How To Take Fascinating Starry Night Photographs: Techniques and Camera Settings

A night full of stars carries a sense of tranquility and calmness, becoming a source of inspiration for photographers. After all, what could be better than looking at the boundless sky and celestial bodies flickering? On a camera, you can capture numerous little details and depict an amazing volume of stars that can't be registered by the human eye.

However, taking night sky photos can be challenging for creators because you have to depict both the beauty of darkness and the brightness of celestial bodies. This requires a clear understanding of contrast and exposure basics. Our article explains useful techniques for taking HD images of a starry night. You can also find clear explanations for setting up your camera. Read on!



Photo by <u>Christian Wiediger</u> on <u>Unsplash</u>

Optimal camera settings for taking star photographs

ISO and aperture are the most important camera settings for night photography. These parameters affect the way your camera lens absorbs the light. After all, photographers have to work in low light conditions.

ISO is a parameter that allows you to regulate the light sensitivity of the lens. A lower ISO value means less sensitivity to light. The optimal value for capturing night scenes is about 1,600–2,000. Aperture refers to the opening of a lens's diaphragm. When setting this parameter, you can manually regulate the light intensity absorbed by your lenses. In a dark environment, you should choose a wider aperture to capture as much light as possible. The optimal value is f/2.8.

Camera settings are essential because you'll have to pay attention to respective conditions and be able to adapt to them. You may also require additional equipment. For example, a tripod helps with taking impressive long-exposure shots where it's possible to see the light movement of stars.

5 professional tips for capturing stars in your pictures

#1 Find a proper location

Stars are poorly visible in some places, especially in city areas. Large buildings block the firmament, while urban dust makes the sky paler. When preparing for star photography, find an appropriate location in advance. Generally, these are areas in fields and near rivers.

You can convey mystery by depicting stars reflected in a body of water. Or, capture flower fields against the night sky and bright celestial bodies. It's better to plan your photo shoot for a new moon since it emits less light and doesn't outweigh the beauty of the stars.

#2 Take pictures using a fisheye lens

"Fisheye" is a convex-shaped lens that allows you to create a sphere effect. Although it causes distortions, this is a good way to bring more volume to your scenes. Fisheye lenses can make your images look like a ball, where all details are hyperbolized. Stars also appear bigger, allowing you to focus your frame on the main object.

#3 Capture long-exposure shots

Stars always move through the sky, but people can't see this because their movement is so slow. As a photographer, you can show the whole beauty and motion path of stars using the longexposure technique. However, this will require a lot of patience.

First, you should find the North or South poles, depending on your current location. Use specialized mobile applications like SkySafari or SkyView Lite for such purposes. The chosen direction should be in the center of your frame so that you can get clearly-visible light circles. Since stars don't produce much light, your camera's ISO value should be high (1,600 or more).

You should also consider the right shutter speed. Stars complete their full rotation in the sky in 24 hours. However, a shutter speed of 60 to 90 minutes is enough to catch their light trails. To set up shutter speed for this long, use manual mode. You will also require a tripod.

#4 Experiment with temperature during editing

You have probably seen fascinating starry sky pictures full of different colors: blue, violet, and green. To make such vivid images, it's essential to post-process pictures. You can change colors and contrast in your pictures by regulating the tint level in graphics editors. This will make separate details, like the moon, for example, pop in the general composition.

#5 Catch the Milky Way in your shot

The Milky Way amazes people with its beauty and endlessness. When looking at it, you can observe the magnificence of the stars. However, many people have never seen the Milky Way in the night sky. So, you should be prepared to shoot it properly.

Find a location where the Milky Way is visible—avoid cities with bright illumination. In some cases, you will need to move

70 miles away from settlements to uncover lightless areas. You can use the World Light Pollution Map to find the appropriate location.

It's also important to choose the proper season and day. Although the Milky Way can be seen almost year-round (excluding the time between November and February), the Galactic Center is more visible in the summer. You should also capture such shots on a moonless night. Otherwise, the Milky Way will be hidden due to excessive illumination, clouds, and foggy haze. Use weather forecasting and moon phase tracking mobile apps to choose optimal conditions. The Milky Way is generally visible from the south. However, when you search for it in the spring, slightly turn your face to the west. In autumn, it's better to behold the Milky Way from the east.

Where to sell your star night photos

You can sell your ready-made pictures on stock content marketplaces and get passive income easily. For example, <u>Depositphotos.com</u>, is an excellent photo stock for aspiring creators.

Depositphotos is a beginner-friendly stock content marketplace. You don't need a solid photography background or expensive equipment to start earning from your artwork. To become a contributor for the platform, you must be over 18 and pass an exam-upload your best works for review. After approval, you will get access to your contributor account and be allowed to upload more images. To succeed on the platform, upload multiple photos and photo sets on different topics, explore the demand using statistics in your account, and offer free photos to attract new customers.

Conclusion

If you search for impressive scenes to capture, images of stars and the night sky are a good option. These visuals attract viewers due to their exceptional detail and depiction of what can't be easily seen by the human eye. To take amazing shots, familiarize yourself with camera settings and useful techniques. Starry night photography also requires patience. Use the helpful tips mentioned in this article to simplify the process!