

Lighting Tips, Close-Up Shots And More

Fifty years ago, Hollywood's glamour photographers used dramatic studio lighting to create celebrity portraits. They weren't the first artists to understand the ability of light and shadow to alter the mood of an image, however. The old master painters, such as Rembrandt, Rubens, and Valazquez, had a marvelous understanding of the subtleties of light and its dominance in the look of their portraits.



Digital imaging tools allow photographers to recreate a look similar to the old masters' without complicated studio lighting setups or hours in the darkroom dodging and burning a print. Not every image should be dark and dramatic, but in the right situation, it can make powerful portraits.

By using basic digital imaging techniques you can make images more interesting by isolating elements and focusing attention on what's most important: your subject.

1. . Start with a good exposure. If you start with an image that has too much contrast (or not enough), your modifications will look fake, and any imperfections will be obvious. Use burn tools to darken and give the illusion of depth and to compensate for flat lighting. Use the clone tool to remove distracting areas in the background and for touch ups.
2. Create a new layer so you can experiment on top of your image and easily undo what doesn't work. If your program won't do layers, just make the selections directly on the image and be sure to save versions as you go.
3. Make a feather of the selection. Depending on the size and resolution of your portrait, experiment with the number of pixels to get the broadest, smoothest transition possible. We recommend anywhere from 70 to 200 pixels.
4. Darken the surrounding environment. There are a variety of ways to go about this: using the opacity controls, adjusting the brightness and contrast of the selected area, or playing with the level controls to get the density you want. To smooth out the image and make for a subtle effect, adjust the transparency of your layers so more of the portrait shows through. If you don't get the gradation, density, and contrast you're looking for after one try, make another selection, bigger than the first, and repeat the same steps. Now you'll have another level of darkness built up. When you're satisfied, merge the layers together.
5. You can call it quits here, or go the extra mile. Experiment with making your image black and white, diffusing it, or both. This is the time to play with any ideas you have.

You don't have to be a professional photographer to take the kind of photos that will make people say "Wow!" Discover an advanced photography technique that will open up a new, exciting realm of creative options: macro photography (extreme close-ups). Since many digital cameras are able to get as close as an inch (2-3 cm) to your subject, you don't even need a macro lens to take close-ups.

With macro photography, familiar objects become unusual and abstract...and unusual objects become even more fascinating. Whether you want to capture butterflies, flowers, or ripples in a pool, macro photography reveals details the eye tends to ignore.



All you need is a digital camera, curiosity about the world around you, and a sense of adventure. Some tips from the pros wouldn't hurt either, which is why we've enlisted the help of a professional who specializes in digital nature photography.

You're in control

Before we move on to the fun stuff, you need to understand the basics of aperture and shutter speed settings: These are the two camera controls that give you the opportunity to be the most creative.

Yes, it's true that many digital cameras are automatic and don't allow for complete control over these settings. But even these cameras have some level of control (through programmed photo settings, etc.). Even with a fully automatic camera, you can take advantage of the effects these controls have on your images.

Aperture and shutter controls

When you take a picture, you expose the film to light. The two parts that work together to control your exposure are the aperture and shutter.

Aperture is the size of the opening that allows light in. The numbers on the aperture control are called f-stops (f16, f11, f8, and so on). Each number higher lets in half as much light as one number lower. The larger the f-stop number, the smaller the opening. A very small aperture makes everything (background and foreground) in focus. A large aperture makes only the subject you're focused on in focus.

Shutter speed is how long the shutter stays open; it controls the amount of time light is allowed to reach the film. Shutter speed is measured in fractions of a second: 125 means 1/125 of a second. On a sunny day, you might use a shutter speed of 1/125 second. On a cloudy day, you might use 1/60 second (with the

same aperture), exposing the film for a longer time.

Shutter and aperture work together. More light (larger aperture) means a faster shutter speed; more depth of field (smaller aperture) means a slower shutter speed.

Depth of field

You'll notice that very few close-up photos are completely sharp from foreground to background; the depth of field tends to be shallow. Depth of field is a measurement that refers to the sharp, in-focus zone in an image. When the camera is really close, your depth of field can be very slight, which can make focusing on your subject very challenging.

You can increase the depth of field in close-ups by using a smaller aperture (higher f-stop) or by increasing the illumination of the subject to stop down the aperture. Or, you could use a shallow depth of field to make a small object stand out sharply against a blurred background.

Macro photography: advice from a pro

Ruth Happel Smiley has been photographing and recording nature for 25 years. Her photographs have been widely published in Audubon magazines and calendars, National Wildlife magazine, and many other nature magazines and books. Here are five of Ruth's tips for getting up close and personal with the natural world:

1. Camera positioning: To deal with shallow depth of field, it's especially important to position your camera parallel to the plane on which you are focusing. If you're shooting an insect resting at an angle on a blade of grass, line up your camera with the body of the insect, or only part of it will be in focus. If you can't get the entire subject in focus, figure out what you want to center on, and make sure it's parallel to the back of the camera.
2. Freeze flash: My simple point-and-shoot doesn't have much in the way of manual adjustments, but it does close down the aperture more when you use the flash, and that gives you a better depth of field to work with. The flash also helps to stop any movement.
3. Exposure compensation: To ensure that at least one of your shots is properly exposed, adjust the EV (exposure value) setting of the camera, usually from -2 or 3 to +2 or 3. The danger with +EV and digital cameras is the tendency for "blooming": areas that are highly overexposed to spill into adjacent pixels. This can even lead to a nasty white line across your image, especially if it's shot at certain angles into the sun. However, I often try a range of EV values, especially when standard settings don't seem to be capturing the shot.



4. Fast or slow: If you want to freeze the action, you need to shoot at a very fast shutter speed: 1/500 of a second or more. If you want to show something in motion, like flowers swaying in the breeze, you may want to shoot at a speed as slow as 1/15 or less (and mounted on a tripod, of course).
5. Depth of field to alter the composition: You can have a very narrow focus on just one thing, like a flower, and throw the background and surroundings out of focus. Or you can try to focus on several things at once, like a spider capturing prey in its web. Then you might want to have the sharpest focus on the spider, but make sure the prey in the foreground or background is reasonably sharp.

Lighting and exposure

The challenge in lighting close-ups is having enough light so you and your camera can focus, while evenly distributing the light to prevent shadows. With flashes, you get deep depth of field, and the extremely short bursts of light at close distances prevent camera or subject movement from blurring. But sometimes a flash will change the photo's color or cause an overexposure because it's too close to the subject. In these cases, it's best to provide another source of light.

Get creative. Use aluminum wrapped cardboard or mirrors as refractors, or set up a homemade miniature lighting tent to achieve diffused lighting. If you're inside, try different household lamps. Since you're using a digital camera, you have the freedom to experiment, check out the results, and then try something completely different.

Freedom to experiment

When it comes to close-up photography, digital camera owners have a huge advantage. You can review your results and make adjustments as you go along. The more new things you try, the better you'll get. Before long, you'll begin to intuitively know how to find the perfect exposure and just the right lighting..

Macro photography is just the beginning of where your newfound knowledge of exposure and shutter speeds can take you. Buy a book on night photography and capture the city lights or the stars in the sky. Or experiment with blurring and freezing motion shots. Above all, be daring, and bold photographs will follow.