

Seven Creative Exposures for Remarkable Photography

By Chuck Palmer

One of the most rewarding experiences in the art of photography is making a remarkable photo with a creative exposure. We can create unique images by understanding and implementing distinctive optical qualities of lens apertures and camera shutter speeds. Although special mobile phone applications may enable creative exposures, a DSLR or cameras capable manual exposure controls will provide the best flexibility to capture creative exposures.

Creative exposures start by understanding the exposure triangle and the influence lens aperture, shutter speed, and ISO sensitivity has on our photographic images. Let's look at several creative exposure possibilities and the impact each choice has on our remarkable photography.



Jennifer - 1/100 sec @ f/2.8, ISO 10000 – 90 mm

Isolation Apertures – Capturing a subject with a small numbered aperture (large lens opening – f/1.4, f/2.0, f/2.8, f/4) creates a narrow range of sharpness or commonly called depth of field. Isolation apertures are especially useful for isolating your subject from a busy background, while creating a blurred but often more interesting dappled canvas to display your subject. The

aesthetic quality of the blur produced in the out-of-focus parts of an image is referred to as bokeh. Try these camera settings to create an Isolation Aperture Exposure:

Lens Choice: A focal length of 50 mm or greater, preferably 85 – 200 mm will produce the best isolation aperture exposure. Position your subject a considerable distance from the background for best results.

Exposure Mode: Aperture Priority or Manual

Aperture: Set to lowest f/stop your lens allows. . . f/1.4 – f/4

ISO: Adjust ISO sensitivity until your shutter speed reflects a speed that will avoid camera shake and/or motion blur.

Note: A good rule of thumb to avoid hand-held camera shake is to make sure your shutter speed is at least 1.5X your lens focal length (1.5 X 50mm = 1/75 or 1/100 sec)



Lake Louise - 1/125 sec @ f/16, ISO 160 – 24 mm

Inclusion Apertures – Capturing a remarkable image with a large numbered aperture (small lens opening – f/16, f/22) creates a large range of sharpness or depth of field. Inclusion apertures are especially useful for landscape photography where we desire the image foreground and background to be in sharp focus. Try these camera settings to create a remarkable photo with an inclusion aperture exposure.

Lens Choice – A focal length of 35 mm (wide angle) or less will produce the greatest depth of field. Set focus point 1/3 the way into your image.

Exposure Mode: Aperture Priority or Manual

Aperture: Set to f/16, f/22, or greater

ISO: Hand-held – set ISO sensitivity until shutter speed is sufficient to avoid motion blur and camera shake. A tripod should be used in low light to avoid camera shake enabling the ISO to be set to the lowest noise setting, typically ISO 100.



Cocoa Beach Pier - 1/50 sec @ f/22, ISO 100 – 44 mm

Starburst Aperture – Your viewers may just spend a little more time admiring your remarkable image if you create a starburst in the specular highlights of your photo. The starburst effect results from pointing your lens at a bright point of light such as the sun or streetlights. As the point of light passes through a small lens aperture, it is diffracted (spread out) across the lens' aperture blades. The quality and characteristics of the starburst produced are the result of lens quality, and the number and shape of the aperture blades inside the lens. Starbursts are best created with a wide-angle lens set to an "inclusion aperture" (f/16, f/22. . . see inclusion aperture settings above). Then position your camera where the light source is just appearing from behind other composition elements in your image. Do not look directly into the sun to avoid eye injury.



Nancy - 1/60 sec @ f/10, ISO 100 – 52 mm

Sharpest Aperture – Many of our remarkable images can be created without any concerns for the range of sharpness. In these images, we just don't care much about our depth of field. Therefore, we can set our aperture mid-range which will result in the sharpest possible images. As the lens aperture gets smaller, light waves progressively spread out and interfere with one another. This causes small details of your photograph to blur. This physics principle is known as diffraction and is a common lens specification. Mid-range aperture settings (f/8, f/10, f/11) typically causes less diffraction and therefore produces sharper images. Try these camera settings when composition elements are relatively close to one another, and you are not concerned about the range of sharpness within your image but still want all elements as sharp as they can be.

Exposure Mode: Aperture Priority or Manual

Aperture: Set to f/8 - f/11

ISO: Set ISO sensitivity until your shutter speed is fast enough to avoid camera shake.



Space Coast Fair - 1.0 sec @ f/22, ISO 100 – 18 mm

Motion Blur Slow Shutter Speed – One of the most creative images in photography is one that depicts motion in a still image. This creative exposure often requires the use of a tripod because the shutter speed used to blur the motion must be very slow. . . too slow to hand-hold. To display motion in your creative image, try these camera settings.

Camera: Use a tripod

Exposure Mode: Manual Mode

Shutter Speed: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{15}$ of a second or slower depending on the speed of the moving composition element.

Aperture: Set aperture to achieve your desired shutter speed.

ISO: Set ISO sensitivity to lowest possible setting to avoid image noise.



Running Late - 1/15 sec @ f/13, ISO 100 – 40 mm

Motion Blur Slow Shutter Speed – Panning – Another method to show motion in still images is to pan the camera with the moving object which blurs the background. Although difficult to execute without practice, this creative exposure is usually created by hand-holding the camera at slow shutter speeds. Panning with a tripod is possible with some caution to assure the tripod is absolutely level but usually limits movement flexibility. Try these camera settings for panning motion blur shots.

Exposure mode: Shutter Priority or Manual

Shutter Speed: 1/15 – 1/60th of a second

Aperture: Set by the camera if in Shutter Priority Mode or set aperture to achieve desired shutter speed if in Manual Mode.

ISO Sensitivity: Set ISO sensitivity to lowest possible setting for desired shutter speed and aperture or try Auto-ISO.



Harmony - 1/640 sec @ f/5.6, ISO 100 – 145 mm

Freeze Action – Fast Shutter Speed – Of course many times we must stop the action to tell our remarkable story. In this creative exposure we must utilize a fast shutter speed to freeze the action. How fast the shutter speed must be depends entirely on how fast the subject is moving. To freeze the action of a person walking, 1/500 – 1/800 may be entirely sufficient. However, a fast-moving animal or vehicle may need shutter speeds of 1/2000 – 1/4000 of a second to stop motion blur. Try these camera settings to freeze action.

Exposure mode: Shutter Priority or Manual

Shutter Speed: 1/500 or faster depending on the speed of motion

Aperture: Typically, f/5.6 or lower but can usually be any number to accomplish desired Shutter Speeds

ISO Sensitivity: Try Auto – ISO or any number to accomplish necessary Shutter Speeds.

Creating remarkable images is one of the main reasons avid photographers love the photographic arts. Practicing and successfully executing any of the seven different creative exposures we have reviewed can go a long way in turning an ordinary photo into a remarkable one. At your next photo shoot, try at least one of the creative exposures you now have in your photography tool box.

As always... keep shooting and may only the remarkable photos be yours.

Chuck