

TYPES OF CAMERA

Point and Shoot camera Point and shoot cameras mean just as the name implies , point the camera at something and trip the shutter. The camera does all the work for you. Unfortunately, the camera is rarely as smart as the photographer so the results can be sharp. Point and shoot cameras are often abbreviated as P&S. These cameras started out as a fixed lens that focused about 4 feet in front of the camera with a fixed aperture and shutter speed. It was basically a box with a shutter. Then the lab that developed the film did what it could to fix the exposure. Today's P&S cameras are much more sophisticated. While there are still some P&S film cameras, such as the disposable or one time use cameras, most P&S today are digital

Features

Metering systems, which calculate the amount of light entering the camera
Variable shutter speed• Variable aperture• Zoom lenses• Automatic focus•
Preset controls for various photographic situations such as:• o landscapes o night-time o people o close-up or macro

Popular P&S Cameras

Kodak Easyshare series• Canon Sureshot series• Canon Powershot series•
Pentax Optio series• Nikon Coolpix series•

SLR and DSLR

SLR stands for Single Lens Reflex and DSLR stands for Digital Single Lens Reflex and refers to how the light enters the camera. These are the cameras you see many professionals and serious amateurs lugging around. These cameras have a larger body than most P&S cameras and interchangeable lenses. While SLRs started out a fully manual, where the photographer had to control all features including focus, most of these cameras are capable of acting in a fully automatic mode just like a P&S. Many now allow the photographer the freedom to also take

control of all functions or any combination of functions. These cameras allow for great control over the photography process and allow the photographer to take images not always possible with a P&S.

Features

SLRs and DSLRs allow for control over: shutter speed• aperture• film speed• focus point• magnification (through the use of various lenses)• capability for add-on flashes• remote releases• additional battery packs. The following are the series of this type of camera•

1. Digital cameras: are made in a wide range of sizes, prices and capabilities. The majority are camera phones, operated as a mobile application through the cell phone menu. Professional photographers and many amateurs use larger, more expensive digital single-lens reflex cameras (DSLR) for their greater versatility. Between these extremes lie digital compact cameras and bridge digital cameras that "bridge" the gap between amateur and professional cameras. Specialized cameras including multispectral imaging equipment and astrographs continue to serve the scientific, military, medical and other special purposes for which digital photography was invented.

2. Compact cameras: are designed to be tiny and portable and are particularly suitable for casual and "snapshot" uses. Hence, they are also called point-and-shoot cameras. The smallest, generally less than 20 mm thick, are described as subcompacts or "ultracompacts" and some are nearly credit card size. Most, apart from ruggedized or waterresistant models, incorporate a retractable lens assembly allowing a thin camera to have a moderately long focal length and thus fully exploit an image sensor larger than that on a camera phone, and a mechanized lens cap to cover the lens when retracted. The retracted and capped lens is protected from keys, coins and other hard objects, thus making it a thin, pocketable package. Subcompacts commonly have one lug and a short wrist strap which aids extraction from a pocket, while thicker compacts may have two lugs for attaching a neck strap.

Compact digital cameras

Compact cameras are usually designed to be easy to use, sacrificing advanced features and picture quality for compactness and simplicity; images can usually only be stored using lossy compression (JPEG). Most have a built-in flash usually of low power, sufficient for nearby subjects. Live preview is almost always used to frame the photo. 43 Most have limited motion picture capability. Compacts often have macro capability and zoom lenses but the zoom range is usually less than for bridge and DSLR cameras. Generally a contrast-detect autofocus system, using the image data from the live preview feed of the main imager, focuses the lens. Typically, these cameras incorporate a nearly silent leaf shutter into the lens but play a simulated camera sound for skeuomorphic purposes. For low cost and small size, these cameras typically use image sensors with a diagonal of approximately 6 mm, corresponding to a crop factor around 7. This gives them weaker low-light performance, greater depth of field, generally closer focusing ability, and smaller components than cameras using larger sensors. Some cameras have GPS, compass, barometer and altimeter. And some are rugged and waterproof

PARTS OF CAMERA

Body:

The camera body is the most basic part of a camera. It is the box that holds the film and the camera controls. The lens is either built-into the body or attaches to the body. The body also houses a battery that powers the shutter, flash, light meter, and other controls. There are generally rings to connect a strap to the camera for easy carrying as well.

Lens: The lens is the part of the camera (or an attachment for the camera) that focuses light into the body and onto the film. The aperture is also contained within the lens

. Viewfinder: The viewfinder is the hole in the back of the camera that a photographer looks through to aim the camera. Some viewfinders use a mirror inside the camera to look through the lens (TTL). Other viewfinders are simply

holes through the body of the camera. Viewfinders that look through the lens (TTL) allow the photographer better accuracy when composing their images

. Shutter Release: The shutter release is a button that raises a shutter inside the camera for a specified amount of time to allow light to expose the film. In a SLR camera, this button also raises a mirror that allows the photographer to use the viewfinder to look through the lens itself. Many SLR cameras also allow a remote release of the shutter via a cable or IR remote.

In automatic cameras, the shutter release also causes the film to advance to the next exposure. In manual cameras, there is a "film advance lever" that must be turned in order to advance the film and the exposure counter.

Shutter: An opaque piece of metal or plastic inside your camera that prevents light from reaching the film or digital sensor. The shutter is opened, or released, by the shutter release button. The amount of time the shutter stays open is controlled by the shutter speed setting.

Shutter Speed Control: The shutter speed control is the point on your camera where you set the amount of time the shutter will remain open. On automatic cameras, this is generally accessed through a menu and displayed on a screen on the back of the camera.

In manual cameras, the shutter speed is generally controlled and displayed on a knob on the top of the camera. The shutter speed is measured in fractions of a second but is generally shown as the denominator only. For example, 1/60 of a second is shown as 60. Film Speed Control:

The film speed control allows you to calibrate your camera's meter to your film speed so that you will get an accurate exposure reading. The film speed may be set electronically through a menu or via a knob/button on manual cameras. On manual cameras, the control is often integrated with a film speed indicator on the top of the camera. On automatic cameras, the control and film speed indicator are generally separate with the film speed being indicated on the electronic menu display on the back of the camera.

F-Stop Control: On automatic cameras, the F-Stop control is on the camera. For older manual cameras, the F-Stop is controlled on the lens. The F-Stop controls allow you to set the size of the aperture within the lens.

Film Compartment: In film cameras, there is a compartment in the back of the camera to hold the film. This compartment has a space for the film canister, sprockets to guide the film across the exposure area, a pressure plate to tighten the film, and a take up reel to wind the film. When the roll of film has been completely exposed, automatic cameras use a small motor to rewind the film. Manual cameras require the photographer to turn a small "rewind knob" to manually rewind the film into the canister. If the film is not rewound before the back compartment is opened, the film will be exposed to enough light to ruin the images.

Flash: Most cameras now include a built-in flash. Some are simple light bulbs built into the front of the camera. On SLR cameras, most built-in flashes pop-up out of a protective storage area on the top of the camera. External flashes can often be attached via the "hot shoe mount" or, in the case of manual cameras, a small connector port on the front of the camera that accepts a cable attached to a distant flash.

Hot Shoe Mount: The hot shoe mount is a point on the top of most SLR cameras where an external flash can be connected. It is called a "hot shoe" because it has electrical contact points and guide rails that fit over the bottom of the flash like a shoe.

Lens Ring Mount: On cameras that allow interchangeable lenses, there is a metal ring on the front of the camera where the lens will attach. This ring contains electrical contact points to connect the lens controls to the camera body. There is a small button or lever to the side of this mount called the "lens release button" that releases the lens from the body.

Camera Controls: In all but certain specialized cameras, the process of obtaining a usable exposure must involve the use, manually or automatically, of a few

controls to ensure the photograph is clear, sharp and well illuminated. The controls usually include but are not limited to the following:

CAMERA SUPPORT

We have better photo quality with the supporting of camera which includes tripod stand monopods, raffle grips. We shall be discussing these one after the other.

1 Tripod stands: there are many variations available and they are useful in natural field of photography picturing the plant, bird animal habitat and so on. A shaky tripod is worse than useless. The tripods must have a good head, which is adjustable in three directions. A small ball-and- socket head is useless as it will not hold a camera with any weight of lens

2 Monopods: these are single telescope tubes with some form of camera support at the top e.g. a ball and socket head. They are much less rigid than a tripod stand and do not allow long exposures, but they can reduce camera movement and they are very useful for semi action photography. They are generally lighter and more portable than a tripod stand.

3 Raffle grips: these are useful devices which comprise an adjustable stock with a shoulder butt at the near end a hand grip at the far end. The camera fits on an adjustable plate to allow it to be used close to the eye and the shutter is tied via a long cable release from a trigger on the hand grip. This combination of steadying the set up against the shoulder and releasing the shutter with a cable- release makes for a very smooth operation and they can add to your ability to avoid camera shake by two stops of the shutter speed. They are highly mobile supports and they have been found to be most useful when photographing birds or mammals with relatively long focal length lenses fitted.

4 The beam bag: this is fascinatingly useful and versatile supports that consist of a strong bag filled with dried beams, polystyrene similar material and closed up. The 46 shape should be rectangular rather than square so that it could be stood on end for higher viewpoint.

5 A- G- clamp -with a head -on: can be clamped to fence posts or car windows for support, though it is rarely solid enough to use a long lens and the support is hardly where you want it. The ground spike generally is pushed into the ground to give a firm ground level support though personally we have found the beam bag to be better for most situation