

HOW-TO ///

FIVE TIPS FOR GETTING AMAZING TO LEGISLATION OF THE SECOND STATES OF THE

USE THESE TECHNIQUES TO MAKE THE MOST OF SHOOTING AFTER DUSK AND BEFORE DAWN

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One of my favorite ways to photograph the grandeur of our planet's landscapes is under the night sky. Aside from the visually striking aesthetic, including stars can further introduce an "otherworldly" feel to such photos.



On this particular evening, all I wanted to do was photograph the arches in Arches National Park under the starry sky. Unfortunately, the conditions didn't quite align for me. But there was no way I was going to head back to the hotel without shooting any frames. Instead, I incorporated the headlights of oncoming traffic to help compose my photo.

sunrises and sunsets picturesque, what truly fascinates me is when all of that radiant light is gone, and I'm left with a gigantic sky full of stars or the moon. It just fills me with awe, especially when I'm lucky enough to be in an area with little to no light pollution from cities or even a densely populated suburban town. And I can think of no better way of appreciating such a spectacular view than by using my camera to photograph it.

Fortunately, today's digital cameras make astral photography easier than ever thanks to major improvements in sensor technology. What used to require a serious amount of experimentation and expensive gear is now attainable with just about any capable digital camera.

Beyond that, however, there are some best practices to keep in mind when setting up your night shots. Like any other type of photography, it helps to have a workflow or methodology in mind to ensure consistent and high-quality results.

Here are some of my favorite tips to practice on your next night shoot, presented in no particular order of priority.

TIP 1: NIGHT PHOTOGRAPHY DOESN'T ALWAYS MEAN STAR PHOTOGRAPHY

It's understandable to directly associate night photography with stars. Next to the moon, stars are elements most anyone expects to see in the night sky. However, depending on the time of year, the phase of the moon, the weather conditions and your specific location, seeing and photographing stars may not be possible. But that doesn't mean you should pack up your camera and get a head start on sleep.

The hallmark of any great photographer is knowing how to turn lemons into

lemonade. If you've already made the effort to haul yourself, and your gear, to a location at some ridiculously late hour, you at least owe it to yourself to find one composition.

One of my favorite things to do when stars are out of the question is to play around with light. Because night photography requires elongated shutter speeds, there are all sorts of ways to leverage a wide variety of light sources in creative ways, like shooting the light trails of a car's headlights on a highway late at night.

You simply need to be open to experimenting.

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TIP 2: NEVER UNDERESTIMATE THE IMPORTANCE OF A STRONG FOREGROUND

Life would be so much easier for photographers if all we had to do was aim our cameras up at a starry sky, focus and shoot.

Of course, there's nothing stopping you from doing exactly that. But I suspect you'll be somewhat disappointed with the results. That's usually because the viewer doesn't have a foreground element to help

give the sky context.

Additionally, when your starry night photos lack a dominant foreground element, there is no way for the viewer to establish a relationship between the stars and the foreground, which is a concept applicable to any photo, regardless of the time of day.

Before I even head out on a night shoot, I spend some time performing my due diligence. I'll scour Google Earth and other photo-sharing sites to see whether there are any visually striking foreground elements. At this point, I'm not looking for night shots from the location. I just want to see if there are potential opportunities. Once that's established, I can head out with a clear plan in mind of how I intend to wrap the stars around the foreground element.



Experimentation is key when identifying an ideal shutter speed for your starry night photos. I often rely on the "500" formula, which you can read about in Tip 4 on page 54, to get a good starting point.

TIP 3: LEARN HOW TO FOCUS TO INFIN-ITY WITH EACH OF YOUR LENSES

If there is one way to ruin a starry night photo instantly, it's by having the shot be out of focus.

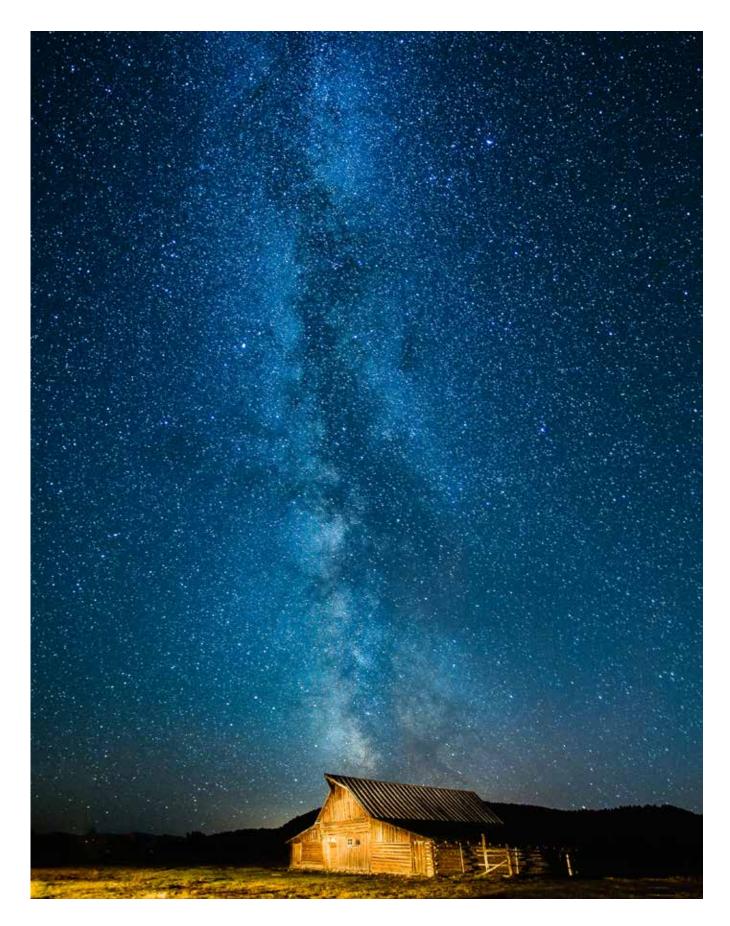
Viewers know what stars look like, or what they should look like. When you look at a starry sky, you should see millions of tiny pinpoints of light. They're not soft or mushy...unless you suffer from cataracts. If the stars in your photos look soft, it is

more than likely due to not achieving critical focus for infinity.

Depending on the focus method of your lens, you may be able to precisely focus on infinity, which is commonly represented by the horizontal "figure 8."

Many lenses don't have this capability of focusing exactly to infinity, which will require some trial and error. In these cases, my preferred method of focusing is to crank my camera's ISO very high and use the electronic viewfinder (or rear LCD) to find my focus. This usually involves me slightly nudging the focus ring back and forth in tiny increments until the stars look like little pinpoints.

I'll then reset my exposure settings, take a shot and review it for focus. If it looks good, then I won't touch the focus ring again for the evening. If it looks slightly soft, then I'll readjust the focus ring and repeat the process.



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TIP 4: LEARN HOW TO DETERMINE THE OPTIMAL SHUTTER SPEED

Determining the right shutter speed for your starry night photo is just as critical as getting a proper focus lock. Depending on who you ask, you may be given a variety of answers as to how you should approach this and, much like getting proper focus, you will need to experiment. However, before you do anything, figure out what your intent is. What I mean by intent is whether you want to present the stars in your photo as sharp, tiny pinpoints or as a wispy star trail. Your answer will determine how to approach your exposure workflow.

SHARP, TINY PINPOINTS: In the case of achieving sharp, tiny pinpoints, there is a well-known formula that I've used to figure out an initial starting point for my

shutter speed. Remember, there are several factors to consider when identifying what the maximum shutter speed can be before you introduce movement in the stars. Those factors are your lens' focal length, the maximum aperture of your lens and the size of your camera's sensor. Once you have that information, you can easily plug it into this basic formula:

500 / Focal Length = Maximum Shutter Speed in Seconds

What's important to understand is that this formula assumes that you're using a 35mm full-frame sensor. If you're using a cropped sensor, then you will need to divide the final result by whatever the crop factor is. In my experience, this formula does a good job of getting me

to a solid starting point to begin experimenting with shutter speeds. Like with the focus experimentation, it's important to take, and review, a few test shots before locking things in.

WISPY STAR TRAILS: For those instances where you want to create a star trail, you'll want to use the same process of identifying an ideal shutter speed. The key difference is that afterward, you'll want to use an intervalometer, either via a remote or within specific cameras that include this feature, to take a sequential series of photos. Once you have a sufficient amount, you can use an image-editing program, like Adobe Photoshop, to blend them together. This technique can be especially striking, especially when you include an interesting foreground element.

Few things are more special to a landscape photographer than seeing the aurora. In fact, it's so mesmerizing that it's easy to forget even to trip the shutter! Just remember to pay close attention to the intensity of the solar activity when determining your shutter speed.

TIP 5: SHOOTING THE NORTHERN LIGHTS

Of all the natural phenomena that I've witnessed, nothing is more amazing than seeing the northern lights dance across the night sky. It's almost as if no picture can quite do it justice compared with seeing it with my own eyes. That's why I strongly recommend you give yourself the opportunity to see it at least once.

One of the first things you'll realize when photographing the northern lights, especially when there's strong solar activity, is that it's quite different than how you might traditionally shoot night photography.

Yes, you need to have the same lack of ambient light and clear skies, but getting proper exposures requires more finesse because the quality, shape and intensity of the lights change so rapidly.

On a recent shoot in Norway, I had to constantly change my shutter speed, ranging from 15 seconds to 2 seconds, from shot to shot. You may feel compelled to drag your shutter (using an even longer shutter speed), but that's a very easy way to blow out the highlights of your image. The aurora can be *that* bright.



Another consideration to keep in mind is white balance: Normally, finding an accurate white balance for night shots is a relatively straightforward process. However, the aurora tends to throw that completely out of whack due to its strong green cast.

In these situations, I tend to edit the

photos in Photoshop using layers. I'll treat the foreground independently on one layer and the green sky on another. While it's important to retain some consistency with regard to the color cast introduced, there is always some wiggle room to fine tune the results.