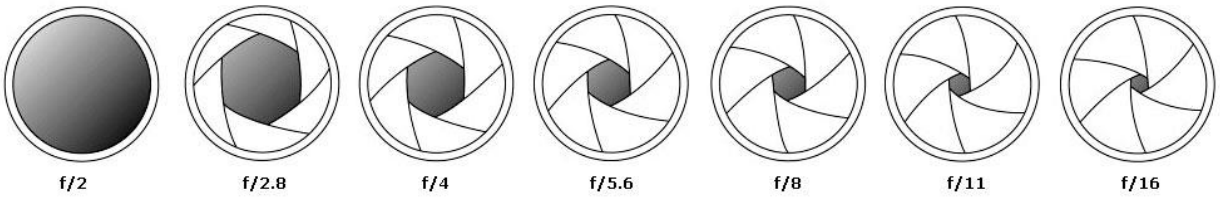
Manual Mode

We all love taking pictures. But many of us won't be satisfied with the image quality or we may be not getting what we actually want to photograph. We all want to know how to take good pictures, right? The best way to improve your photography is learning how to shoot in manual mode. Generally speaking, manual mode is a combination of ***Aperture, Shutter Speed, and ISO.***

Aperture

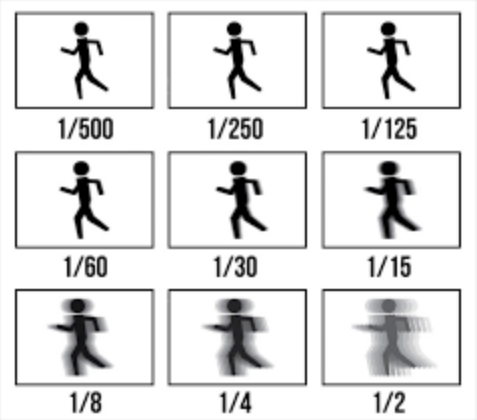
Aperture (or f-stop) controls how much light is allowed through your lens by setting the f-stop. It is a hole in the lens which closes or opens according to the f-stop value we set. It's similar to the pupil in our eye which changes the size according to the light in the surrounding environments. Or simply consider a window. The more it is open, more will be the light falling in the room and vice-versa. Keep in mind that lower the f-stop number the more the lens is open and higher the f-stop number the lens opening is narrow. So what does aperture do? It controls the **depth of field**, or simply the area under focus. We know that wider aperture lets more light in. Why would you ever want a narrow aperture if a wider one lets in more light? Aside from those situations where you have too much light and want to let less of it in, narrowing the aperture means more of the photograph will appear to be in focus. For example, a narrow aperture is great for landscapes. A wider aperture means less of the photograph will be in focus, which is something that's generally visually pleasing and isn't seen as a downside. If you've seen photographs with a subject in focus and beautiful blurred backgrounds, this is often the effect of a wide aperture. Wider apertures are great for portraits.



Shutter Speed

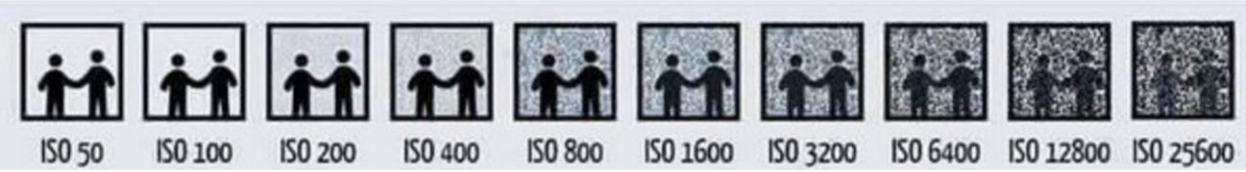
Shutter speed controls how long the image sensor is exposed to light. This is the amount of time that your shutter is open. Higher shutter speeds prevent motion blur and freeze motion, but let in less light because the shutter is not open as long. A lower shutter speed will let in more light,

but may give your subjects motion blur if they are moving in the photo because the shutter is open longer. If we shoot pictures using a higher shutter speed, we prevent a blurry picture. It is suitable when picturing children or shooting moving objects. If you are in a low lighting situation you will have to use a slow shutter speed, but make sure you use a tripod to prevent any shakes. As I told slow shutter speeds create motion blur, it is great for artistic purposes like light painting. Slow shutter speeds are also necessary for panning shots. It is also useful to get that star trails you want while astrophotography.



ISO

ISO is an important setting you shouldn’t ignore. ISO in digital cameras works differently than ISO on an old film camera. (In old film cameras we use different films with different ISO speeds according to lighting conditions.) It controls how sensitive your camera’s image sensor is to light. When you have a lot of available light use a low ISO and in low light you can use a higher ISO. The advantage of a low ISO is that the light in a given exposure is more accurately represented. As we increase ISO it brings more light but the disadvantage is that we get more noise as we increase the ISO. Most cameras will set the ISO automatically, even in manual mode. Generally, you can stick with the same ISO setting if your lighting situation doesn't change, so it's good to get used to setting it yourself. That said, sometimes lighting changes enough in dark, indoor settings that letting the camera set it for you automatically can be helpful - even when shooting manually.



Combining Settings

In manual mode you set everything yourself, so you have to think about all three of these settings before you take a photograph. The best thing you can do make this easier on yourself is to give priority to one of the settings by deciding what's most important. Do you want to ensure a shallow depth of field? If so, your priority is your aperture. Do you want the most accurate representation of light? Make ISO your priority. Do you want to prevent as much motion blur as possible? Concentrate on shutter speed first. Once you know your priority, all you need to do is set the other settings to whatever is necessary to expose the right amount of light to the photograph.