

Glossary of Terms (Basic Photography)

Ambient Light

The available light completely surrounding a subject. Light already existing in an indoor or outdoor setting that is not caused by any illumination supplied by the photographer.

Angle Of View

The area of a scene that a lens covers or sees. Angle of view is determined by the focal length of the lens. A wide-angle lens (short-focal-length) includes more of the scene-a wider angle of view-than a normal (normal-focal-length) or telephoto (long-focal-length) lens.

Aperture

The lens opening. The opening in a camera lens through which light passes to expose the film. The size of aperture is either fixed or adjustable. Aperture size is usually calibrated in f-numbers-the larger the number, the smaller the lens opening. Aperture settings on the camera control F stops. For low light conditions, one needs to open to a camera setting such as F4. On bright, sunny days, close down the aperture to F 16.

Aperture Priority

An exposure mode on an automatic or autofocus camera that lets you set the aperture while the camera sets the shutter speed for proper exposure. If you change the aperture, or the light level changes, the shutter speed changes automatically.

Autofocus (AF)

System by which the camera lens automatically focuses the image of a selected part of the picture subject.

Automatic Camera

A camera with a built-in exposure meter that automatically adjusts the lens opening, shutter speed, or both for proper exposure is called an automatic camera.

A shutter-speed setting on an adjustable camera that allows for time exposures. When set on B, the shutter will stay open as long as the shutter release button remains depressed.

Background

The part of the scene that appears behind the principal subject of the picture.

Backlighting

This is the light coming from behind the subject, toward the camera lens, so that the subject stands out vividly against the background. Sometimes produces a silhouette effect.

Balance

Placement of colors, light and dark masses, or large and small objects in a picture to create harmony and equilibrium.

Blowup

An enlargement; a print that is made larger than the negative or slide.

Bounce Lighting

Flash or tungsten light bounced off a reflector (such as the ceiling or walls) to give the effect of natural or available light.

Bracketing

The process of taking additional pictures of the subject through a range of exposures-both lighter and darker-when unsure of the correct exposure.

Camera Angles

Various positions of the camera (high, medium, or low; and left, right, or straight on) with respect to the subject, each giving a different viewpoint or effect.

Candid Pictures

Un-posed pictures of people, often taken without the subject's knowledge. These usually appear more natural and relaxed than posed pictures.

ccd sensor

(Charged Coupled Device) to sense light color and intensity. The part of a digital camera used to record the image instead of film.

Close-Up

A picture taken with the subject close to the camera-usually less than two or three feet away, but it can be as close as a few inches.

Close-Up Lens

A lens attachment placed in front of a camera lens to permit taking pictures at a closer distance than the camera lens alone will allow.

Composition

The composition is the pleasing arrangement of the elements within a scene—the main subject, the foreground and background, and supporting subjects.

Contrast

The range of difference in the light to dark areas of a image the brightness range of a subject or the scene lighting.

Contrasty

Higher-than-normal contrast including very bright and dark areas. The range of density in a image is higher than it was in the original scene.

Cropping

Printing only part of the image, usually for a more pleasing composition. May also refer to the framing of the scene in the viewfinder.

Darkroom

Light-tight area used for processing films and for printing and processing papers; also for loading and unloading film holders and some cameras.

Dedicated Flash

A fully automatic flash that works only with specific cameras. Dedicated flash units automatically set the proper flash sync speed and lens aperture, and electronic sensors within the camera automatically control exposure by regulating the amount of light from the flash.

Definition

The clarity of detail in a photograph.

Density

The blackness of an area in a image. Sometimes referred to as contrast.

Depth of Field

The amount of distance between the nearest and farthest objects that appear in acceptably sharp focus in a photograph. Depth of field depends on the lens opening, the focal length of the lens, and the distance from the lens to the subject. It means what else in the photograph is in acceptable focus besides the subject? Is some of the foreground and all of the background in focus? Then you have alot of depth-of-field. If only the subject is in focus and the foreground and background are out of focus, then you have very little depth-of-field.

Diffuse Lighting

Lighting that is low or moderate in contrast, such as on an overcast day.

Diffusing

Softening detail in a print with a diffusion disk or other material that scatters light.

Digital zoom

An enlargement or interpolation of a cropped portion of the digital image. This type of enlargement is done with software, and not a lens.

Double Exposure

Two pictures taken on one frame of film, or two images printed on one piece of photographic paper.

DPI

digital images are essentially made up of little "dots". We use DPI (Dots Per Inch) as a measure of resolution. Generally speaking, the higher the number, the higher the resolution. 300 DPI is considered (by most of us) to be photo quality. Generally speaking, you won't notice much difference in quality by going higher than 300 DPI. In fact, if an image is being used on the web or for computer screen purposes, then it needs to be 72 DPI, since that's all most computer screens can display anyway.

Emulsion

Micro-thin layers of gelatin on film in which light-sensitive ingredients are suspended; triggered by light to create a chemical reaction resulting in a photographic image.

Emulsion Side

The side of the film coated with emulsion. In contact printing and enlarging, the emulsion side of the film-dull side-should face the emulsion side of the photo paper-shiny side.

Enlargement

A print that is larger than the negative or slide; blowup.

Enlarger

A device consisting of a light source, a negative holder, and a lens, and means of adjusting these to project an enlarged image from a negative onto a sheet of photographic paper.

Existing Light

Available light. Strictly speaking, existing light covers all natural lighting from moonlight to sunshine. For photographic purposes, existing light is the light that is already on the scene or project and includes room lamps, fluorescent lamps, spotlights, neon signs, candles, daylight through windows, outdoor scenes at twilight or in moonlight, and scenes artificially illuminated after dark.

Exposure

The quantity of light allowed to act on a photographic material; a product of the intensity (controlled by the lens opening) and the duration (controlled by the shutter speed) of light striking the CCD.

Exposure Meter

An instrument with a light-sensitive cell that measures the light reflected from or falling on a subject, used as an aid for selecting the exposure setting. The same as a light meter.

File size

File size refers to how big the image will be printed. The size of an image can be measured in inches or pixels. To determine the size of a digital image, open image through Photoshop elements under "file" and "image size".

Graininess

The sand-like or granular appearance of a image, negative, print, or slide. Graininess becomes more pronounced with faster film and the degree of enlargement.

High Contrast

A wide range of density in a image.

Highlights

The brightest areas of a subject and the corresponding areas in a image.

Hot Shoe

The fitting on a camera that holds a small portable flash. It has an electrical contact that aligns with the contact on the flash unit's "foot" and fires the flash when you press the shutter release. This direct flash-to-camera contact eliminates the need for a PC cord.

Interpolation

a digital process of increasing file size. Software doubles the pixels, care must be taken as quality of final image may be compromised.

ISO Speed

The emulsion speed (sensitivity) of the camera as determined by the standards of the International Standards Organization. We have found that higher ISO numbers in digital cameras result in increased noise.

Lens

One or more pieces of optical glass or similar material designed to collect and focus rays of light to form a sharp image on the film, paper, or projection screen.

Lens Shade

A collar or hood at the front of a lens that keeps unwanted light from striking the lens and causing image flare. May be attached or detachable, and should be sized to the particular lens to avoid vignetting.

Lens Speed

The largest lens opening (smallest f-number) at which a lens can be set. A fast lens transmits more light and has a larger opening than a slow lens

Light meter

An instrument with a light-sensitive cell that measures the light reflected from or falling on a subject, used as an aid for selecting the exposure setting. The same as a light meter.

Macro Lens

A lens that provides continuous focusing from infinity to extreme close-ups, often to a reproduction ratio of 1:2 (half life-size) or 1:1 (life-size).

Megapixel

A picture made up of one million pixels, or one million picture elements.

Motor Drive

A mechanism for advancing the film to the next frame and re-cocking the shutter, activated by an electric motor usually powered by batteries. This is popular for action-sequence photography and for recording images by remote control.

Negative

The developed film that contains a reversed tone image of the original scene.

Normal Lens

A lens that makes the image in a photograph appear in perspective similar to that of the original scene. A normal lens has a shorter focal length and a wider field of view than a telephoto lens, and a longer focal length and narrower field of view than a wide-angle lens.

Optical zoom

controls the lens on the digital camera that provides magnification of the subject being photographed.

Overexposure

A condition in which too much light reaches the CCD. (Charged Coupled Device) to sense light color and intensity. The part of a digital camera used to record the image instead of film.

Panning

Moving the camera so that the image of a moving object remains in the same relative position in the viewfinder as you take a picture.

Panorama

A broad view, usually scenic.

Pixel

An abbreviation for "picture element". The smallest unit of measurement for a digital image.

Polarizing Screen (Filter)

A filter that transmits light traveling in one plane while absorbing light traveling in other planes. When placed on a camera lens or on light sources, it can eliminate undesirable reflections from a subject such as water, glass, or other objects with shiny surfaces. This filter also darkens blue sky.

Positive

The opposite of a negative, an image with the same tonal relationships as those in the original scenes—for example, a finished print or a slide.

Print

A positive picture, usually on paper, and usually produced from a negative.

Processing

Developing, fixing, and washing exposed photographic film or paper to produce either a negative image or a positive image.

Program Exposure

An exposure mode on an automatic or autofocus camera that automatically sets both the aperture and the shutter speed for proper exposure.

Reflector

Any device used to reflect light onto a subject.

Resolution

Resolution is the sharpness and clarity of a digital image that can refer to the number of dots per inch dots in inch. The term is most often used to describe monitors, printers, and bit-mapped graphic images. In the case of dot-matrix and laser printers, the resolution indicates the number of dots per inch. For example, a 300-dpi (dots per inch) printer is one that is capable of printing 300 distinct dots in a line 1 inch long. This means it can print 90,000 dots per square inch.

Saturation

An attribute of perceived color, or the percentage of hue in a color. Saturated colors are called vivid, strong, or deep. Desaturated colors are called dull, weak, or washed out.

Selective Focus or limited Depth-of-Field

Choosing a lens opening that produces a shallow depth of field. Usually this is used to isolate a subject by causing most other elements in the scene to be blurred.

Shutter

Blades, a curtain, plate, or some other movable cover in a camera that controls the time during which light reaches the CCD.

Shutter Priority

An exposure mode on an automatic or autofocus camera that lets you select the desired shutter speed; the camera sets the aperture for proper exposure. If you change the shutter speed, or the light level changes, the camera adjusts the aperture automatically.

Side Lighting

Light striking the subject from the side relative to the position of the camera; produces shadows and highlights to create modeling on the subject.

Simple Camera

A camera that has few or no adjustments to be made by the picture-taker. Usually, simple cameras have only one size of lens opening and one or two shutter speeds and do not require focusing by the picture-taker.

Single-Lens-Reflex (SLR) Camera

A camera in which you view the scene through the same lens that takes the picture (single lens reflex) This is a camera where the photographer sees exactly the same image that is exposed to through the lens to the ccd sensor or the film. A mirror flips up out of the way, the shutter opens and the image is exposed onto the sensor or film.

Slide

A photographic transparency (positive) mounted for projection.

Soft Focus

Produced by use of a special lens that creates soft outlines.

Soft Lighting

Lighting that is low or moderate in contrast, such as on an overcast day.

Stopping Down

Changing the lens aperture to a smaller opening; for example, from f/8 to f/11.

Telephoto Lens

A lens that makes a subject appear larger on film than does a normal lens at the same camera-to-subject distance. A telephoto lens has a longer focal length and narrower field of view than a normal lens.

Through-The-Lens Focusing

Viewing a scene to be photographed through the same lens that admits light to the film. Through-the-lens viewing, as in a single-lens-reflex (SLR) camera, while focusing and composing a picture, eliminates parallax.

Through-The-Lens Metering

Meter built into the camera determines exposure for the scene by reading light that passes through the lens during picture-taking.

Time Exposure

A comparatively long exposure made in seconds or minutes.

Tone

The degree of lightness or darkness in any given area of a print; also referred to as value. Cold tones (bluish) and warm tones (reddish) refer to the color of the image in both black-and-white and color photographs.

Transparency

A positive photographic image on film, viewed or projected by transmitted light (light shining through film).

Tripod

A three-legged supporting stand used to hold the camera steady. Especially useful when using slow shutter speeds and/or telephoto lenses.

Underexposure

A condition in which NOT ENOUGH light reaches the CCD. (Charged Coupled Device) to sense light color and intensity. The part of a digital camera used to record the image instead of film.

Unipod

A one-legged support used to hold the camera steady.

Vignetting

A fall-off in brightness at the edges of an image, slide, or print. Can be caused by poor lens design, using a lens hood not matched to the lens, or attaching too many filters to the front of the lens.

Wide-Angle Lens

A lens that has a shorter focal length and a wider field of view (includes more subject area) than a normal lens.

White balance

White balance refers to the color balance of the light, which is measured in degrees kelvin. For example, sunlight is 5,000 degrees kelvin. Florescent light is 3200 degrees kelvin. Different types of indoor lighting may cause an image to appear green. The white balance control helps to achieve proper color balance.

Zoom Lens

A lens in which you adjust the focal length over a wide range. In effect, this gives you lenses of many focal lengths.