

# Shutter Speed photography tips



The shutter speed of an image is simply the amount of time, in seconds, that the shutter is open to let in light to impact the film or sensor of the camera. The shorter the time the shutter is open, the less light that gets in. The longer the shutter is open, the more light gets in.

If the shutter is open a very short period of time, it freezes motion. The object can't move in the amount of time the shutter is open.

If the shutter is open for a long period of time, it lets motion blur. Cars can go completely from one end of the image to the other while the shutter is still open absorbing the image.

So the shutter speed impacts two main things:

- 1) how much light is reaching the image, to make it lighter or darker
- 2) how much the object in the scene is frozen or motion-blurred, if it is indeed moving.

Shutter speeds start at a FRACTION of a second. So typically they can begin at 1/4000th of a second. That's really, really fast. They can go all the way up to a 30-second exposure or higher. Note that, confusingly, many cameras show you the fraction amount for anything below 1 second. So a value of 60 means 1/60th of a second. It doesn't mean it is open for 60 full seconds.

1/4000th of a second - freezes an arrow in flight

1/125th of a second - freezes a candle flicker

1/60th of a second - recommended slowest speed for hand-held camera - below this, tripod time

1 second - waterfall stream becomes blurry

8 seconds - car lights leave light trails floating over the road

