

Camera Controls

The ISO value in the camera determines the amount of light needed to capture an image with sufficient useful detail. Mechanisms in the camera control the exposure - the shutter and the aperture. The shutter controls the length of time light is recorded while the aperture opening controls the volume of light recorded. The two controls work together to achieve a proper exposure. The shutter and aperture can be combined in many different ways to make an exposure. The way a photographer uses these combinations can change the way the image looks. We will spend some time exploring the options of these two camera controls and how they affect your images.

Modern cameras have evolved into electronic devices. To take control you have to be able to find the controls for the mechanisms. The labeling and function of the controls is far from standardized, but these are some of the designations commonly in use.

Mode - the type of exposure control is selected

P	Program	The metering system sets both the aperture and the shutter speed according to a computerized guide “programmed” into its operating system. The “Auto” mode is a version that controls all the settings with no override option.
A	Aperture Priority	The photographer selects the lens opening and the camera selects the shutter speed based on the light level. Some cameras designate this as “AV”.
S	Shutter Priority	The photographer selects the shutter speed and the camera selects the lens aperture based on the light available. Some other designations are “T” and “TV”.
M	Manual	The photographer sets both the shutter and aperture values. The camera meter is available as a guide but does not control the settings.

Drive - controls the rate of picture taking

	or S	Single	The camera takes one picture at a time. The shutter button is pushed each time an exposure is desired.
	or C	Continuous	Holding the shutter release down will take a series of pictures. The rate of shooting increases with higher shutter speeds.
		Timer	The shutter release is delayed for a time, usually 10 seconds.
		Remote	An infrared shutter release accessory is available

Auto focus (AF) - controls the focusing of the lens (from camera or lens)

S	Single	The camera focuses on the subject placed at the sensor area and then takes the picture. You have the ability to hold the focus point by pressure on the shutter button.
C	Continuous	The focus changes continuously as you point the camera or as the subject moves. The shutter may release when the subject is out of focus.
M	Manual	Auto focus is off. You set the distance visually or using a scale.

* Note: Similar designations are used for different controls