

Long Exposure Case Study #9

PANNING MOTION

by Kent DuFault

If you are familiar with the technique of panning, you're probably wondering why in the heck is he talking about this in a long exposure case study? Panning is most often associated with fast-moving subjects such as race cars or cowgirls on horses.

If you put your mindset outside of conformed thinking, you will come to realize how the combination of panning and long exposure can create some pretty amazing effects. This idea can be accurate no matter what the subject is or how fast it is moving!

Years ago, I took a workshop with a very famous commercial photographer. He showed us step by step how he created a studio photograph of a race car that, in the final image, appeared to be speeding down a track. What was the purpose of creating the photo in the studio? The vehicle had perfect lighting! To accomplish this shot, he used a long exposure, slight movement, and panning. It was my first opportunity to view this technique. It opened my eyes to the creative options of mixing shutter speed length, with subject movement, camera movement, and the lights on / lights off concept.



Image 001



Image 002

For traditional panning purposes, the best shots will typically (not always) have some point within the picture that is entirely in focus or very close to that point. In Image 002, I have indicated where that point is in the cowgirl photograph.

Could Image 001 have been a long exposure photograph? It most certainly could have. Thinking of the situation in a traditional sense, with the horse moving at full gallop, then no, this photograph would have required a short faster exposure, along with panning.

But what if the horse was moving at a very slow trot? Then most certainly, this photo could have been created using a long exposure.

Pro Tip: What constitutes a long exposure? At what point are you telling yourself, "I am

in long exposure mode." When the shutter speed becomes slow enough that you can no longer hold the camera in your hands and take a sharp picture of a static object... you are then in long exposure mode. This point will vary based upon the photographer, as well as the lens used.

I am thinking back to my story about the race car in the studio.

What if the horse was barely moving?

The photographer used a long exposure, along with panning, to add excitement to what would have otherwise been a pretty static picture! For a shot like this, a shutter speed of $\frac{1}{4}$ to $\frac{1}{8}$ of a second would likely be the best-extended exposure setting.



Image 003

Not all long exposure panning shots need to have a recognizable area of sharpness. However, be aware that this type of panning shot will almost always be more abstract than reflecting realism.



Image 004

This panning shot, Image 004, was most definitely a long exposure image. The next time you're shooting in low light, try to create an exciting panning photograph versus raising the ISO setting.

Pro Tip: When panning, the camera moves in a single fluid direction. For Image 004, the camera moved in a fluid horizontal movement from right to left. If the subject is moving, and you want portions of the subject to be sharp. Time your movement of the camera to be in sync with the speed of the subject. A pan doesn't have to be horizontal. It can also be vertical.

You create a pan shot while holding the camera in your hands. Brace the camera against your face. Tuck your elbows tight to your chest or abdomen.

Create the movement of the camera by making a smooth swivel with your hips.

This technique can be used for both a horizontal or a vertical pan.

Create the movement at the hips.

You can also put the camera on a tripod for a pan. When the camera is on a tripod, you can use even slower long exposures timeframes for the pan. For example, imagine a ship passing by. You put the camera on a tripod. You set a proper exposure with a shutter speed of four seconds. You pan with the boat as it moves past you. You now have a photograph of a ship that looks as if it is racing across the water!



Image 005

Was the train (Image 005) moving very fast, fast, slow, very slow, very very slow, or not at all?

The train was moving very, very, slow, probably almost stopped.

To create movement with a panning shot, an object in the scene has to be moving. We can fool the viewer of our photographs by manipulating the shutter speed. But something has to be moving.

If you see a panning shot and something looks 'off' about it. It's probably because the panning effect was created in post-production.

With this train barely rolling through the scene, a prolonged exposure shutter speed of somewhere between 1/30th to 1/8th of a second, combined with a smooth pan, would keep the train extremely sharp while blurring out the background.

Important Point: When panning a camera, the blur will always be present on the trailing end of the camera movement. It will not be on the front end or both ends of objects depicted in the frame. In Image 005, post-production was used to enhance the panning effect. You can tell this by looking at the tall building in the background. It has blurred movement on both the leading and trailing end.

Your Challenge

It's time to use panning in a new and fun way with long exposure. I want you to photograph at least five different slow-moving subjects. Whatever they are is your choice. However, their movement needs to be slow enough that you wouldn't have considered panning. Set your camera to a long exposure. Start at $\frac{1}{2}$ second and incrementally go down to as slow as 5 seconds. When you get past 2 seconds, put the camera on a tripod. The Challenge is to create new effects uniquely using panning with prolonged exposure and a slow-moving subject.

Evaluation

Were you able to capture exciting and varied shots with this technique? Would you put any of these pictures in your portfolio? Did you depict a subject in a new and visually appealing manner? What challenges did you face? What shutter speeds worked out best for you? Did the lighting play a role in your outcome? If not, try this Challenge again and change the illumination drastically.