

You may think it seems counter-intuitive to shoot landscapes once the sun has disappeared and light levels drop, but night sky photography actually has a special quality that brings a completely new dimension to your images.

The low-light conditions can present a challenge in terms of the practicalities of taking pictures, but much of this is a psychological aversion to shooting in the dark (which is actually a common photography problem).

Once these mental barriers are overcome, the rewards of night sky photography far outweigh any personal discomfort, opening up I a whole host of new image-making opportunities. Lighting is clearly an issue when shooting night sky photography – there simply isn't much of it, especially out in the countryside away from artificial light sources.

So how do you light your subject? One way is to use the light reflected from the moon. Under a fullish moon it's possible to produce a fully illuminated landscape picture using a long exposure.

Moonlit images have a mystical, tranquil quality. The light is unlike that I from the harsh rays of the sun, and the results are amazing. In a similar way that our eyes adjust to moonlight and allow us to see almost as well as in daylight, a camera is able to capture images illuminated solely by moonlight.

However, there is a big difference between daylight images and those taken using the much softer light from the moon. The way that light interacts with a scene to reveal shape and form looks very different when captured over a long exposure 1 of ten, 20 or even 40 minutes.

# 1 - Star Trails



Due to the Earth's rotation about its axis, it seems that the light from stars moves in circles around the celestial pole. These movements are detectable after about 5 to 10 minutes, and can be traced by your camera in the form of a streak. To photograph this magical effect, you need a sturdy tripod and lots of patience. Focus the lens to infinity and set the camera's mode at Manual or Bulb shooting mode. With the use of a cable release you will capture the stars moving across the sky. These exposures can be a few minutes to several hours long. If you keep few things in mind, such as the timing, composition, and power of the battery, you can make photographing star trails simpler for you.

2-1 Find the Right Location



3-1 Use Long Shutter Speeds



When photographing the night sky with a long exposure, exposures of 15 minutes or longer will show the rotation of the Earth. You'll need a wide-angle lens and a sturdy tripod, of course. You'll want to use a cable release to eliminate camera shake of any kind, as it will RUIN your photo. Focus the lens to infinity and set the camera to B "Bulb" shooting mode. Set your aperture to f/4 for optimal results, and depress the remote to open the shutter. You should keep your ISO at 100 to keep the digital noise at a minimum, because the sky is so dark and less prone to producing digital noise when the exposure is above 15 seconds. To complete the photo after your desired elapsed time, depress the remote again, and release the shutter.

## 4-D Auroras and Polar Lights



5-0 Cloudy Skies



As the light begins to fall, look at the cloudy skies. Watch the colors and how they merge though the cloud. Even though it is dark, you should try using an 80A blue cooling filter to enhance the blue cast of the sky and to reduce the yellow cast from the artifical lights. Use a wide-angle lens and opt for longer exposures. You can first try a few test shots, and then assess them carefully on your digital camera. You should be able to decide on the best range of exposures to capture some good photographs of an overcast sky.

### **Recommended Settings**



Metering after dark can be a problem, so make sure you choose the best option for your particular situation. If the conditions are both light and dark you need to use spot metering for an accurate reading. If the darkness is even you can use center weighted or evaluative metering. Don't use flash if you can help it as this can affect the resulting image, creating an area of the photograph that is over-lit. Manual and Bulb modes are the best shooting modes for this kind of photography.

### **Recommended Equipment**



Night skies should always be photographed with the assistance of a tripod. Don't forget to buy a cable release or a remote control for taking the picture – this is important because some shots will take up to 30 seconds or even more. Your lens ideally should have an infinity focusing mode and your camera should have the ability to do a mirror lock up - a feature in which the mirror in the camera moves out of the way before the shutter is released. This feature eliminates the vibration that occurs when the mirror slaps up into the camera housing. A wide-angle lens is the best choice for night skies, and a zoom makes it even more versatile.

# Conclusion



When taking pictures of the night sky, remember that patience is as important as is the ability to look at an image's composition critically and decide what you need to change next time to make it better. As we stated earlier, the process of finding the right exposure length for the image you want is going to be a process of trial and error (in terms of lens length, shutter speed, aperture setting, as all three allow for different effects). With long exposures of over 30 seconds, a cable release is necessary to ensure tack sharp final images. For additional variety and perhaps better photographs of stars in the sky, you might want to try a few B&W shots. Dress warmly if the weather is cold, because sitting still on a cold night is much colder than walking in the cold, so extra layers may be needed. Remember to take a flashlight with you so you can adjust your camera in the dark. The more images of the night sky you take, the more you will learn the best way to photograph them.