

## Scene Modes

The Coolpix P520 offers several of what I will call scene modes. The terminology can be a bit confusing, because the camera's menus and documentation use the word "scene" in several similar and overlapping contexts. First, there are three scene modes that occupy individual slots marked by icons on the mode dial: Night Landscape, Landscape, and Backlighting. Next, there is another slot on the mode dial marked SCENE. When you select that setting, you can press the Menu button to the lower left of the multi selector and scroll through a list of 16 specific scene settings: Portrait, Sports, Night Portrait, Party/Indoor, Beach, Snow, Sunset, Dusk/Dawn, Close-up, Food, Museum, Fireworks Show, Black and White Copy, Panorama, Pet Portrait, and 3D Photography. Finally, there is a 17th entry on this list, which actually is the first entry at the top of the list: Scene Auto Selector. I will discuss all of these scene settings individually, but first I will provide some general remarks about these shooting mode options.

Scene modes are rather different from the other shooting modes I have discussed up to this point. The scene modes do not have a single defining feature, such as permitting control over one or more aspects of exposure. Instead, when you select a scene shooting mode, you are in effect telling the camera what sort of environment the picture is being taken in, and what type of image you are looking for, and you are letting the camera make a group of decisions as to what settings to use to produce that result.

Some photographers may not like the scene modes because their settings take some creative decisions away from you and limit your options in some unfortunate ways. For example, you will find that your Shooting menu options are severely limited when the mode dial is turned to the SCENE setting or any of the scene modes with slots on the mode dial, such as Night Landscape. That means that you cannot set the white balance, but must rely on the camera's Auto White Balance set-

ting, which may not always properly evaluate the existing light source. In most cases, you cannot select features such as continuous shooting, and you can't choose your metering mode or your ISO setting.

Despite the limitations, though, I have found the various scene settings to be quite useful in certain situations. Remember that you don't have to use these settings only for their labeled purposes; you may find that some of them offer a group of options that is well-suited for some shooting scenarios that you are regularly faced with. For example, you may find the Sports setting works well for shots of children at play, or that the Sunset setting, which emphasizes red hues, is great for images in a particular garden that is rich with reddish plants and flowers.

That concludes the general introduction to scene modes. But there are numerous choices, and you need to know something about each option to decide whether it's one you would want to select. In general, a given scene setting carries with it a variety of values, including things like focus mode, flash status, range of shutter speeds, sensitivity to various colors, and others. I will discuss the complete list of scene settings so you can make informed choices. I will first discuss the settings that have their own slots on the mode dial, followed by the settings that are grouped under the SCENE setting on the dial.

### Night Landscape



Fig. 3-17: Night Landscape Mode

This mode, symbolized by a crescent moon above a building, appears on the mode dial just below the SCENE setting, as seen in Figure 3-17. It is intended for use without flash to take shots outdoors at night in areas that are not brightly lighted.

When you select this shooting mode with the mode dial, there are two sub-options that appear on the Shooting menu: Hand-held and Tripod. To choose one of these options, press the Menu button, then select Night Landscape, the bottom item on the brief menu list that appears. Then press the OK button or the right direction button, and choose either Hand-held or Tripod, as shown in Figure 3-18.



Fig. 3-18: Night Landscape Menu Options

With Hand-held, the camera will take a continuous group of pictures and combine them in the camera into a single image, to overcome the effects of the high ISO setting the camera uses to take a good exposure in dim light without flash. A single image could be degraded from the visual “noise” that results from the use of high ISO values; by combining several images, the camera can create a single image using the best aspects of each, and can digitally smooth away the noise. You should try to hold the camera as steady as possible when shooting, but it will use a relatively fast shutter speed if at all possible to avoid blur from camera shake.

The image in Figure 3-19 was taken with the P520 handheld after sunset on a cloudy evening. The camera took a series of shots and combined them internally to create the composite image shown here, which was exposed at f/3.9 for 1/100 second at ISO 800.



*Fig. 3-19: Night Landscape Example - Hand-held*

If you choose the Tripod option from the menu, then the camera will use a slower shutter speed and a lower ISO setting, so as to avoid noise. The use of the tripod will avoid the effects of camera shake. Of course, this setting is useful only if you actually attach the camera firmly to a tripod.

Figure 3-20 was taken with this setting in the same area as the previous figure, but somewhat later, when the sky was even darker. Because the camera was on a sturdy tripod, it was possible to use a shutter speed of one-half second, at  $f/3.6$  and ISO 80. By using the lowest possible ISO setting, the camera is able to achieve excellent image quality.



Fig. 3-20: Night Landscape Example - Using Tripod

## Landscape

This is the setting with a mountain-range icon on the mode dial next to Night Landscape, as seen in Figure 3-21. With many other cameras, including the Nikon Coolpix P500, a predecessor to the P520, this shooting mode was one of those that are selected through the Shooting menu when the dial is set to the SCENE setting. With the P520, though, the Landscape setting occupies its own slot on the mode dial, perhaps in recognition of the great usefulness of this setting.



Fig. 3-21: Landscape Mode

I find myself using the Landscape setting often, and I appreciate that it is very easy to twist the mode dial to choose it. When you do, you will again, as with Night Landscape mode, have the ability to select one of the two options from the Shooting menu: in this case, Noise Reduction Burst or Single Shot, as

seen in Figure 3-22.

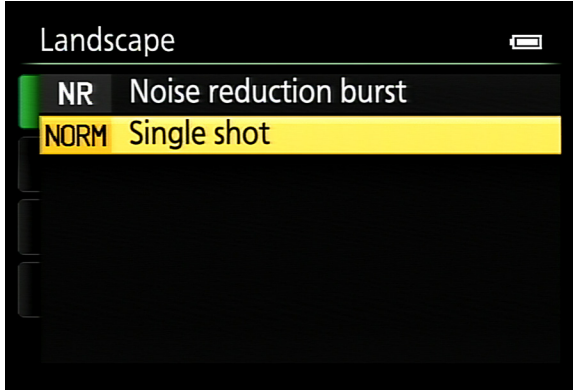


Fig. 3-22: Landscape Menu Options

If you select Noise Reduction Burst, the camera will take a rapid series of shots at a relatively high ISO setting and combine them in the camera into a final image. The camera's internal processing will combine the individual shots so as to reduce the visual “noise” that results from using higher ISO settings.

If, instead, you select the Single Shot option, the camera will operate as you would expect for a normal Landscape setting—it will take just one shot at a lower ISO setting, which likely will result in a sharper picture than one taken with the Noise Reduction Burst setting. The example in Figure 3-23 was taken using the Single Shot setting with the camera on a tripod.



Fig. 3-23: Landscape Example

## Backlighting/HDR



Fig. 3-24: Backlighting Mode

This mode, marked on the mode dial by an icon of a person with a bright light in the background to the upper left, as seen in Figure 3-24, is intended to be used in difficult lighting situations—in particular, when there is bright light present, but it is behind the subject. (Nikon calls this mode simply “Backlighting,” but its single sub-mode is HDR, which, as discussed below, is an important feature for modern cameras, so I have added HDR to the heading here for easier identification.)

When this mode is selected, as with the two previous modes, you have two sub-options selectable by pressing the Menu button and then selecting the HDR option on the menu screen. In this case, the two options are HDR On and HDR Off.

If you choose the default value, HDR Off, the camera forces the built-in flash to fire in order to overcome the shadows caused by your subject's being lighted from behind.

If, instead, you choose HDR On, you have a considerably different situation. With this setting, the camera internally performs its own version of HDR, or High Dynamic Range, processing. In case you haven't encountered this phenomenon before, HDR has been a very popular photographic style for the past several years. Essentially, HDR photography involves using special techniques to deal with subjects that include areas of extreme contrast between light and dark. For example, if a building is partly lit by bright sunshine and partly hidden in deep shadow, the contrast is likely to be so great that



a photograph cannot depict both parts of the building with normal exposure. Either one area of the image will be much too bright, so the highlights are blown out, or one area will be much too dark, so the details are swallowed in the shadows.

In the past, HDR was carried out in post-processing, using software such as Photoshop or special programs such as PhotoAcute or Photomatix Pro. The photographer would take multiple exposures of the scene using different exposure levels, some of them exposing the dark parts of the scene properly and some of them exposing the bright parts properly. When combined in HDR software, the images could be blended together to result in a final composite image that shows all parts of the image nicely exposed. These HDR composite images often have an unnatural or surrealistic appearance, because it is obvious that a “normal” photograph could not include such a wide range of well-exposed areas.

With many modern cameras, including the Coolpix P520, the manufacturer has included programming that gives the photographer the ability to take multiple photographs that are combined inside the camera to result in an HDR-like image. With the P520, I would not say that the result can match the “true” HDR that you can obtain through software, but it certainly does make a noticeable difference. Here is how it works.

When you choose the HDR On setting on the P520, you then must select the degree of HDR processing the camera will use: Level 1, 2, or 3, as shown in Figure 3-25.



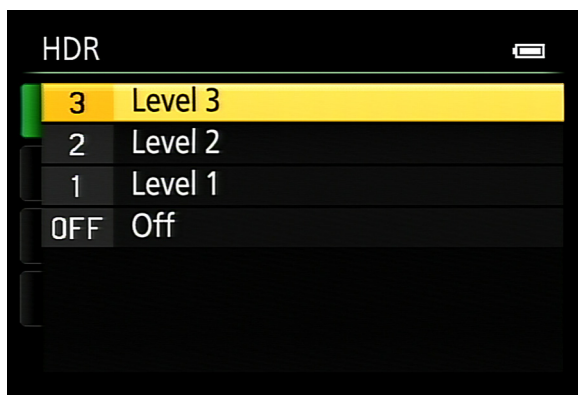


Fig. 3-25: HDR Menu Options

The higher the level, the greater the HDR effect. With all of these levels, the camera turns the built-in flash unit off. When you shoot using these settings, you should hold the camera very steady, or, ideally, place it on a tripod. After you press the shutter, you will see a yellow progress bar appear on the display and extend to the right as the camera processes the multiple images into two final ones. The first of the two final images will be an image taken with the Active D-Lighting feature turned on, to brighten shadowy areas of the image to bring out details. The second image will be an HDR composite that contains the best-exposed parts of multiple images, thereby expanding the dynamic range of the shot.

The images shown here illustrate the effects of this setting, followed by an HDR image done with software. These images were taken from an unlighted room looking outdoors to a bright, sunny day with a blue sky and some clouds. The first two shots, Figures 3-26 and 3-27, were taken with the camera in Manual exposure mode, with no special settings, to show the contrast between the bright and shadowed parts of the scene.