

Basics of Star Trail Photography

Equipment:

All you need for star trail photography is a fully charged camera with a bulb setting, a lens (wide angle preferably), sturdy tripod and head, a cable release that is able to be locked for at least an hour, bubble level for hot shoe, compass, and a powerful flashlight to aid in composition. Camera batteries vary, but I have gotten over 3 one hour exposures on a single charge, even on a very cold night.

Composing at night:

Star photography is best when there is no moon. To achieve star trail circles, you must find the North Star (or Southern Cross) and shoot with it in your frame. By far, the hardest part of night/astral photography is composing at night. One method is to scout a subject during the day, compose it, focus it, and mark your lens so that when you return at night, you are ready. This is not always practical but it can be done;

New technology has made that much easier. I use a 10 million candle power flashlight that I purchased at Cabella's for around \$40. By pointing this light at the edges of your foreground subject, you can compose almost as easily as you would during the day. You can also use this to "paint" your subject if they are large or far away from you that a normal light can't reach; remember that you don't have to paint. You can have a silhouette with the stars trails.

Settings for Star Trails:

The best starting point for star trails is ISO 100 and the next to widest opening on your lens (example; you have an f4 lens-set at 4.5) and the camera set to **BULB**. That's it! You composed your image as to the instructions above; now lock the shutter open with the cable release. You can now begin your painting if you choose. Try to keep them open for at least an hour. The longer you keep the shutter open, the longer or full circle your trails will be. If you are pointing away from the North Star, your trails will be sideways or up and down. You can experiment with higher ISO's; but remember that you start to introduce much more ambient light into the picture and that includes city light pollution!

Settings for Star Points:

Set the Camera to the highest ISO setting and use the same f stop you would use for the trails. The higher the ISO the better, but this will introduce noise which can be minimized in post processing. I also use "Noise Ninja", by Picturecode; www.picturecode.com, to help reduce most of it. Expose for only 30 seconds as longer than that, the stars start to get trails.

Precautions:

Night photography poses many challenges that daytime photography does not. I have on one headlamp while I'm walking and keep a spare in my backpack with extra batteries for both so as not to get stuck anywhere without a light source. If you are hiking around at night serious injury or worse can happen as uneven terrain is not as easily visible as it is during the day. Extra attention should be paid while walking around at night but it is well worth the reward.

See you in the night,

Roman Kurywczak
Small Group Photo Tours
www.roaminwithroman.com
rkurywczak@gmail.com or
H roaminwroman@comcast.net
908-241-0500 or
H 908-241-2248