

Photography in Motion

Action Photography Tips & Tricks

Skill's Night Presentation, June 3, 2017

by John Avera

Photography in motion is magical in that it takes something ordinary and allows it to come alive. Action photography draws the viewer in, as if they were right there in the moment. When looking at an action shot, you should be able to feel the movement, sense the anticipation, or realize what a rare sight you are witnessing. Action is found in the everyday and in the spectacular; it might be found in the twirling skirt of a dancer, the flapping ears of a puppy, or the curve of a crashing wave.

Shutter Speeds for Aircraft

Fast Jet in Sky 1/1,000

Fast Jet Air Display 1/1,200

Fast Jet with blurred background 1/500

Prop Aircraft or helicopter 1/60 to 1/350

Links to Nikon Autofocus Information

<https://www.youtube.com/watch?v=FzqQskGoURE>

https://www.youtube.com/watch?v=N_bzhJAKms

<http://backcountrygallery.com/books/>

Autofocus Fine Tune

<http://michaeltapesdesign.com/index.html>

Whimberly Tripod Head

How it works, how to get it, why you need it... www.tripodhead.com

Moose Peterson's IBook for Aviation Photography

<https://itunes.apple.com/us/app/moose-press/id648176476?mt=8>

How to shoot action and sports photography: It's all in the timing!

1. Pre-planning
2. Expect the worst from the weather
3. Finding Shots – know your subject
4. Pre-Focus
5. Don't watch – shoot
6. Look beyond the obvious
7. Shoot in Short Bursts
8. Give the subject room to move
9. Get a fast memory card
10. Don't miss the face
11. Get down low
12. Shoot with 2 eyes open
13. Don't mash the shutter button, roll your finger
14. Frozen technique
 - a. Fast shutter speed
 - b. Fast light source
15. Blurred technique
 - a. Slow shutter speed
 - b. Panning
16. Focusing
 - a. Autofocus single
 - b. Autofocus continuous
 - c. Continuous shooting mode high speed
17. Equipment
 - a. Camera
 - b. Lenses
 - c. Tripod, monopod
18. Batteries
19. Tripod
 - a. Surfing – yes
 - b. Bicycle Race – no
 - c. Car Race – no
 - d. Air Show – maybe with Whimbly Head
20. Monopod
 - a. Surfing – yes
 - b. Bicycle Race – yes
 - c. Car Race – yes
 - d. Air Show - no
21. Photoshop
 - a. Motion blur filter

10 TIPS FOR STUNNING ACTION PHOTOGRAPHY

Action Photography Tip #1: Plan ahead! Carefully plan where you will set up. This is probably the biggest mistake for action photographers. No matter what action you are going to shoot, you need to predict where you can be to capture the most interesting aspect of the action.

Action Photography Tip #2: Pre-focus. If the subject suddenly springs into the frame, you might consider using a technique called pre-focusing.

Action Photography Tip #3: Shoot in short bursts rather than one long bursts. This will prevent your buffer from filling up, which could cost you the shot. I usually shoot action in 5 - 7 shot bursts, wait a second, then shoot another burst. To do this, turn your camera to continuous high drive mode.

Action Photography Tip #4: Give the subject space to move. For fast-moving subjects, the best composition is usually to allow some space on the side of the photo where they are traveling.

Action Photography Tip #5: Get a [fast memory card](#)! This can help prevent your camera from slowing down if the memory card write speed is the bottleneck in your system.

Action Photography Tip #6: Don't miss the face. Capturing the expression on the face of the subject will add much more drama to the photo.

Action Photography Tip #7: Get down low. One of the most important—and lesser-known—composition tips is that shooting from down low will make your subject look powerful. Look at any picture of a CEO in Forbes or Business Week and you'll see that they are often shot from a low angle to make the person seem like a towering giant.

The same is true in action shots, where photographers generally want to make the subject look dramatic and powerful.

Action Photography Tip #8: Shoot with two eyes open. Closing one eye lessens your ability to determine depth and hinders your eye's ability to track movement. It takes some practice, but I always shoot sports and action with two eyes open, and it seems to help me get the shot.

Action Photography Tip #9: Don't mash the shutter button! Roll your finger.

Freezing the action for action photography

Freezing the action is the ultimate aim for a lot of action photographers, and there are essentially two techniques you can use to achieve this:

1. Fast shutter speed

There is a direct link between aperture, shutter speed, ISO value and the light in the scene. Put simply, to be able to use speeds that will freeze motion, you need a fast lens, high ISO setting and good light.

2. Fast light source.

The alternative of shooting with a fast shutter speed is exposing with a light source that has a very short duration, like a portable flash.

Most on-camera flash systems output light for durations of between 1/800 and 1/30,000sec. It is this brief flash that freezes the motion.

Don't be confused with the shutter speed your camera uses to sync with the flash – usually between 1/125 and 1/250 sec – the length of time that is used to expose your frame is based on the flash's duration.

Using slower shutter speeds for action photography

Photographers also like to use slower shutter speeds to capture moving subjects. The blurry results communicate a feeling of motion.

The shutter speed, direction of the motion through the frame, the lens length and the speed of the subject all govern the amount of blur in the final image.

Try a range of speeds with the same subject. Your tests will give you a starting point that you can use next time you are shooting a similar subject.

Using panning and flash blur for action photography

An extended blurred motion technique is panning. This involves the photographer moving with the motion of the subject, keeping the subject in the frame during the exposure.

When this technique is coupled with a slow shutter speed, it's possible to produce photographs that have sharp subjects and blurred backgrounds. Try starting with speeds of 1/30th sec.

You can also combine stillness and movement, using a flash blur technique. To achieve this effect you need to set your camera on a slower than normal sync shutter speed. The short flash duration will freeze part of the action and the long shutter will provide a sense of motion.