

# Night Photography

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*Old court house, July 4th*



Whether photographing local celebrations, such as carnival and firework displays, capturing architecture and cityscapes, or pointing your camera toward the moon and stars, you can find dramatic images with night photography. All it takes is the right equipment, choosing the best time, and dialing in the correct settings on your camera.

The *Equipment* needed: camera, digital or film; daylight film ISO 100 for film cameras; memory card for digital cameras; tripod—essential at slow shutter speeds; cable release—to prevent camera shake; appropriate lens—wide angle to zoom, and a flash light—it's dark out there.

The *Time of Day* is important. The best times are from first light in the morning until sunrise, and sunset until last light. Experts agree that 10 to 30 minutes before official sunrise and after official sunset are the best windows of opportunity. During those times you can capture photos with a midnight blue cast to the sky. Midnight blue is not only more pleasing to our eye than pure black,

it allows us to see separation between our subject and the sky. When the sky is too dark, we cannot distinguish where a building stops and the sky begins. A bit of light in the sky allows us to see important details.

*Good Exposures* are essential. Allowing the camera to meter a scene usually gives poor results. The meter in our camera thinks the world is 18% gray. Night brings darker subjects. The camera wants to meter them at gray instead of black. This often gives us overexposed images as a result. For example, the suggested settings for a skyline 10 minutes after sunset are a shutter speed of 1/30 and an aperture of f4, for bracketing you might leave your camera at f4 and change your shutter speed to both 1/15 and 1/60. Between the three resulting images, you should have a good exposure. Always bracket your exposures.

How to *Photograph the Moon*: Remember the moon is lit with pure *high noon* sunlight. If we use our camera's meter, it will sense the dark sky and give too much exposure, resulting in the moon becoming a white blob. Instead, the proper exposure is the *Sunny 16 Rule*. Set your f-stop to f16. Set your ISO to 100. Set your shutter speed to 1/ISO or, in this example, 1/100. Bracket your exposure from there and you should capture the moon and it's craters. The longer millimeter lens you use, the larger the moon will be in your image.

For *Star Trails*, set your camera on a tripod, open the aperture all the way (smallest number aperture your lens has), and lock your cable release open for 20 minutes to hours, at 100 ISO. Choose a clear sky night, as clouds will interfere. You need to be away from the light pollution of a city, as it will hamper your results. Interesting patterns occur when you have the North Star in your picture. It stays stationary, while all the other stars seem to circle it due to Earth's rotation.

*Fireworks* alone can be fun, but finding a cityscape or structure to balance the display can be even better. For fireworks, set your digital camera on ISO 100, f16 and a shutter speed from 8 to 16 seconds. This gives you time to capture the full progression of 1 to 5 bursts. Fireworks take time to fully display. **Do not wait until you view a good display. By then it is too late.** Best results are achieved when you continually shoot, one image immediately following another. Then, when you sort your images on your computer, you will find the gems among the images.

*Carnivals* are filled with light and motion. Capturing the scene at dusk can show the lights, movement, and festive mood. Remember when photographing moving rides, the faster the ride is



*Moon*

spinning and the slower your shutter speed, the less we see the details of the structure and the more we see what is beyond the blur. Bracket not only your exposure, but also your shutter speeds to capture the scene.

*Digital versus Film.* At slow shutter speeds, film does not absorb light at same rate as in the normal shutter speed range. Film needs more light for an equivalent exposure at slower shutter speeds. Film's need for longer exposure at slower shutter speeds is called reciprocity failure. Digital does not have reciprocity failure. Digital has noise and noise occurs at higher ISO settings. Use ISO 100 for great results. Noise will also occur at longer shutter speeds, but noise reduction software can help.

So, instead of going to dinner as the sun sets in the west, get ready for the night. You can capture



*Fireworks, St. Louis*

the night sky, including the stars and moon.

Celebration images of light and cheer are to be found at your local carnivals and fairs. Watching the fireworks burst while clicking away, allows you to enjoy them all year. Each photographer has nightly opportunities to capture a part or a whole city as it sparkles in the light of the night. Enjoy the night and it's many points of light. ■

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*Stairway to history*



*Ferris wheel*

