




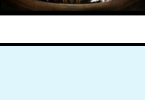
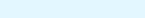


SUGGESTED SHUTTER SPEEDS

Knowing your subject and the goal of the photo will help you select the correct shutter speed. Do you want to freeze action? Use faster shutter speed. Do you want artistic blur or a sense of motion? Use slower speeds. Use this chart as a starting point for various subjects and recommended shutter speeds. Then adjust from there based on lighting and based on the results from a test shot. Too blurry? Speed it up. Want more motion? Slow it down. Balance the shutter speed with aperture and ISO. For example in low light to use fast shutter speeds you will need wider aperture, higher ISO or both. Remember, a long exposure in bright light will not work without the use of an ND filter or other adjustments.

The longer the shutter is open, the more likely you will have camera shake blurring your photos. Shutter speeds slower than 1/60 are not recommended for handheld, instead use a tripod. Your shutter speed should also not exceed your lens length when shooting handheld. For example with a 200mm lens, shutter speed should be 1/200th or faster.

SHUTTER SPEED	USES	EXAMPLE IMAGES
1/4000	Racecars, bullet trains, hummingbird wings	
1/2000 to 1/1000	Sports, fast people or animals, cars/motorcycles	
1/500	Slow moving animals or subjects	
1/250	Portraits, children at play	
1/125	Panning fast subjects, landscapes	
1/60 to 1/15	Panning slower subject, stationary objects, 1/60 is slowest handheld speed	
1/8 to 1/4	Street/panning of people walking; blurry effect with fast moving water	
.5 (1/2) to 4 seconds	Dreamy/blurry water, car or light trails	
5 to 20+ seconds	Star trails/night photography including fireworks, light painting, etc.	
Minutes	Specialty territory including star trails, image stacking, compositing, etc.	