

Your Camera's Settings: Shutter Priority Mode

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Your camera has many automatic modes to make your life as a photographer a little easier. Each of these automatic modes was designed to isolate one or two of the many variables and settings you'll encounter while taking pictures. Today, we're going to look at Shutter Priority Mode, an automatic mode that isolates the shutter speed setting. You'll learn how to use this mode to take anything from action sequences to unbelievably smooth images of flowing waterfalls. I'll show you the secret to getting the most out of your camera's shutter priority mode.



You can get to shutter priority mode by twisting your camera's top dial to the "S" or "Tv" setting. At least, that's how most cameras handle it. A different camera model might have it hidden somewhere else (something that tends to be the case with most point-and-shoot models).

Tv

Once you're in shutter priority mode, your camera only allows you to adjust one setting. That setting is the shutter speed. So, in order to properly use your camera's shutter priority mode, you need to know a little more about shutters and shutter speeds in general.

What is the shutter, and what is shutter speed?

Every camera works by temporarily exposing a light-sensitive surface to light from the outside world. The shutter determines the length of time the image sensor receives its light by opening

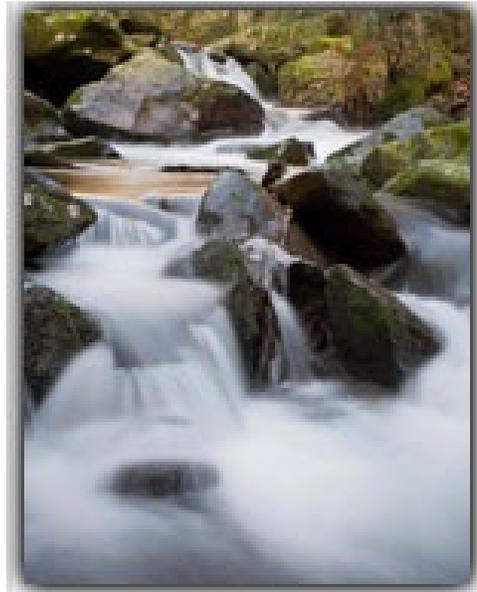
and closing. Whether it's a very tiny fraction of a second (1/500s), or it's a much longer period of time (3 seconds), your shutter opens and closes every time you take a picture with your camera.

By changing your camera's shutter speed, you're either increasing or decreasing the length of time the image sensor is exposed to light. If the sensor is exposed to light for longer, the resulting image will be brighter. If it is exposed to light for less time, the resulting image will be darker. That is the first thing you will notice once you start playing around with shutter priority mode.

Freezing The Action

But there is another factor at work with shutter speeds. A shorter shutter speed can freeze action that would otherwise appear blurred if you were to use a longer shutter speed. That's why shutter priority mode can come in handy when you're shooting sports and action photography. Just dial the shutter speed up to 1/500s, and the camera does the rest of the work. You get a nice freeze frame in the heat of the moment.

A longer shutter speed will allow you to add a motion blur to your images. The most popular use of this effect can be seen in images of beautifully flowing waterfalls like the one to the right.



Because your camera's shutter is open for longer, the water has a chance to move a little bit while the image sensor is being exposed to the light. If you use a tripod, the rest of the image will stay still while the water appears somewhat blurred. The longer you leave your shutter open, the more blurred the water becomes.

How does shutter priority mode work?

Shutter priority mode is an automatic mode, meaning it works by using your camera's internal light meter, analyzing the scene in front of you, and attempting to come up with an even and balanced exposure using the shutter speed you give it. By

exposure, I mean the balance of light and dark in your image. Shutter priority mode attempts to make an image that isn't too bright or too dark.

So, if you're picking the shutter speed, and the camera is picking everything else, then what is the camera picking? One of these settings is the aperture size. The aperture is the hole that light travels through to get to the image sensor. When it's wide open, the image formed is much brighter. When it's closed, the resulting image is darker.

When you shoot in shutter priority mode, your camera adjusts the aperture to give you a balanced exposure. If your shutter speed is really fast, the camera picks a more wide open aperture to compensate for the lowered amount of light hitting the sensor. Similarly, if you pick a really slow shutter speed, the camera picks a more closed aperture to effectively lower the amount of light coming through. Either way, it's "trying" to get an image that is neither too bright nor too dark.

Are there any disadvantages to shutter priority mode?

Unfortunately, yes. Shutter priority mode is an automatic mode, meaning it is prone to all of the problems that go along with any automatic mode. Your camera is equipped with some fairly

sophisticated sensors, but every time it takes a picture in any automatic mode, it is still "guessing" at what you're trying to shoot. Sometimes it flat out guesses wrong.

The sun often confuses automatic modes because one part of the scene will be very bright while the rest of it is not. If you're shooting in shutter priority mode, the camera will pick an extremely wide open aperture to block out some of the extra light, and when it does this, the rest of your scene appears too dark. Unfortunately, there is really only one way to fix this. You have to shoot in manual mode.

Most automatic modes are at their best when the light is as its softest. This tends to happen on overcast days, but it can just as well happen during the early morning and twilight hours. Automatic modes tend to fail when there's too much contrast between lights and darks in a scene. If one part of the scene is too bright, the camera attempts to tone it down. But by toning down one part of the scene, the entire scene is affected.

It's handy to know when an automatic mode is working for you or against you. If it isn't helping you, it's a good idea to learn how to take the same picture in manual mode. I'll get to that topic in a future article.