

and, after all, you can see in the monitor whether you disagree with how the camera metered or exposed the image and simply reshoot after adjusting the exposure settings to your liking. This option, in my mind, makes the whole metering mode issue a lot less critical than it is when you shoot with film.

The one exception to this advice might be when you're shooting a series of images in which a significant contrast in lighting exists between subject and background, as my examples here. Then, switching to Partial, Spot, or Center-Weighted Average metering may save you the time of having to adjust the exposure for each image.

## Setting ISO, f-stop, and Shutter Speed

**REMEMBER**

If you want to control ISO, aperture (f-stop), or shutter speed, you must set the camera to one of the five advanced exposure modes. Formally called Creative Zone modes in Canon nomenclature, these modes include programmed auto (P), shutter-priority autoexposure (Tv), aperture-priority autoexposure (Av), manual exposure (M), and auto depth of field (A-DEP).

I explain each of these modes at the start of the chapter, but Table 5-1 offers a quick recap, along with a recommendation of when to use each mode. (In the table, the initials AE stand for autoexposure.) The next sections provide specifics (finally, you say) on how to adjust ISO, aperture, and shutter speed in all five modes.

### Controlling ISO

As explained at the start of this chapter, your camera's ISO setting controls how sensitive the image sensor is to light. At higher ISO values, you need less light to expose an image.

**WARNING!**

Remember the downside to raising ISO however: The higher the ISO, the greater the possibility of noisy images. See Figure 5-8 for a reminder of what that defect looks like.

In the fully automatic exposure modes, the camera selects an ISO from 100 to 800, depending on the available light. You have no control over ISO in those exposure modes.

## Table 5-1 Advanced Exposure Modes (P, Tv, Av, M, A-DEP)

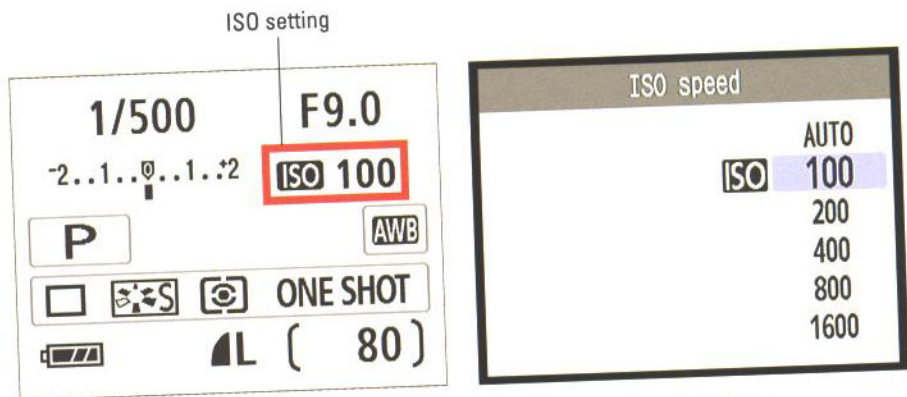
Mode	How It Works	When to Use It
P (programmed AE)	The camera selects aperture and shutter speed but enables you to choose which combination of the two you prefer.	You want an easy way to experiment with different aperture/shutter speed combos, or you need more control over other aspects of your picture than provided by Full Auto mode.
Tv (shutter-priority AE)	You set the shutter speed; the camera selects the appropriate aperture.	Shutter speed is your main concern, as when shooting action or creating motion-blur effects.
Av (aperture-priority AE)	You set the aperture; the camera selects the shutter speed to produce a good exposure.	Your main photographic goal is to control depth of field.
M (manual exposure)	You set both aperture and shutter speed.	You can't get the results you want from any of the other modes, or you simply want to dial in specific aperture and shutter speed settings as quickly as possible.
A-DEP	The camera selects both aperture and shutter speed but gives priority to selecting an aperture that produces the depth of field needed to keep all objects in the frame in sharp focus.	You aren't sure which aperture setting to use to extend the zone of sharp focus to cover all of your subjects.

In the advanced exposure modes, you have the following ISO choices:

- ✓ **Auto:** You can still rely on the camera to adjust ISO for you in the advanced exposure modes if you prefer. The same parameters apply as for the fully automatic exposure modes; that is, the camera chooses an ISO setting from 100 to 800, depending on the available light. However, if you set the Mode dial to M, for manual exposure mode, or enable the flash, ISO is always set to 400.

- Specific ISO speeds:** You can choose from five ISO speeds — 100, 200, 400, 800, or 1600 — *unless* you enable the Highlight Tone Priority function, which I cover later in this chapter. If you do enable that option, the minimum ISO you can select is 200.

The current ISO is displayed in the upper-right corner of the Camera Settings display, as shown on the left in Figure 5-16. You can also monitor the ISO in the viewfinder display and in the Live View display.



**Figure 5-16:** Press the ISO button on top of the camera to access the ISO setting.

To adjust the setting, just press the ISO button, located just behind the Main dial, on top of the camera. You then see the screen shown on the right in the figure. Use the cross keys or rotate the Main dial to highlight your choice. Then press the Set button.

In Auto ISO mode, the Camera Settings display and Live View display initially show Auto as the ISO value, as you would expect. But if you press the shutter button halfway, which initiates exposure metering, the value changes to show you the ISO setting the camera has selected for you. You also see the selected value in the viewfinder rather than the word Auto.

## Adjusting aperture and shutter speed

You can adjust aperture and shutter speed only in P, Tv, Av, and M exposure modes. In A-DEP mode, the camera forces you to use its selected exposure settings. (You can, however, tweak the exposure by using the exposure-compensation feature discussed in the next section.)

