rectangles that are labeled (when highlighted) ISO Auto Minimum and ISO Auto Maximum, as shown in Figure 4-52.

Figure 4-52. ISO Minimum Value Highlighted

Move the highlight to each of these blocks in turn using the Right button and change the value as you wish, pressing the Up and Down buttons or turning the Control wheel. You can set both the minimum and the maximum to values from 125 to 12800. When both values have been set, press the Center button to move to the shooting screen.

Once those values are set, the camera will keep the ISO level within the range you have specified whenever you select Auto ISO or the Auto setting for Multi Frame Noise Reduction, discussed below. Of course, you can always set a specific ISO value at any other level by selecting it from the ISO menu.

Multi Frame Noise Reduction

Finally, I will discuss the top item on the ISO menu, whose icon includes the ISO label and a stack of frames, shown in Figure 4-53. If you highlight that icon with the orange selection block, you will see that the name of this option is Multi Frame Noise Reduction (MFNR).

Figure 4-53. Multi Frame Noise Reduction Option Highlighted

This setting lets you set an ISO value as high as 25600, twice as high as the maximum value on the standard ISO menu. When you use MFNR, the camera takes multiple shots in a rapid burst and creates a composite image with reduced noise. The camera also attempts to select frames with minimal motion blur.

After you have selected MFNR, use the Right button to move the highlight to the right side of the screen, on the selection block for the ISO setting to be used, as shown in Figure 4-54.

Figure 4-54. Multi Frame Noise Reduction Value Selection Block Highlighted

Use the Up and Down buttons or turn the Control wheel to select a value, which can be Auto or a specific value from 200 all the way up to 25600. If you choose Auto, the camera will select an ISO within the limits set for ISO Auto Minimum and Maximum, and it will take multiple shots using that value. You cannot use the flash when MFNR is in effect. Also, you cannot use Raw quality or continuous shooting with this setting.

Using the MFNR setting is the only way to set the RX100 III to an ISO level above 12800. (You can, however, use the High Sensitivity setting of Scene mode, in which case the camera may use that high setting if it finds it necessary.) If you are faced with the prospect of taking pictures in an unusually dark environment, consider using this specialized setting, which really is more akin to a shooting mode than to an ISO setting.

In Figure 4-55, I used the Auto setting of MFNR to capture a view of Civil War-era medicine bottles in a dimly lighted museum. The RX100 III set the ISO to 6400, enabling the camera to use a shutter speed of 1/25 second despite the dark conditions. The result was a final image with good detail and no motion blur.

Figure 4-55. Multi Frame Noise Reduction Sample Image - ISO 6400

Here are some more notes on ISO. As I discussed in Chapter 3, with the RX100 III, unlike many other cameras, you can select Auto ISO in Manual exposure mode. In that way, you can set both the shutter speed and aperture, and still have the camera set the exposure automatically by varying the ISO level. In the Auto shooting modes, Scene mode, and Sweep Panorama mode, Auto ISO is automatically set, and you cannot adjust the ISO setting. The available ISO settings for movie recording are different from those for stills; I will discuss that point in Chapter 8.

Also, note that the settings for ISO 80 and 100 are surrounded by lines on the menu, as shown in Figure 4-53. The lines indicate that those 2 settings are not "native" to the RX100 III's sensor, whose base ISO is 125. So, although using the 2 lower settings reduces the sensor's sensitivity to light and darkens the exposure, it does not improve dynamic range or reduce noise in your images significantly.

ND Filter

The last item on screen 3 of the Shooting menu is the ND Filter setting. With this option, you can use a built-in neutral density filter to reduce the amount of light entering the lens, so you will have more flexibility in setting shutter speed and aperture.

The main use for this feature is when the light is bright and you need to use a slow shutter speed or wide aperture. You may need a slow shutter speed to blur the appearance of a waterfall or a wide aperture to blur the background for a portrait. If conditions are bright, it may not be possible to make the setting you need.

For example, I took the photo in Figure 4-56 on a bright day when I needed to use a slow shutter speed to smooth out the water spraying from a fountain in a pond. For this image, I set the camera to Shutter Priority mode and set the shutter speed to 1/10 second. I set the ISO to its lowest native value, 125. As you can see, the image was overexposed and unusable.

Figure 4-56. ND Filter Off: f/11.0, 1/10 Sec., ISO 125

For Figure 4-57, I turned on the ND Filter option, which reduced the exposure setting by 3 EV. With this option enabled, I was able to use a shutter speed of 1/6 second at ISO 125. With these settings, the image was exposed normally, and the water in the fountain was smoothed out as I wanted.

Figure 4-57. ND Filter On: f/11.0, 1/6 Sec., ISO 125

This menu option has 3 possible settings, as shown in Figure 4-58: Auto, On, and Off.

Figure 4-58. ND Filter Menu Options Screen

The second 2 are self-explanatory: The ND Filter is either used or not used. With Auto, the camera will activate the ND Filter if it detects a need to reduce the light. I prefer not to use that setting, because I like to make my own decisions about settings. In the Auto, Scene, and Sweep Panorama modes, you can't adjust this setting; the camera automatically uses the Auto option. In Manual exposure mode, you can't select the Auto option for ND Filter.

If you're using one of the advanced shooting modes (Program, Aperture Priority, or Shutter Priority) and taking casual shots, you might want to set ND Filter to Auto to give you more leeway in the settings you use for aperture and shutter speed without having to dig through the menu to turn on that feature. However, it might be a better idea to assign ND Filter to one of the camera's control buttons, as discussed in Chapter 7; if you do that, then it's an easy matter to press that button to call up the ND Filter menu screen and turn the filter on or off whenever you need to.

The next menu items to discuss are on screen 4 of the Shooting menu, shown in Figure 4-59.

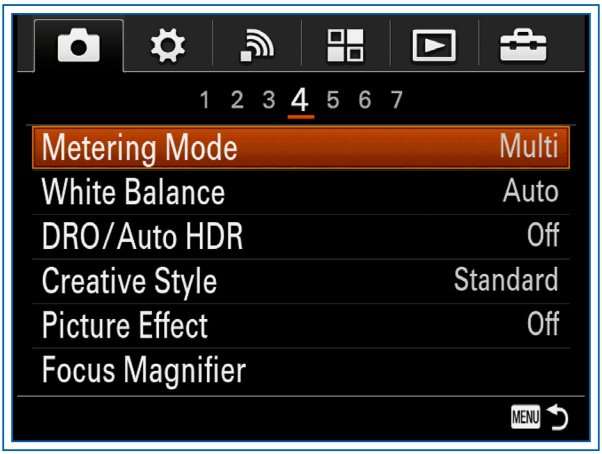

Figure 4-59. Screen 4 of Shooting Menu

Metering Mode

This option lets you choose among the 3 patterns of exposure metering offered by the RX100 III—Multi, Center, and Spot—as shown in Figure 4-60.

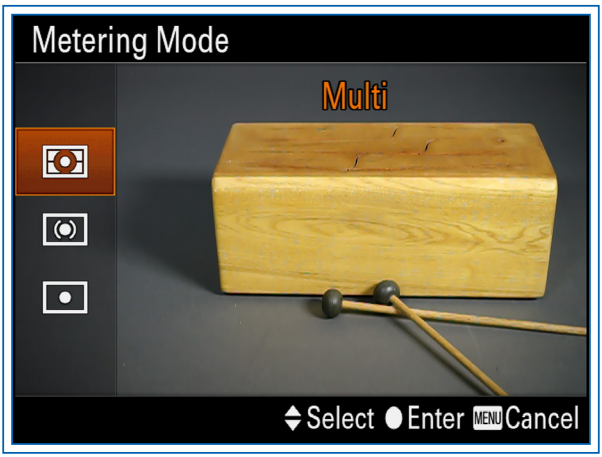

Figure 4-60. Metering Mode Options Screen

This choice tells the camera's automatic exposure system what part of the scene to consider when setting the exposure. With

Multi, the camera uses the entire scene that is visible on the display. With Center, the camera still measures all of the light from the scene, but it gives additional weight to the center portion of the image on the theory that your main subject is in or near the center. Finally, with Spot, the camera evaluates only the light that is found within the spot metering zone.

In Spot mode, the camera places a small circle in the center of the screen indicating the metered area, as seen in Figure 4-61.

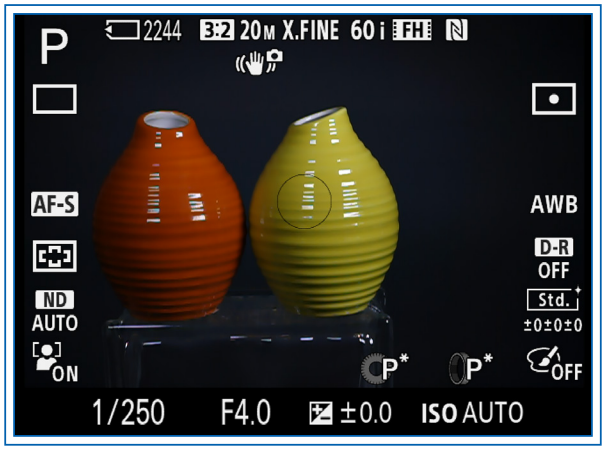

Figure 4-61. Spot Meter Circle on Screen

With this setting, you can see the effects of the exposure system clearly by selecting the Program exposure mode and aiming the small circle at various points, some bright and some dark, and seeing how sharply the brightness of the scene on the camera's display changes. If you try the same experiment using Multi or Center mode, you will see more subtle and gradual changes.

If you choose Spot metering, the circle you will see is different from the rectangular frames the camera uses to indicate the Center or Flexible Spot Focus Area mode settings. If you make either of those Focus Area settings at the same time as the Spot metering setting, you will see both a spot-metering circle and an autofocus frame in the center of the LCD screen, as in Figure 4-62,

which shows the screen with the Spot metering and Center Focus Area settings in effect.

Figure 4-62. Spot Meter and Center Focus Frames on Screen

Be aware which one of these settings is in effect, if a circle or a frame is visible in the center of the screen. Remember that the circle is for spot metering, and the rectangular bracket is for Center or Flexible Spot autofocus (or an equivalent Lock-on AF setting).

In the 2 Auto modes and all varieties of Scene mode, the only metering method available is Multi. That method also is the only one available when Clear Image Zoom or Digital Zoom is in use. (The conflict arises only when the lens is actually zoomed beyond the limit of optical zoom; at that point, the camera will change the metering method to Multi, and will change it back when the lens is zoomed back within the optical zoom limit.)

The Multi setting is best used for scenes with relatively even contrast, such as landscapes, and for action shots, in which the location of the main subject may move through different parts of the frame. The Center setting is useful for sunrise and sunset scenes, and for other situations in which there is a large, central subject that exhibits considerable contrast with the rest of the