Figure 4-43. Exposure Bracketing Menu Options Screen

Use the multi selector dial or direction buttons to highlight your choice, then make the selection by pressing the OK button. When you exit to shooting mode, the camera's display will include a notation such as BKT±0.7, unless you left bracketing turned off. (Press the Display button if necessary to show this detail on the screen.)

This notation means the camera will take three exposures separated by the indicated amount of exposure value (EV, a standard measure of brightness). Adding a single unit of EV, +1.0, has the same effect as opening the aperture by one full f-stop.

When you are ready to shoot, press and release the shutter button and hold the camera steady (or use a tripod) while it takes the three exposures. The first picture taken is always at the metered level, or 0 change in exposure value (EV); the second is at the lower EV (darker), and the third is at the higher EV (brighter). If you have added exposure compensation, the bracketed exposures are taken at three levels relative to the adjusted exposure.

The flash cannot be used when bracketing is in effect. If you press the Flash button (Up button) when bracketing is turned on, nothing will happen. If the flash was previously set to forced on (Fill Flash) or any other mode in which the flash might fire, the camera will turn the flash off when bracketing is selected. Also, the self-timer cannot be used with bracketing.

Be sure to cancel exposure bracketing when you are done using this feature; otherwise, it will stay in effect even after you turn the camera off and back on again.

AF Area Mode

This next option on the second screen of the Shooting menu gives you several options for controlling how the autofocus frame is set up when the camera is in autofocus mode.

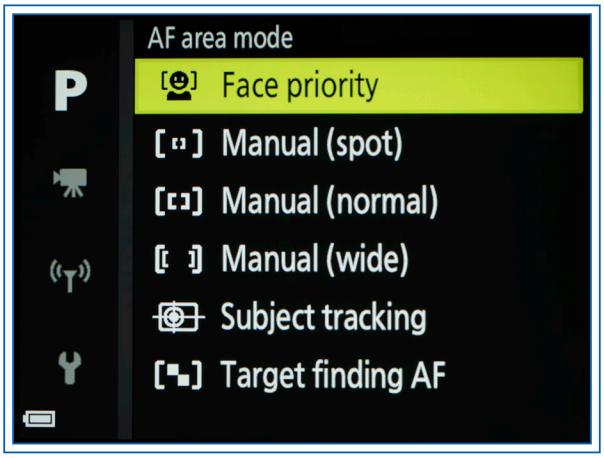

Figure 4-44. AF Area Mode Menu Options Screen

Once this menu option is highlighted, press the OK button or the Right button to display the next menu screen, and then use the multi selector dial or the Up and Down buttons to select one of the six options shown in Figure 4-44, as follows:

Face Priority

With this option, the camera looks for human faces. If it detects one or more faces, it puts a yellow, double-bordered frame on the closest face, and single-bordered frames on other faces, as shown in Figure 4-45.

Figure 4-45. Face Priority Setting in Use

When you press the shutter button halfway, the camera will focus on the main face, place a double-bordered

green frame on it, and set the exposure and white balance for that face. If no faces are detected, the camera focuses on an object closest to the camera within nine focus areas.

This is a good option to choose when you're at a picnic or other group function and you need to take a quick snapshot with focus fixed on people's faces rather than on trees, buildings, or other objects. In other situations, you may want to take more time and select the focus point and other options yourself.

Manual (Spot, Normal or Wide)

The next three options for AF Area Mode are variations of the Manual setting. The only differences are the sizes of the focus frames used—Spot, Normal, or Wide. The illustrations here all use the Normal size.

If you select one of the three Manual settings for AF Area Mode, the camera displays a focus frame of the chosen size in the center of the screen, with arrows pointing in each direction outside the frame. You can now use the four direction buttons or the multi selector dial to move the focus frame to any of 99 possible locations around the screen, as shown in Figure 4-46. (There are only 81 locations available if you are using the 1:1 aspect ratio, with Image Size set to 3888 x 3888.)

Figure 4-46. Movable Focus Frame on Shooting Screen

This is a good option if you are shooting a scene with items at varying distances from the camera and you want to focus on an item that is not in the center of the scene. Of course, this option is useful only if you have time to select it and move the focus frame to the location where you want it. If you don't have time, it may be easier just to place the center of the frame over the item you want to focus on, press the shutter button halfway to lock focus, and then move the camera back to compose the image as you want it. That method is also the best way to proceed when you are using Center-weighted or Spot for the Metering option and you want to lock both focus and exposure for a subject that is not in the center of the scene. If you use the Manual setting for AF Area Mode in that situation, the focus will be set on the off-center subject, but the exposure will be based on the subject in the center of the screen.

If you do have the time to use the Manual option for AF Area Mode, here is how to use it. Once you have located the focus frame where you want it using the buttons or dial, press the shutter button to lock focus and then take the picture. The focus frame will stay in this location even after the camera is powered off and back on, so be sure to reset it to the center when you no longer need it in an off-center position. When the frame is in the center of the screen, a dot will appear in the center of the frame while it is movable.

If you need to use one of the four direction buttons for another purpose while using Manual AF Area Mode, press the OK button to return the buttons to their other functions (flash mode, focus mode, self-timer, and exposure compensation); then, after using a button for another function, press OK again to return the buttons to controlling the location of the focus frame.

Subject Tracking

This next AF Area Mode option is designed for situations in which you need to track a moving subject, such as a sports competitor, a pet, or a child at play.

Figure 4-47. Subject Tracking Setting Ready for Use

Once you have selected this mode, you will see a small, white, square-shaped bracket in the center of the screen, with the words OK Start below it, as shown in Figure 4-47.

Aim this square bracket at the subject you want to track and press the OK button. The frame will change to a yellow square with corner brackets, as shown in Figure 4-48, which the camera will try to keep centered over the subject, even as the subject (or the camera) moves.

Figure 4-48. Subject Tracking Setting Activated

When you press the shutter button halfway to check exposure, the frame turns green to confirm exposure, and tracking stops. To start tracking again, release the shutter button. To end tracking without taking a picture, press the OK button. Press the shutter button all the way down when you are ready to take the picture.

When Subject Tracking is selected, the Monochrome setting for Picture Control is not available.

Target Finding AF

The final option for AF Area Mode, Target Finding AF, is the default setting and the one the camera uses when it is set to the Auto shooting mode. With this option, the B700 uses its programming to try to select the main focus point(s). The camera does not have any focus frame on its display screen at first. As you aim the camera at a scene, though, the camera may display yellow frames of varying sizes and shapes on the screen, as shown in Figure 4-49, as it tries to detect the subject to focus on.

When you press the shutter button halfway to lock focus, the camera will try to select the "main" subject. It will first look for a human face, then for a subject that matches programmed factors, such as size, position, and color. If it has not found a main subject, it will focus on the items closest to the camera within nine focus blocks in the central part of the display. It will display one or more green rectangles on the screen to show the point(s) it chose for focusing, as shown in Figure 4-50.

Figure 4-49. Target Finding Subject Detection Frame

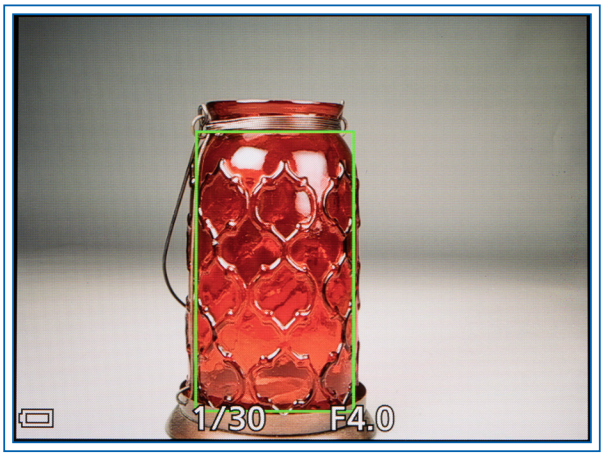

Figure 4-50. Target Finding Frame After Focus Achieved

This focusing mode is good for shots of general scenes when you don't have time to choose a focus point yourself or when there is not much doubt about where the camera will set its focus. For example, if you are taking a snapshot of a person in front of a scenic view, you can safely assume that the camera will focus on the person. If the scene includes multiple objects fairly close to the camera, you might be better off using one of the Manual settings to make sure the subject you want to focus on is inside the focus frame.

Autofocus Mode

This feature, whose menu screen is shown in Figure 4-51, lets you decide whether the camera will focus just

once, when you press the shutter button halfway, or will focus continuously before you press the button halfway.

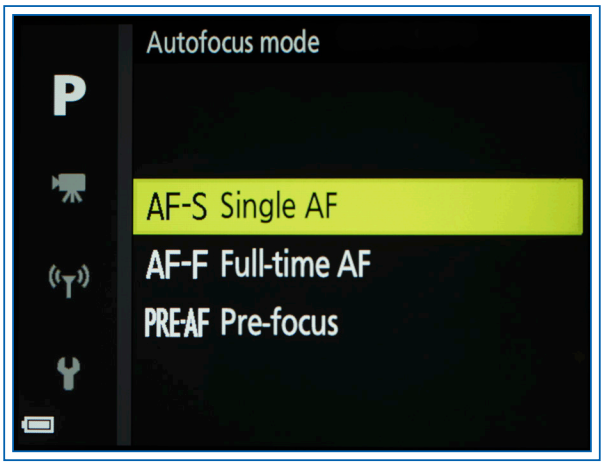

Figure 4-51. Autofocus Mode Menu Options Screen

Choose Single AF if you want to conserve the battery and wait until you are ready to take the picture before the camera uses its autofocus mechanism; choose Full-time AF if you want the camera to focus continuously. Choose Pre-focus (the default setting) if you want the camera to focus continuously when it detects motion, or when the camera is moved to a new position.

Although the Full-time option and the Pre-focus option will use up your battery more quickly than Single AF, they have the advantage of keeping the image in focus as you move the camera or your subject moves around; in that way, when you are ready to capture the image, the camera can make the final focusing adjustments quickly when you press the shutter button.

This Autofocus Mode option does not apply for shooting movies; you need to select an autofocus mode from the Movie menu for that situation. When manual focus is in effect, you can select this menu option, but it will not have any effect until you switch the camera to autofocus or macro focus. With the infinity focus mode, the camera uses Single AF for Autofocus Mode, regardless of the setting for this option. When the Smile Timer is active, the camera uses Single AF in all cases.

For ordinary photography, I prefer Single AF. But, if I am shooting subjects that are in constant motion, Pre-focus or Full-time AF can be useful.

Flash Exposure Compensation

This option works in similar fashion to standard exposure compensation, discussed in Chapter 2. It is available only in Program, Aperture Priority, Shutter Priority, and Manual exposure modes. You can dial in an amount of positive or negative flash exposure compensation up to two EV units in either direction, in increments of 1/3 EV. When you do that, the camera will increase or decrease the output of the flash, unless it was already using its maximum or minimum power.

I find this setting of most use when I'm taking a portrait with flash. I like to use some negative flash exposure compensation to make sure the flash does not wash out the image with excessive brightness.

To use this setting, go to its entry on the second screen of the Shooting menu and press the OK button or the Right button to get to the adjustment screen. At that screen, turn the multi selector dial or use the Up and Down buttons to dial in up to +2.0 EV or -2.0 EV, as shown in Figure 4-52.

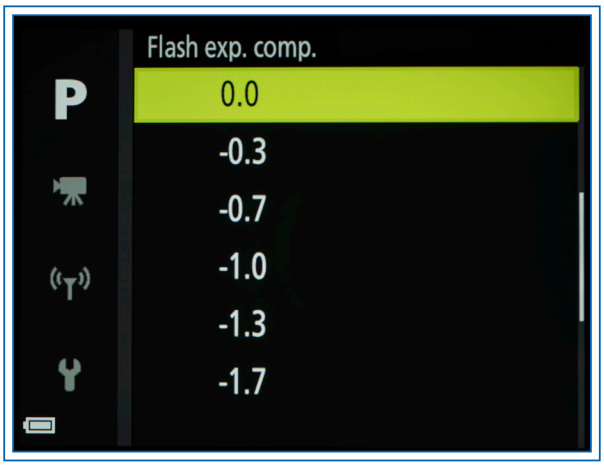

Figure 4-52. Flash Exposure Compensation Adjustment Screen

Press the OK button to confirm your selection when the value you want to choose is highlighted in the yellow bar. When you have activated a positive or negative amount of flash exposure compensation, that value will appear on the camera's display in the lower right-hand corner, but only when the flash is popped up. That value will remain in effect even after the camera has been powered off and back on, so be sure to cancel it when you no longer need the compensation.

The third screen of the Shooting menu is shown in Figure 4-53.

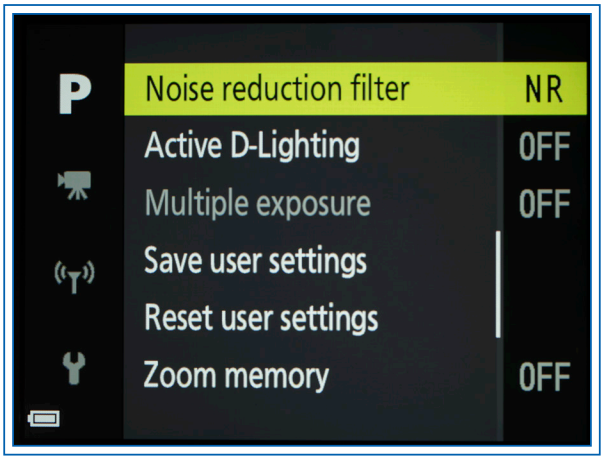

Figure 4-53. Screen 3 of Shooting Menu

Noise Reduction Filter

Noise reduction is an electronic feature built into the B700's programming to compensate for visual noise in your images, which can be caused by long exposures or by the use of high ISO settings. By default, this option is set to Normal, which causes the camera to use a moderate amount of noise reduction. If you want to have larger or smaller amounts of noise reduction applied in every case, you can switch the setting to High or Low, as shown in Figure 4-54. You cannot turn noise reduction completely off.

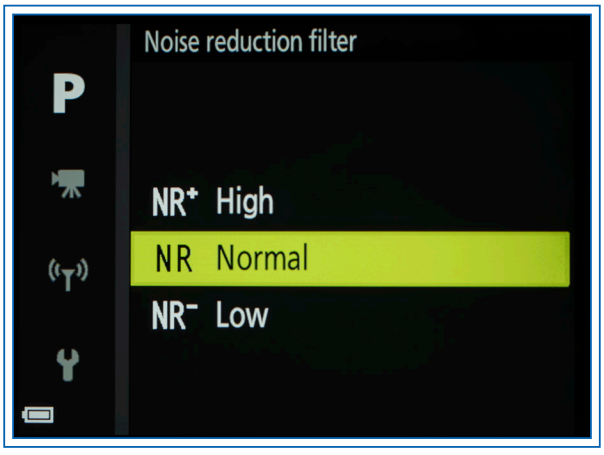

Figure 4-54. Noise Reduction Filter Menu Options Screen

What you do with this setting is a matter of personal preference. If you are going to be using Photoshop, Photoshop Elements, or similar software to process the images on your computer, you may want to leave Noise Reduction Filter set to Low, so you can minimize the amount of processing done in the camera.

Excessive noise reduction can reduce the detail and other positive features of an image. However, if you will be using the shots straight from the camera and you are shooting with long shutter speeds or high ISO settings, you may well want to turn this setting up to High to avoid the graininess that comes from visual noise.

Active D-Lighting

This second entry on screen 3 of the Shooting menu can help avoid problems with excessive contrast in your images. Such problems arise because digital cameras cannot easily process a wide range of dark and light areas in the same image—that is, their "dynamic range" is limited. So, if you are taking a picture in an area partly lit by bright sunlight and partly in deep shade, the resulting image is likely to have dark areas in which details are lost in the shadows, or areas in which highlights, or bright areas, are excessively light, or "blown out," so, again, the details of the image are lost. One approach to this problem is to use HDR techniques, with which multiple photographs of the same scene with different exposures are combined into a composite image that is properly exposed throughout the entire scene. I discussed that technique in Chapter 3, in connection with the Backlighting/HDR setting of Scene mode.

Figure 4-55. Active D-Lighting Menu Options Screen

The Active D-Lighting menu option gives you another way to approach the problem of uneven lighting. This feature uses processing in the camera to boost details in dark areas and reduce overexposure in bright areas, resulting in a single image with better exposure than would be possible otherwise. If you turn this option on, the camera reduces the overall exposure and performs digital processing as it records the image, resulting in

some restoration of details in the shadows and in the highlights, to even out the lighting. This menu option, as shown in Figure 4-55, provides three levels of this processing: High, Normal, and Low, as well as Off, the default setting.

To illustrate the effects of this setting, I took a pair of photographs of a group of stones on a wooden platform, partly in sun and partly in shade. For the first sample image, Figure 4-56, Active D-Lighting was turned off; for Figure 4-57, it was turned on to the High setting.

Figure 4-56. Active D-Lighting Turned Off

Figure 4-57. Active D-Lighting Set to High

With Active D-Lighting set to High, the camera noticeably reduced the overexposure in the brighter part of the image. It also brought some details out of the shadowed areas. My recommendation is to turn on Active D-Lighting when you are shooting a subject that is partly in the sun and partly in the shade. In those cases, if you have time, I would try setting this menu option to its various levels to see how the results compare. You also might want to use exposure bracketing, discussed earlier in this chapter, and merge those three exposures using HDR software, as discussed in Chapter 3. Or, you can use the Backlighting/HDR setting of Scene mode, also discussed in Chapter 3.

The Metering option is not available on the Shooting menu when Active D-Lighting is turned on to any level; in that case, the camera uses the Matrix setting for metering. Also, when Active D-Lighting is in effect, you cannot adjust the contrast parameter for the Picture Control settings.

The Coolpix B700 has a related feature called simply D-Lighting, which is used in playback mode for images that have already been taken. I'll discuss that feature in Chapter 6.

Multiple Exposure

This menu option lets you shoot multiple exposures in the camera. You can shoot either two or three images on the same digital frame. When you highlight this option and press the OK button or the Right button, the camera displays the options screen, shown in Figure 4-58.

Figure 4-58. Multiple Exposure Menu Options Screen

To shoot multiple exposures, set the Multiple Exposure Mode option to On. You can set the Auto Gain option to On, which is the default setting, or turn it off. If it is turned on, then the camera will use its programming to adjust the relative brightness of the multiple images as it sees fit. If you turn this option off, then the images will be recorded without adjustment. In my experience, this feature produces better results with Auto Gain turned on, though certain situations may yield better results with it turned off.

After you turn Multiple Exposure Mode on, aim at your first subject. If you will be shooting the second subject to appear beside the first one, then be sure to plan ahead, leaving space where the second subject will appear. Plan for a third subject also, if you will be shooting three items. If the positioning of the subjects will be critical, you should use a tripod to keep the composition precise. It usually works best to shoot any given object only once in the same position to avoid making it too prominent in its exposure. So, if an object has been photographed in one position in the first exposure, I usually remove it before taking the second exposure.

Press the shutter button to take the first picture. After some processing time, the camera will display the first image on the screen in a translucent mode, so you can continue to view the first image while you compose the next one. Now, line up the second image while viewing the first one, as illustrated in Figure 4-59.

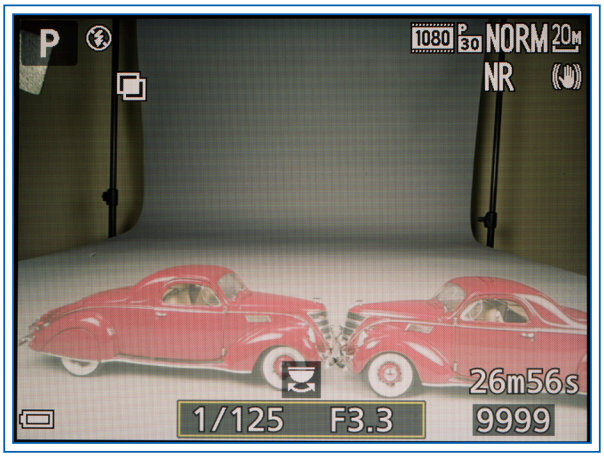

Figure 4-59. Multiple Exposure Shooting Screen After First Shot

When this composition looks right, press the shutter button to take the second image. The camera will take even longer to process this exposure. When it has finished processing, the double exposure will be displayed on the screen. It will still appear translucent, because you now have the option of taking one more picture to add to the composition. If you want to do that, go ahead and line up the third shot and press the shutter button. After the camera finishes processing the third image, it will return to the shooting screen. To view the final composition with three exposures, press the Playback button and you will see the finished product.

If you want to use only two exposures, then, after you take the second one, go to the Menu system and turn off the Multiple Exposure Mode option, or just turn the mode dial to a shooting mode that does not provide access to this menu item, such as Auto, Scene, or Creative.

Figure 4-60. Multiple Exposure Final Image

Figure 4-60 shows the finished image from two shots of a model car. I had Auto Gain turned on and I added some contrast and sharpening to the final image in Photoshop, because it looked a bit faded as it came out of the camera. The camera also saves each individual image you take for the multiple exposure composite.

Save User Settings

I discussed this feature in Chapter 3 in connection with the User Settings shooting mode, marked by the letter U on the mode dial. To save your current shooting settings for instant recall with the U slot on the dial, navigate to the Save User Settings option on the Shooting menu, as shown in Figure 4-61, and press the Right button or the OK button to save the settings.

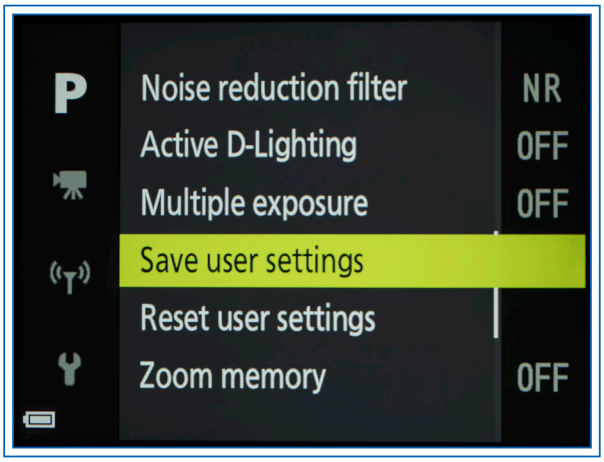

Figure 4-61. Save User Settings Item on Shooting Menu

Be sure the settings are as you want before you press the button, because the camera does not ask you to confirm your choice; it just displays a "Done" message once you press the button.

Reset User Settings

This option on the Shooting menu, shown in Figure 4-62, lets you reset the settings that have been saved to the User Settings mode (U slot on the mode dial).

Figure 4-62. Reset User Settings Item on Shooting Menu

When you select this option, the camera resets all of those items to their default values without your having to adjust each one in the menu screens. For example, choosing this option sets the shooting mode to Program, the flash mode to Auto, exposure compensation to 0.0, the zoom lens to its wide-angle position, and all items on the Shooting menu to their default settings.

Note that this option affects only the settings saved for the User Settings shooting mode; if you want to reset all settings for the camera for all modes, you have to use the Reset All menu option, which is found on the Setup menu, as discussed in Chapter 7.

Zoom Memory and Startup Zoom Position

The next two items on the Shooting menu are closely related, so I will discuss them together. The first of these, the last option on screen 3 of the menu, is Zoom Memory. This feature lets you control whether the zoom lever zooms the lens in continuous increments or in distinct, separate steps. By default this option is turned off, so you can zoom continuously in any amounts, zooming either in or out.

If you turn the Zoom Memory setting on using this menu option, the camera displays a list of focal lengths, from full wide-angle to full telephoto: 24mm, 28mm, 35mm, 50mm, 85mm, 105mm, 135mm, 200mm, 300mm, 400mm, 500mm, 600mm, 800mm, 1000mm, 1200mm, and 1440mm, the maximum range of the optical zoom. It takes three menu screens to include all of these values; the first screen is shown in Figure 4-63.

Figure 4-63. First Screen of Zoom Memory Menu Options

Each value initially has a check box to its left. Move the selection bar through the list using the Up and Down buttons, the multi selector dial, or the command dial. As each value is highlighted, you can press the OK button to check or un-check its box. If the box is checked, the camera will include that focal length in the zoom memory.

When you have finished checking the boxes for the focal lengths you want to include in the zoom memory, exit from the menu screen by pressing the Menu button or by half-pressing the shutter button. Now, when you press the zoom lever, each press will take the lens to the next focal length that was checked for Zoom Memory.

For example, suppose you turned on the Zoom Memory option and checked the boxes for 50mm, 200mm, and 1000mm. Then, if you are starting from the full wide-angle position of 24mm, when you press the zoom lever to the right, the lens will zoom in to 50mm. If you press it again, the lens will zoom to 200mm, and one more press will take it all the way to 1000mm. You will not be able to zoom the lens to any other positions. The same will be true when you zoom back out by pressing the

zoom lever in the other direction. It does not matter if you use a very quick press of the lever or hold the lever in position; it will zoom only to the next level that has its box checked on the Zoom Memory menu screen.

As I noted above, the Zoom Memory option is closely related to the Startup Zoom Position option, which is the first item on screen 4 of the Shooting menu, shown in Figure 4-64.

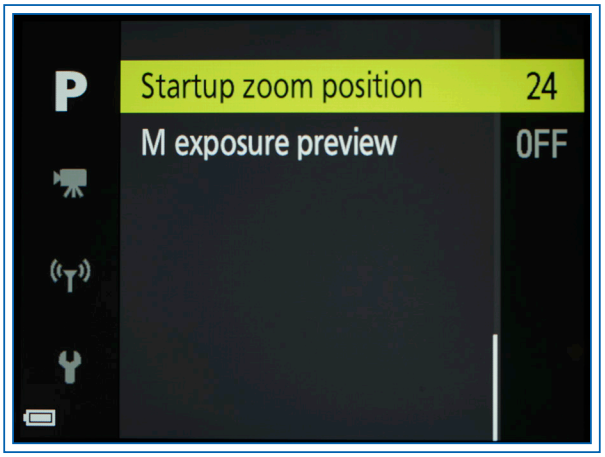

Figure 4-64. Screen 4 of Shooting Menu

With that menu item, whose first screen of options is shown in Figure 4-65, you select the single focal length to use when you first turn the camera on.

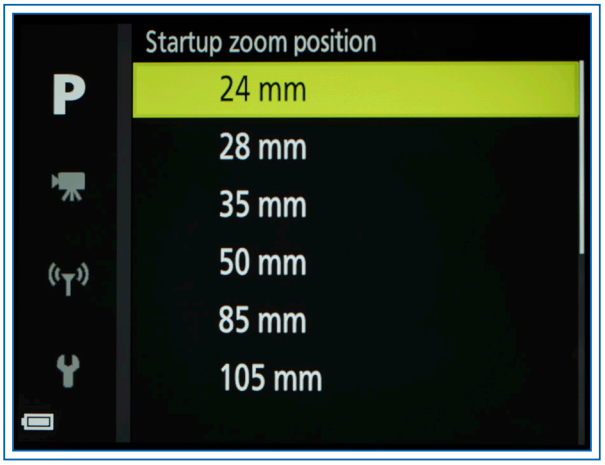

Figure 4-65. First Screen of Startup Zoom Position Menu Options

In this case, the choices are more limited: 24mm, 28mm, 35mm, 50mm, 85mm, 105mm, or 135mm. You select this menu option, then move to the next screen and position the yellow selection bar on the focal length you want to choose. Press the OK button to confirm. Then, when you turn the camera on the next time, the lens will automatically zoom to that focal length.

Here is how these two settings are related. When you select a focal length for Startup Zoom Position, you will see that that value is automatically checked on the screen for Zoom Memory, and its menu item is dimmed, meaning you cannot alter it. In other words, you cannot un-check the box for that focal length, because the camera is going to start up at that focal length. For example, suppose you select 50mm for Startup Zoom Position, and 35mm, 200mm, and 1000mm for Zoom Memory. The next time you turn on the camera, the lens will zoom to the 50mm position. If you press the zoom lever to zoom out, the lens will move to 35 mm. If you then press the lever to zoom in, the lens will zoom back to 50mm, the startup position. From there, it will zoom to 200mm, then 1000mm.

These two menu options, working together, give a good deal of control over how the lens zooms. Of course, you don't need to have that degree of control; you may be content to use the default settings, using the startup position of 24mm and allowing the lens to zoom to any setting, without using the Zoom Memory option. However, it can be convenient to know what focal length you are using for a given shot. If you turn Zoom Memory off, the camera's display will not show you what focal length it is using; if you turn it on, you will see the focal length briefly displayed at the top of the display, when you press the zoom lever.

The Zoom Memory option does not control the operation of the side zoom control, the switch on the left side of the camera that can be used for zoom (or for manual focus if that function is assigned through the Setup menu). So, even if you have turned on the Zoom Memory menu option, thereby restricting the zoom lever to certain focal lengths, you can still use the side zoom control to zoom the lens continuously, as long as that control is assigned to the zoom function.

Manual Exposure Preview

This last item on the Shooting menu has a narrow, specific purpose—to control whether the camera's display reflects the brightness of the image that will result from current settings when the camera is in Manual exposure mode. When you select this item and press the OK button or the Right button to move to the next screen, you will see a screen with options to turn this feature on or off. If you leave it at its default setting