



# DIFFERENT PARTS OF A CAMERA



14 Basic Parts of a Camera Explained

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As a photographer, it is nice to have a good understanding of the different parts of a camera. It will help you to understand the working of a digital camera. In this article, I will explain different camera parts in detail. It will help you get a basic idea of a digital camera.

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## Parts of a Camera



# 1. Aperture



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Aperture is the opening in front of the camera. It will be present in the lens part.

For, an interchangeable lens camera, you will have the option to change the lens. So, you will have more options with the Aperture.

But, for a standard point and shoot or bridge camera, the lens is a fixed one. So, the options are limited. You can vary the Aperture in lens from the camera body.

## 2. Shutter

### FRONT VIEW

**SHUTTER TRIGGER**

**SHUTTER**



**CAMERA BODY**

**IMAGE SENSOR**

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The shutter is another vital part of a camera. It controls the time duration for which the image sensor is exposed to the light.

Most of the digital cameras come with a combination of electronic and mechanical shutter or mechanical alone.

All digital cameras are designed for a specific shutter life, also known as the camera shutter count. The reliable shutter operation is guaranteed only up to this value. The top-end models will come with a higher shutter count.

### 3. Image Sensor- The Most Important Part of a Camera

It is the image sensor that decides the image resolution. So, it is like the heart of the camera. In the early days, the almirah was used to do this job. Now, it got replaced by CCD and CMOS sensors. They are responsible for acquiring each of the pixels in an image. An image sensor is quantified based on its size and number of megapixels.

### 4. ViewFinder

## BACK VIEW

**VIEWFINDER**

**BUTTON INTERFACE**



**PRIMARY LCD DISPLAY**

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The viewfinder is the small rectangular opening, seen on top of the camera. You can see through this window to compose and frame the shot.

Digital cameras either have an optical viewfinder or an electronic viewfinder. The viewfinder also shows parameters like exposure, shutter speed, Aperture, ISO, and a few other basic settings for image capture.

## 5. Digital LCD Display

All digital cameras will have an LCD to view images and to set the different parameters and modes.

It is the visual interface that helps the photographer to set the camera settings according to his choice. It is on the backside of the camera.

Some high-end models come with dual displays. The secondary display will be on the top side.

## 6. Button Interface

You can find many buttons that are configured to do certain operations on the backside and top of the body. Some cameras allow you to configure some buttons according to your choice.

## 7. Inbuilt Flash

## TOP VIEW

**MODE DIAL**

**INBUILT FLASH**

**SHUTTER TRIGGER**



**HOTSHOE**

**SECONDARY LCD DISPLAY**

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More than 90% of digital cameras will come with an inbuilt flash. It will be on the top side. It will pop up only when you enable flash in the settings or manually.

## Horn antenna

Frequency: 2Ghz-18Ghz, High gain up to 17dBi, Suitable for EMC/ EMI testing

Fei Teng Wireless (FT-RF)

Open

You will not get the same performance as an external antenna. It will also consume a good amount of battery power, especially for point and shoot ones.

## 8. Shutter Trigger

Shutter trigger is a kind of tactile push-button switch which comes with dual press option. The first press, which is referred to as the half click, is to acquire the focus on the subject.

The second press, which is the full press is to activate the shutter mechanism.

Some cameras allow you to separate the half-press Autofocus feature from this button. You can configure the button on the backside for focusing. So, the shutter button only activates the shutter alone in this condition.

The shutter trigger button is located on the top right-hand side of the camera for usability.

## 9. Mode Dial

The Mode dial is another part of a camera used to change different modes. Some of the standard Modes include Aperture mode, Shutter mode, Manual mode, and Auto mode. It is located on the top side.

## 10. Hotshoe

Hotshoe is another integral part of a digital camera. It is on the top side of all cameras.

It is mainly for mounting the external flash. You can also use it to mount wireless triggers, external microphone, and spirit bubble level.

This Hotshoe mount varies for different camera manufacturers. So, you cannot use one model of external flash on all bodies.

## 11. Communication Ports

## **SIDE VIEW 1**



### **COMMUNICATION PORTS**

**[USB, HDMI,  
AUDIO,  
SHUTTER TRIGGER]**

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Communication ports are usually on either side of the camera. USB is the most common type of communication port, present in all models. It is for image transfer from the camera to the computer.

Other communication interfaces include HDMI port, Audio port, Ethernet, Wired remote trigger port, and Display port. These ports may not be present in all models.

Bluetooth, Wia, and NFC are some of the wireless communication interfaces supported by a camera. You need to refer to the camera manual to check the different types of communication interfaces.

## 12. Recording Medium

## SIDE VIEW 2

**MEMORY CARD  
SLOT**



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In digital cameras, the memory card is the photo storage medium. The type of memory card varies with different types of cameras. There will be a card slot located on the side or bottom to insert the memory card. Some cameras come with dual memory card slots.

SD card is the commonly supported memory card for most of the digital cameras. Compact Flash card, Micro SD card, XQD card, C Fast card, or some of the other memory cards used in DSLR and mirrorless digital cameras.

## 13. Battery and Battery Compartment



www.photographyaxis.com

All digital camera needs a battery for its operation. The type of battery varies for

different camera types

(<https://www.photographyaxis.com/photography-articles/different-types-of-cameras/>). Most cameras use lightweight rechargeable Lithium polymer batteries. (<https://batteryuniversity.com/article/understanding-lithium-ion/>) It will be a custom one, supplied along with the digital camera.

Lithium polymer batteries.

Some point and shoot models use alkaline batteries. The battery compartment is usually at the bottom or side of the camera.

## 14. Tripod Mount

All Digital cameras will come with a tripod mount, located at the bottom side. It allows you to mount the camera on a tripod.

Most of the cameras will have 1/4 20 UNC thread. Some come with a 3/8 16 UNC thread. So, check the manual to know the right tripod thread size (<https://www.photographyaxis.com/photography-articles/camera-thread-size-vs-tripod-thread-size/>).

### tripod thread size

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## Parts of Cameras

1. **Body** - Made of high grade plastic or metal; holds all parts together; provides protection to the delicate internal parts of the camera.
2. **Lens** - Lens Assembly is several layers of lenses of varying properties providing zoom, focusing, and distortion correction. The most important part of the camera
3. **Shutter Release Button** - This is the "trigger" of the camera.
4. **Mode Dial** - Contains several symbols (differs by model), allows you to select a shooting mode, automatic or manual or one of the pre-defined settings.
5. **Viewfinder** - Small window that shows the image the camera's imaging sensor sees.
6. **Aperture Ring** - Found on older SLR cameras; it is used to select an aperture opening. In modern lenses, the aperture is controlled electronically through the body.
7. **Focusing Ring** - found around the lens of SLR and DSLR cameras; turn to manually focus the lens.
8. **LCD Display** - In some compact cameras this acts as the viewfinder; small at the back of the camera used for framing or reviewing pictures
9. **Flash** - Built-in on the body of most compact and some DSLR cameras; can be fixed or flip type; provides an instantaneous burst of bright light to illuminate a poorly lit scene.
10. **Control Buttons** - Usually includes a set of directional keys and a few other buttons to activate certain functions and menus, this is used to let users interact with the camera's computer system.
11. **Power Switch** - Turns the camera on or off.
12. **Zoom Control** - Usually marked with W and T, which stands for "Wide" and "Tele"; used to control the camera's lenses to zoom-in or zoom-out. For DSLR cameras, the zoom is usually controlled by a zoom ring in the lens.
13. **Battery Compartment** - Holds the batteries; vary in size and shape by camera

type/brand

**14. Memory Card Slot** - where memory cards are inserted

**15. Flash Mount (Hot-Shoe)** - Standard holder with contact plates for optional flash accessory.

**16. Diopter** - varies the focal length of the lens in the viewfinder to allow people wearing eyeglasses to see clearly through it even without the eyeglasses.

**17.Tripod Mount** - where your standard tripod or monopod is attached for added Stabilit