

AMBIENT OR LOW LIGHT PHOTOGRAPHY

By DWAIN Cox 10\13\2008

The optimum light for most photography is good sunlight. However, life goes on when the sun goes down. For many photographers, this is the preferred time to be shooting. After Dusk and until the sun first peaks above the morning horizon, is prime time for low light photography.

Indoor and other “less than good light” conditions also fit into the Low light category.

So, what do you need and what do you need to know?

First, you'll need a tripod or a monopod or set the camera on a fixed object. Use a remote shutter release or the camera timer to minimize movement.

Second, you need to know how to control your shutter speed and aperture. For this lesson, set the shooting mode to Manual.

1. Shooting Inside a building or room.

You may not need a tripod if you can keep your shutter speed above 1/30sec. How do we do that? Set your aperture as wide as your lens will allow. Aim your camera at your subject and check your in-camera meter. If the shutter speed is above 1/30sec, hold your camera steady and take the shot. If not, increase the ISO and recheck. If you have increased the ISO and the shutter speed is still less than 1/30sec, get a tripod.

Considerations: Is the subject (or any object in the frame) stationary or moving? How much movement? Are you using a long lens? If your subject is moving and you have maxxed out your ISO, using minimum apreature and the shutter speed is still too low to stop the action, you will need more light or a flash.

2. Shooting a Sunset.

Sunsets are usually a silhouette type image. The light in the sky may be bright enough to not require a tripod, but use one anyway because the light and colors change quickly as the sun goes down and you want to be ready. If objects in the foreground are illuminated, you will need to shoot when the brightness of the sky and object are within the exposure range, or balanced. Meter the object, then meter the sky, take the shot when they are the same.

Considerations: As the sun goes down, the colors change and you may want to change your white balance to keep the colors accurate or to enhance them. Use graduated filters to add color and to darken the sky. Using filters or increasing depth of field will increase the shutter speed. Try underexposing the image while the sky is still bright, this simulates a sunset.

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3. Shooting a Skyline at Dusk.

This is similar to a sunset. The skyline shot shows the city lights just before the sky goes dark. We have to balance the light between the sky and the lights in the buildings. If you wait too late, the brighter lights will overwhelm the rest of the image. If you shoot too early, the lights will be less visible and less interesting. Frame to eliminate close and bright lights.

Considerations: Remember, the city lights are tungsten, fluorescent, sodium, mercury vapor and who knows what else. All different colors and needing a different white balance. Using filters or increasing depth of field will increase the shutter speed.

4. Shooting Night Scenes.

The night life is just waiting for your camera. You can find it anywhere. It's what you do with it that makes it interesting. Look at what catches your eye and frame the shot to eliminate other distractions unless you feel they add to the scene.

Considerations: Consider options that make static objects move or change colors. Use the zoom or try panning to make the lights streak. Use a flash for fill, freezing action or adding color from a gel. Incorporate reflections into the shot.

5. Shooting Action.

In the previous shots, the subjects were static. Now we are capturing moving objects so setting the exposure starts with the shutter speed. After you frame your shot, determine how long it takes for the object to move through the frame, that is your shutter speed. Now set the ISO and aperture to get the desired exposure and effect.

Considerations: Traffic lights don't stay green. Timing is everything. It may take several tries to get the desired effect. Red taillights are more colorful. Try the 2nd curtain flash. Try panning with a single car for a different effect.

6. Shooting the Moon.

Think of this as shooting a light bulb so that you can read the 60w label. Set your camera on spot meter and use a long lens and tripod. Fill the frame with as much moon as possible. You may have to adjust the exposure to see the surface detail.

Considerations: The moon is moving, exposures longer than about 30 seconds may start to blur. Long focal length lenses are subject to movement from any source such as ground vibrations or small amounts of wind.

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Four basic factors determine the exposure.

1. **Color Balance** - Telling your camera how to interpret the colors.
2. **ISO** - How sensitive your camera is to light.
3. **Shutter speed** - Length of time the shutter is open.
4. **Aperture** - How much light is allowed through the lens iris when the shutter opens.

What is Color Balance? (AWB, Sunlight, Cloudy, Shade, Tungsten, Fluorescent, etc.)

In the Film world, you select daylight or tungsten film, or use filters to change the color hue to record the colors correctly on the film. In the Digital world, you simply set the camera's White balance to sunlight, tungsten, fluorescent, cloudy or whatever the light source is for that photo. Auto White Balance (AWB), works pretty good in most situations. Leaving your camera set to Daylight while shooting indoors will make your images brown or orangish. (That may not be a word but it is a color).

What is the ISO? (50, 100, 200, 400, 800, 1600 etc.)

ISO settings determine how sensitive your camera is to the light. In dark areas, there may not be enough light to get a correct exposure with the aperture wide open and the shutter speed very slow. Raising the ISO will allow your camera to "See" more light and get a good exposure.

What is Shutter Speed? (1/30, 1/60, 1/125, 1/250, 1/500, 1/1000, etc.)

The shutter speed determines your camera's ability to "freeze" moving objects. Shutter speed is measured in fractions of a second. The longer the shutter is open, the more likely you are to have a blurry image. Moving objects is one type of movement, camera shake is the other. A higher shutter speed can minimize or eliminate movement.

What is the Aperture? (f/2.8, f/5.6, f/8, f/11, etc)

Aperture controls the amount of light entering the camera. Like the Iris of your eye, it senses when the light is bright and closes to a smaller opening. At night, it opens to allow more light in. If your eyes are bad and you have to squint to see clearer, the same is true for your camera. When the iris or aperture gets smaller, more subjects closer and farther from your focus point will be sharper. This is called Depth of Field and is controlled by the aperture.