

## What Shutter Priority Mode Can Teach You About Your Camera

<http://www.digital-photo-secrets.com/tip/2232/what-shutter-priority-mode-can-teach-you-about-your-camera/>



Learning how to use the more advanced features of your camera is a challenge for anyone new to photography. Sometimes you wish there were some way to boil it all down to some easy-to-understand model. I always tell new photographers that if they want to learn more about their camera, they should learn about shutter priority mode first. Here's why.

### First of all, what is shutter priority mode?

Shutter priority mode is a special camera mode available on most digital SLRs and some point-and-shoots (a.k.a. "bridge cameras"). Shutter priority mode is just like automatic mode, but there is one key difference. You tell the camera the shutter speed you plan on shooting with, and the camera picks the rest of the settings automatically. It's called shutter "priority" mode because the camera picks everything else around the shutter speed you pick. Now here's what this mode can teach you about your camera...

### Different amounts of blurriness teach you about exposure

Most of us know what the shutter does, but we don't relate it to the actual photo being taken. We just know that the photo gets taken once you hear the sound of the shutter releasing. What people don't know is that the speed of the shutter release really can determine a lot of what goes on in your photo.



Just try it out. Use shutter priority mode to play with different shutter speeds. When your shutter speed is slow, practically everything in the image is blurry (like the water in the top photo). When it is fast, everything is frozen. At fast shutter speeds, even the quickest objects freeze in their tracks (like the pitcher to the right). Why is this?

To find the answer, you'll end up learning about exposure. Fast moving objects freeze at fast shutter speeds because the camera is only exposing the sensor to light for a very small fraction of a second. Can you tell me what you can see in 1/500th of a second? For most people, that's shorter than the blink of an eye.

Not much of anything can move that far in 1/500th of a second, unless it's moving very very fast.

Now think of what happens when your shutter speed is 500 times this amount, exactly one second long. Can things move around in the span of a second? Sure they can! They can't get very far, but they can get a lot further than something that only has 1/500th of a second to move.

### Whenever the shutter is open, it is recording light

At 1/500th of a second, almost no light gets in. At one second, 500 times that amount of light gets into the camera. Your camera works by recording light. The image it forms on the sensor is a product of the time the sensor is exposed to light, the size of the hole the light travels through, and the way your sensor processes that light. By using shutter priority mode, you're isolating the time variable so you can learn more about the way it affects your images.

Now some of you might want to know why your pictures aren't much brighter or darker when you change your shutter speed settings in shutter priority mode. In a nutshell, shutter priority mode is an automatic mode. Your camera automatically adjusts the aperture and ISO speed settings to give you the same brightness.

### Experiment

Here's where it gets fun!

Photographing moving water is a classic way to demonstrate the effect shutter speed has on your photos. Take a trip to your local stream or fountain with your camera. With your camera set to Shutter Priority mode, first take a photo with a very fast (1/200 or faster) shutter speed. You'll find the camera captures water droplets crisp and clear in the photo, just like the photo below.



Now start to reduce the shutter speed, to 1/100, then 1/50, then 1/20, and even slower. As you drop below 1/20 you should place your camera on a tripod so your hands moving don't affect the shot and cause everything to be blurry. You'll find the lower shutter speed you choose, the more the water 'flows' and blurs in the photo. That's because it can travel further while the shutter is open and the camera records where every bit of water started,

and where it moved in the photo. You'll end up with a photo like the one below:



### **When To Use What Shutter Speed**

Cool effects like water moving can get boring after a while, but there's always a time and place to use a different shutter speed. For an idea of what shutter speeds you use for specific situations, see my article on [Shutter Speeds You'll Use Every Day](#)

### **Try Manual Mode**

All of this practice with shutter priority mode is secretly preparing you for learning manual mode. Not much is all that different between the two. With shutter priority mode, you pick a shutter speed, and the camera picks the aperture. With manual mode, you pick both. Keep a log of the aperture values the camera picks automatically, and then use a similar value when you're shooting in manual mode. That's how you learn manual photography.

Shutter priority mode teaches you that your camera takes a picture by recording light for a set time period. As you play around with different shutter speeds, you will see how it affects the rest of the photo. If you have always wondered what's going on inside your camera, this is the fast-track to figuring it out.

How did you learn about shutter speeds? I'd love to hear your story. Please share in the comments below.