Photomanual

TGJ-3MI

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Getting to Know Your Camera

As with any piece of electronic equipment, you want to take the time to learn how to operate your camera correctly. The first step is reading over the manual.This is important, since you want to ensure you are familiar with basic operations, charging instructions, how to load memory cards, transfer images to your computer, etc. For your first shots, limit the settings you change so that you can get started quickly. On most digital cameras, you adjust settings using a menu that is displayed in the camera's LCD panel. The settings are within menus much like computer software. Your camera will also have a control on it -usually on the back or top - that functions like a four-sided computer mouse so you can select different settings.

Used to change or adjust settings on the camera.

Getting to Know Your Camera

Most digital SLR cameras have similar basic features, including:

-White Balance Adjustment

-Aperture/Exposure Control

-Shutter Speed Control

-Quality/Sharpness Settings

-Red-Eye Reduction

-"Macro" Mode and Preset Photo Modes

Shutter Speed

A camera's shutter speed refers to the length of time the shutter stays open, allowing light to enter the camera. The faster the shutter speed, the less light that enters the camera and the quicker the image is captured. A good photographer knows how to make aperture settings and shutter speed work together! As with exposure settings, most digital cameras have auto-shutter modes. Be aware of how different shutter speeds affect an image.

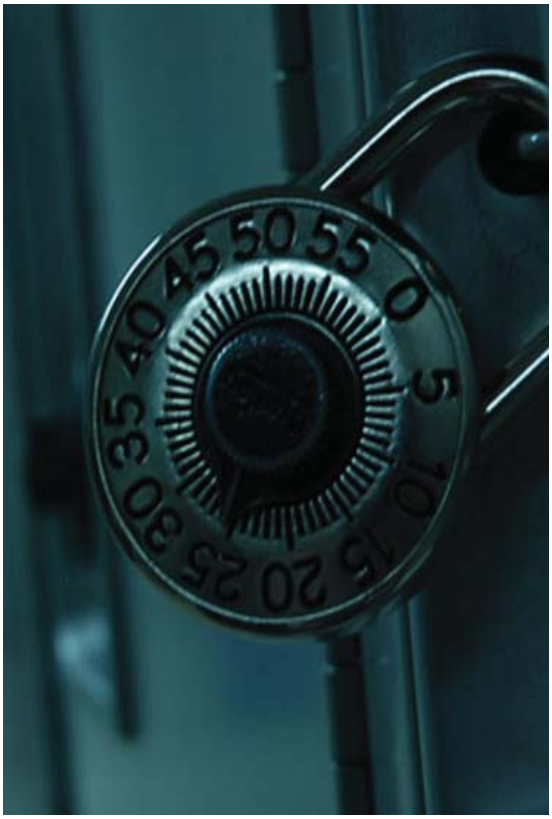
The longer exposures (such as 1 second) give much more light to the film than a 1/1000 of a second exposure.

Fast Shutter Speed: 1/30 sec

Slow Shutter Speed: 1/3 sec

White Balance

White balance adjusts colors based on the light you are shooting (indoor vs. outdoor) – usually referred to as COLOUR TEMPERATURE. With proper white balancing, white objects in your photos appear as white instead of with an orange or blue cast. Some digital cameras have an auto-white balance feature, but be careful as it isn't always accurate. You can correct white-balance problems on the computer(with programs such as Photoshop).



INCORRECT WHITE BALANCE (blue tint) – camera not adjusted for outdoor photos

CORRECT WHITE BALANCE camera adjusted for outdoor photos – no unusual tinting

Depth of Field

The camera's aperture setting also controls the depth of field of your photos. Depth of field is the range of distance from the camera lens that appears in sharp focus. The smaller the aperture opening (or higher F-Stop number), the greater the depth of field (or larger range of focus). The larger the aperture opening (or smaller F-Stop number), the shallower the depth of field (small range of focus).

Depth of Field Images:

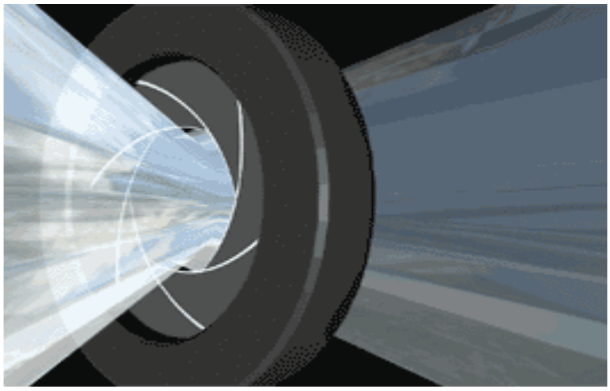
Depth of Field

Deep Depth of Field: f/13

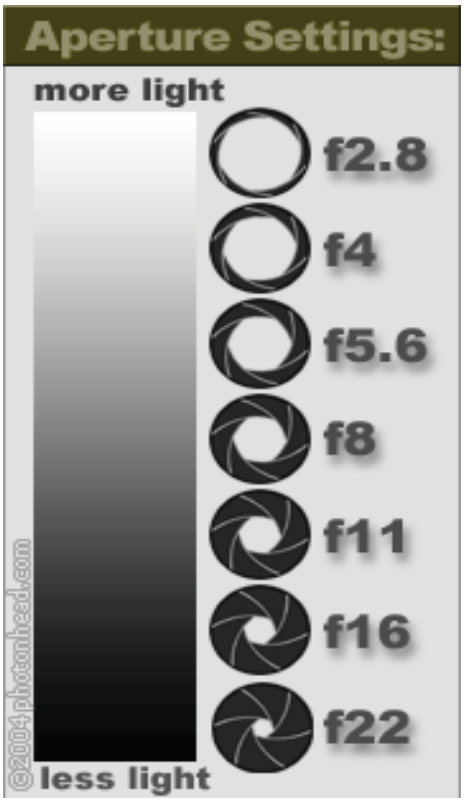
Shallow Depth of Field: f/4.5

Aperture Settings

A camera's aperture is the opening that allows light into the lens (think of the iris in your eye). Setting the aperture correctly is important for ensuring properly exposed photos (meaning the correct amount of light). A large aperture setting lets in more light and is useful in more darkly lit situations. A small aperture setting is better suited for brightly lit scenes. Most digital cameras feature an auto-exposure setting that automatically adjusts the aperture as lighting conditions change. Professional photographers rarely use auto-exposure mode, preferring instead to control the aperture setting themselves. Different aperture settings are referred to as F-Stops. The smaller the F-Stop number, the larger the aperture opening.



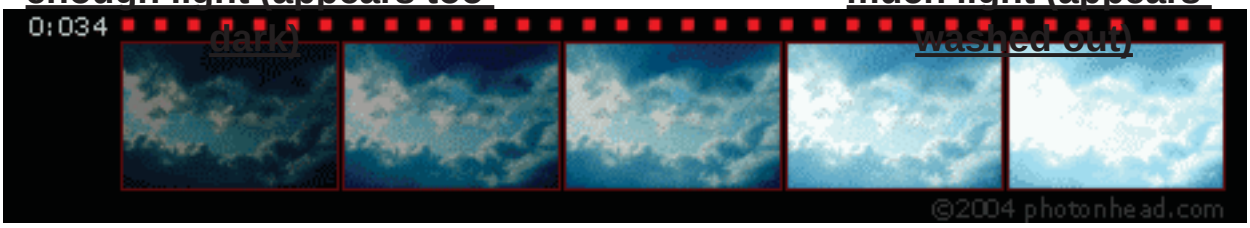
Brightness is reduced as light passes through the aperture ofa camera lens.



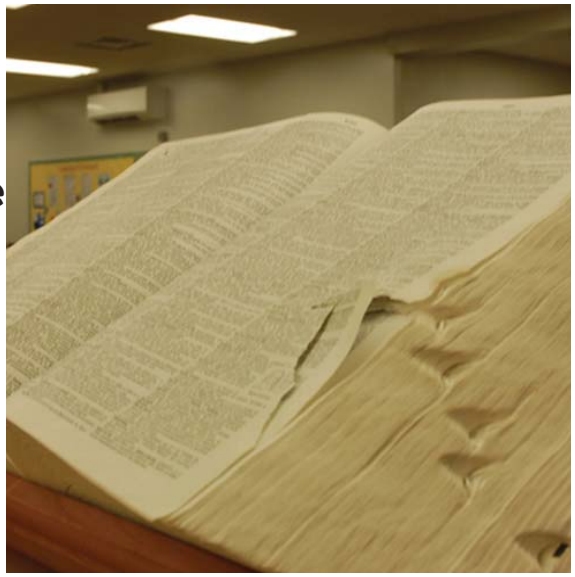
Aperture Settings

Under-exposed = not enough light (appears too dark)

Over-exposed = too much light (appears washed out)



Perfect light exposure image f9



Over-exposed image f3.8

Under-exposed image f25

IOS (Film Speed)

ISO refers to the speed at which the camera's CCD captures the image. Lower ISO speeds (200) create a higher quality image but require longer exposure times. Lower speeds are well suited to brightly lit subjects and still life photos. Higher ISO speeds (1000 or higher) result in quick exposure times with slightly reduced quality. Higher speeds are suited to low light conditions or moving subjects.

Slow IOS/ISO 200

Medium IOS/ISO 400

Fast IOS/ISO 1600

3-Point Portrait Lighting

You will be using a 3 point lighting kit with a key light, a fill light and a back light. The key light should be set at roughly a 45 degree angle (both vertically and horizontally) to your subject. With the key light aimed correctly your subject should be brightly lit with heavy shadow patterns caused by the nose and the eyebrows. The fill light will be used to soften, but not eliminate, the shadows. It should be set at approximately a 45 degree angle on the opposite side from the key light. Aim the fill light away from the subject and use the umbrella reflector to reflect light onto the subject. With both key and fill lights on the subject should be well lit with light shadow patterns caused by the eyebrows and nose. The background light should not be aimed at the subject. It will be aimed at the backdrop in order to light it evenly and eliminate any shadows caused by the key and fill lights.

Three Point Lighting Station

3-Point Portrait Lighting

Examples of Three Point Lighting:

Flash

1-Point Lighting

2-Point Lighting

3-Point Lighting

Natural Lighting

Natural Lighting pictures are simply pictures taken in natural light. Natural Light is light generated by the sun. The easiest way to get a natural light photo is to go outside and take a photo.

These are all examples of natural lighting. All these photos were taken with the camera set in automatic.

Image Composition/Rule of Thirds

Your initial impulse may be to use the camera's LCD monitor instead of the viewfinder to compose pictures. You can do this, but this technique can also result in "soft" focus images; holding a lightweight camera away from your body is an invitation for motion blur. Holding the viewfinder to your eye provides built-in stabilization that helps ensure sharp images. To stabilize the camera, hold it with one hand, and support it with the other. Keep your elbows close at your side. Stand with your feet shoulder-width apart to steady the camera. Get close to your subject when possible. This eliminates potentially distracting background details and focuses attention on your subject. Pay attention to the background! Use the Rule of Thirds! Avoid placing objects dead centre – this helps to create visual interest. Try to take shots from interesting angles. Force people to see things in unique ways.

Rule of Thirds

Unique Shoots

Product Photography: Nikon VS Canon

Nikon

f/6.3

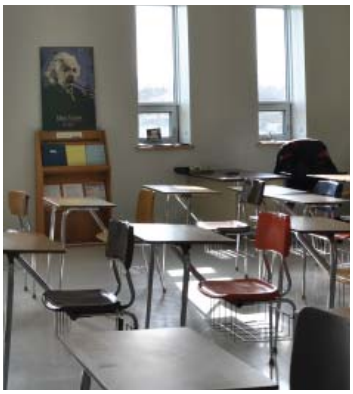
ISO-200

Exposure Time: 1/160sec

f/7.1

ISO-200

Exposure Time: 1/50 sec



f/5.6

Exposure Time: 1/30 sec

ISO-200

Canon

f/5.6

ISO-100

Exposure Time: 1/80 sec

f/4

ISO-100

Exposure Time: 1/50sec

f/5

Exposure Time: 1/100 sec

ISO-400

All photos taken in Automatic mode and no flash was used.

Product Photography: Nikon VS Canon

After testing both the Canon and Nikon camera's I personally prefer the Canon camera. In all the comparison shots on the last page, I like all the Canon picture better then the Nikon ones. The Nikon camera continually put the flash on in Automatic Mode, which I found rather annoying because the flash was unnecessary. I manually had to turn off the flash to get the exact same shots as the Canon camera with the Nikon camera. Additionally, when comparing the two photos of the classroom on the last page, the Nikon photo came out rather pixilated compared to the Canon image which was very clear. I also noticed that the two cameras capture light quite differently as shown in the top photos on the last page. The Canon photo has a lot of shadows on the rugby ball while the Nikon image seems to be missing a few shadows on the ball. All in all, these cameras are both goof camera to use but I have a preference for the Canon camera over the Nikon camera.

Nikon

Canon