shutter speed or aperture without affecting the overall exposure. An asterisk will appear in the lower right corner of the display while you activate the button that activates AEL.

With Manual Shift, if you select a new value for which there is no corresponding value available to maintain the exposure, the camera will not select new values. For example, if the original settings are f/1.8 and 1/250 second, and, using Manual Shift, you attempt to select a faster shutter speed, the camera will not choose any new values, because there is no available aperture setting that can maintain the original exposure setting.

I use Manual exposure mode often, for various purposes. One use is to take images at different exposures to combine into a composite HDR image. I will discuss that technique in Chapter 4. I also use Manual mode when using external flash with the RX100 V, as discussed in Appendix A, because the flash does not interact with the camera's autoexposure system.



Figure 3-24. Manual Exposure Example

Manual mode also is useful for some special types of photography, such as making silhouettes. For example, in Figure 3-24, I adjusted exposure settings manually to photograph a factory with its smokestack, adjusting the shutter speed and aperture to reduce the exposure and give the scene a dark, silhouette-like appearance, emphasizing the subject's shape.

Scene Mode

Unlike other modes, Scene mode does not have a single defining feature, such as permitting control over one or more aspects of exposure. Instead, when you select Scene mode and then choose a scene type within that mode, you are 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 the decisions as to what settings to use to produce that result.

With most scene types, you cannot select several options that are available in the advanced shooting modes, such as Creative Style, Picture Effect, Metering Mode, White Balance, Focus Area, and ISO. There also are some settings that are available with certain scene types but not others, as discussed later in this chapter.

Although some photographers may feel that Scene mode limits creative decisions, I find it useful. You don't have to use the scene types only for their labeled purposes; some of them may offer settings that are useful for scenarios you regularly encounter.

You select Scene mode by turning the Mode dial to the SCN indicator, as shown in Figure 3-25.



Figure 3-25. Mode Dial at SCN

Now, unless you want to use the setting that is already in place, you need to pick one from the list of 13 scene types. There are several ways to do this, depending on current menu settings.

If Mode Dial Guide is turned on through screen 2 of the Setup menu, then, whenever you turn the Mode dial to the SCN setting and press the Center button, the Scene Selection menu in Figure 3-26 appears.

If Mode Dial Guide is not turned on, or if the camera is already in Scene mode, you can use the Shooting menu to call up the Scene Selection screen. Navigate to screen 8 of the Shooting menu and choose the Scene Selection item, as shown in Figure 3-27.



Figure 3-26. Scene Selection Menu

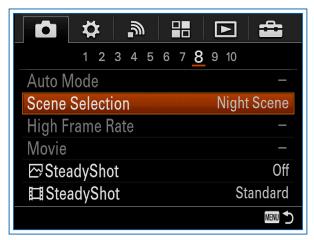


Figure 3-27. Scene Selection Item Highlighted on Menu

Once the Scene Selection menu is displayed, scroll through the 13 selections using the Up and Down buttons or the Control wheel. Press the Center button to select a setting and return to the shooting screen. You will see an icon representing that setting in the upper left corner of the display. (You may need to press the Display button to see the screen that shows the scene setting icon; the icon will disappear after a few seconds on some display screens.) For example, Figure 3-28 shows the display when the Gourmet setting is selected.

For each scene type the camera displays a screen with a description of the setting's uses as you move the selector over it, as shown in Figure 3-26, so you are not left to puzzle out what each icon represents. As you press the Up or Down button or turn the Control wheel to move the selector over the other scene types, when you reach the bottom or top edge of the screen, the selector wraps around to the first or last setting and continues going.

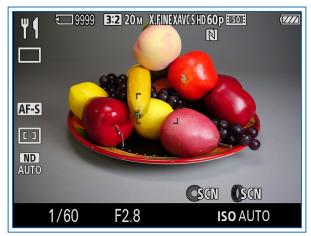


Figure 3-28. Icon for Gourmet Scene Setting on Display

There also are two more ways to select a scene type. If the Control ring is set to its Standard setting, then when the shooting screen is displayed in Scene mode, you can just turn the Control ring to cycle through the various scene types. You will see a circular display as the ring turns, as shown in Figure 3-29.



Figure 3-29. Display When Selecting Scene Type with Control Ring

After you stop turning the ring, the icon for the selected scene type will appear in the upper left corner. (If you are using manual focus or DMF (Direct Manual Focus) this will not work, because the Control ring will adjust focus and will not be available to display scene types.) Also, you can turn the Control wheel in Scene mode to change scene types, regardless of the function assigned to the Control ring. With that option, there is no circular display; the camera just cycles through the various scene icons in the upper left corner of the display.

That's all you have to do to select a scene type. But you need to know something about each option to decide whether it's one you would want to use. In general, each

scene type carries with it a variety of values, including things like focus mode, flash status, range of shutter speeds, sensitivity to various colors, and others.

Note that some settings are designed for certain types of shooting, rather than particular subjects such as sunsets or fireworks. For example, the Anti Motion Blur and High Sensitivity settings are designed for difficult shooting environments, such as dimly lighted areas.

PORTRAIT

The Portrait setting is designed to produce flesh tones with a softening effect, as shown in Figure 3-30. You should stand fairly close to the subject and set the zoom to fill the frame. If you have the Auto Object Framing option turned on through screen 7 of the Shooting menu, the camera may re-frame the portrait for you.



Figure 3-30. Portrait Example

The camera will try to use a wide aperture to blur the background. You can use Autoflash or Fill-flash if you want to even out the lighting or reduce shadows on your subject's face. If you want to improve the lighting, consider using off-camera flash with a softbox attachment.

If you are shooting a portrait in front of a busy background, such as a house, try to position the subject's head in front of a plain area, such as a light-colored wall, so the head will be seen clearly.

You can use the self-timer, but you cannot use bracketing or continuous shooting. You can use the self-portrait timer feature if it is turned on through screen 5 of the Custom menu. To use that feature, flip the LCD screen up so it is facing in the same direction as the lens, and turn the camera so the lens is facing you. Press the shutter button as you see your face, and

the shutter will fire after a three-second on-screen countdown.

SPORTS **A**CTION

The Sports Action setting is for use when lighting is bright and you need to freeze the action of athletes, children at play, pets, or other subjects. The camera may set a high ISO value so it can use a fast shutter speed to stop action. The flash is initially forced off, but you can turn on Fill-flash. The camera sets itself for continuous shooting so you can hold down the shutter button and capture a burst of images. In that way, you increase your chances of capturing the action at a perfect moment. You can switch to any of the three speeds of continuous shooting if you want, but you cannot set Drive Mode to single shooting or turn on the self-timer. (I'll discuss the Drive Mode options in Chapter 4.) The camera turns on continuous autofocus, so it adjusts focus automatically as the subject moves. You can switch to manual focus or direct manual focus (DMF), which are discussed in Chapter 4. You cannot turn on single autofocus.



Figure 3-31. Sports Action Example

In Figure 3-31, I used this setting to photograph a bicycle rider who suddenly appeared on a trail coming toward me. The camera used a fast shutter speed of 1/1250 second at f/2.8 with an ISO setting of 640, with continuous shooting turned on. I held down the shutter button for a burst of 12 shots, and chose this one for the final version.

MACRO

Although you can focus at close range in other shooting modes, it is convenient to use this setting to call up a

group of options that are suited for extreme closeups of flowers, insects, or other small objects.

When you select the Macro option, the camera will let you set the flash to Forced Off, Autoflash, or Fill-flash. You cannot use continuous shooting or bracketing, but you can use the self-timer.

The camera initially uses single autofocus, but you don't have to use autofocus to take macro shots. You can use manual focus to focus on objects very close to the lens. You do, however, lose the benefit of automatic focus, and it can be tricky finding the correct focus manually. If you use the DMF setting, though, you can check focus by pressing the shutter button halfway and having the camera use its autofocus system. You also can take advantage of several aids to manual focusing with the RX100 V: Peaking, MF Assist, and Focus Magnifier, discussed in Chapters 4 and 7.

You don't have to use the Macro setting to shoot extreme closeups with the RX100 V. If you set the camera to one of its autofocus modes—either single-shot AF or continuous AF—it will focus on objects as close as two inches (five cm) when the lens is zoomed out and as close as 12 inches (30 cm) when the lens is zoomed in to its maximum telephoto range.

When shooting extreme closeups, you should use a tripod if possible because the depth of field is very shallow and you need to keep the camera steady to take a usable photograph. It's also a good idea to take advantage of the two-second or five-second self-timer. If you take the picture using the self-timer, you will not be touching the camera when the shutter is activated, so the chance of camera shake is minimized. You also can use a wired remote control, as discussed in Appendix A, or a remote control app that operates the camera through a wireless network, as discussed in Chapter 9.

If you need artificial illumination, consider using some sort of diffuser over the built-in flash, such as a handkerchief or piece of translucent plastic. Using the flash without some diffusion is likely to result in uneven illumination at such a close range. You might consider using a small lamp that can illuminate the subject without overwhelming it. Another approach is to use an off-camera flash triggered by an optical slave system, as discussed in Appendix A. In that case, you can attach a softbox to the flash to diffuse the light.

In Figure 3-32, I took a shot of the head of a small sculpture depicting the Roman goddess Diana in an art museum, holding the lens quite close, with no tripod.



Figure 3-32. Macro Example

LANDSCAPE

Landscape is a Scene mode setting I use often. It is convenient to turn the Mode dial to the SCN position and pull up the Landscape setting when I'm at a scenic location. The camera lets you use Fill-flash in case you want to shoot an image of a person as part of your composition, and it boosts the brightness and intensity of the colors somewhat. Otherwise, it limits your choices; you cannot use continuous shooting, but you can use the self-timer. Figure 3-33 is an example taken using the Landscape setting for a shot of the skyline of Richmond, Virginia, with reflections in the James River.



Figure 3-33. Landscape Example

SUNSET

This setting enhances reddish hues. You can use Fill-flash to take a portrait with the sunset or sunrise in the background. You cannot use continuous shooting, but you can use the self-timer. As I noted earlier, you don't have to limit this, or any Scene mode setting, to

the subject its name implies. If you are photographing reddish leaves in autumn, you might use this option to create an enhanced view of the brightly colored foliage.

In Figure 3-34, I used the Sunset option to photograph a scene over the James River a few minutes before sunset.



Figure 3-34. Sunset Example

NIGHT SCENE

The Night Scene option is designed to preserve the natural look of an evening setting. The camera disables the use of the flash completely; if the scene is quite dark, you should use a tripod to avoid camera motion during the long exposure that may be required. You cannot use continuous shooting, but you can use the self-timer. This setting is good for landscapes and other outdoor scenes after dark when flash would not help. The camera does not raise the ISO or use multiple shots, as it does with other modes used in dim lighting, such as Anti Motion Blur and Hand-held Twilight.

In Figure 3-35, I used the Night Scene setting to photograph a downtown view of Richmond, Virginia, about 20 minutes after sunset, with the moon at the upper left. The camera was on a tripod, and the shutter speed was 1/15 second at ISO 125, with aperture f/1.8.



Figure 3-35. Night Scene Example

HAND-HELD TWILIGHT

This scene type is for taking pictures in low light without flash or tripod. With this special setting, the camera may boost the ISO to a higher level so it can use a fast shutter speed, and it takes a rapid burst of four shots. The camera combines these shots internally into one composite image to counteract the effects of high ISO, which often causes visible "noise," or grain, in an image.

Although the camera tries to select frames with minimal motion blur, the final result with this setting is more likely to show motion blur than a shot made with the Anti Motion Blur setting, discussed later in this section. If the Quality option on the Shooting menu is set to RAW or Raw & JPEG, the camera resets it to Fine while using this setting. However, you can set Quality to Extra Fine, and the camera will use that setting.

Hand-held Twilight is a good option if you are shooting a landscape or other static subject when you cannot use a tripod or flash and the light is dim. If you can use a tripod, you might be better off using the Night Scene setting, discussed above. Or, if you don't mind using flash, you could just use Intelligent Auto, Program, or one of the more ordinary shooting modes. Hand-held Twilight is a useful option when it's needed, but it will not yield the same overall quality as a shot at a lower ISO with the camera on a steady support.



Figure 3-36. Hand-held Twilight Example

In Figure 3-36, I used this setting for a shot of a bridge across the river a few minutes after sunset, without using a tripod.

NIGHT PORTRAIT

This night-oriented setting is for situations when you are taking a portrait and are willing to use the camera's

built-in flash. The main differences from the settings discussed above are that with Night Portrait, the camera takes only one shot and it activates the flash, in Slow Sync mode. You cannot set the Flash Mode to Flash Off. (However, you can leave the flash unit retracted, and the camera will let you take the shot without flash.)

I will discuss Slow Sync in more detail in Chapter 4. Basically, with this setting, the camera uses a slow shutter speed, so that as the flash illuminates the portrait subject, there is enough time for natural light to illuminate the background also. You can use the self-timer, but not continuous shooting. You also can use Raw quality if you wish, so this setting is a good choice for a high-quality portrait outdoors at night. Because of the slow shutter speed, you should use a tripod if possible to avoid motion blur.



Figure 3-37. Night Portrait Example

In Figure 3-37, I used this setting for a portrait after dark, with some ambient light in the background. I used the flash, and the camera set the shutter speed to 1/4 second, an exposure long enough to allow some of the background scenery to appear.

ANTI MOTION BLUR

As noted earlier, this Scene mode setting is not meant for a particular subject, but for a certain type of situation. This option is useful when the lighting is dim or the lens is zoomed in to a telephoto setting. In either of those situations, the image is subject to blurring because of camera motion. In dim lighting, blurring can happen when the camera uses a slow shutter speed to expose the image properly, because it is hard to hold the camera steady enough for a sharply focused shot longer than about 1/30 second. In the telephoto

case, any camera motion is exaggerated because of the magnification of the image.

To counter the effects of this blurring, with Anti Motion Blur the camera raises the ISO to a higher-than-normal level so the camera can use a fast shutter speed and still let in enough light to expose the image properly. Because higher ISO settings result in increased visual noise, the camera takes a rapid burst of four shots and combines them internally into a single image with reduced noise. The camera also counteracts blur from motion of the subject to a fair extent, by analyzing the shots and rejecting those with motion blur as much as possible.

Anti Motion Blur is useful as the light is fading if you don't want to use flash. It is similar to the Hand-held Twilight setting, discussed above, but the camera is likely to use a higher ISO value with this option, which may result in more noise in the image. For Figure 3-38, I used this setting to capture an image of a man and his young helper, working on a project outdoors shortly after sunset. The camera used a very high ISO setting of 3200 and a shutter speed of 1/250 second along with its multiple-shot processing. As a result, the image does not show significant motion blur.



Figure 3-38. Anti Motion Blur Example

You should not expect good results if you use this setting with fast-moving subjects, because the camera will not be able to eliminate motion blur. With slower-moving subjects, though, the RX100 V can do a good job of reducing or avoiding blur. With this setting, you cannot set the Drive Mode options except for the self-timer, and

you cannot use the flash. As with the Hand-held Twilight setting, if Quality is set to Raw or Raw & JPEG, the camera resets it to Fine while using this setting, though you can set Quality to Extra Fine if you want.

PET

The Pet setting is for taking photos of cats, dogs, and other animals. It is similar to Sports Action in that the flash is off by default but can be set to Fill-flash. The Pet setting, though, lets you use the Soft Skin Effect setting on the Shooting menu, and does not let you use continuous shooting. I would recommend that you use this setting when you are shooting a relatively posed or calm shot of your dog, cat, or other pet; if the animal is running around, you might be better off with the Sports Action selection.



Figure 3-39. Pet Example

I used this setting for Figure 3-39, a shot of a normally very active spaniel, when she took a break to look around at her environment.

GOURMET

The Gourmet setting, according to Sony, is meant to let you shoot food so that it looks "delicious." In terms of settings, the RX100 V raises the brightness and vividness of colors to enhance the appearance of food. This setting is useful for people who write food blogs, or who like to record their meals for posterity. The camera lets you have the flash either forced off or set to Fill-flash. Continuous shooting is not available, but you can use the self-timer. In Figure 3-40, the color and brightness enhancements of this setting gave a boost to this image of a bowl of artificial fruit.



Figure 3-40. Gourmet Example

FIREWORKS

This scene type is designed to capture vivid images of fireworks bursts. It sets the camera to a two-second shutter speed and intensifies colors. If you can, you should set the camera on a tripod or other sturdy support and turn off the SteadyShot image stabilization option on the Shooting menu. The camera disables the flash and continuous shooting.



Figure 3-41. Fireworks Example

This setting is one you can also use as an alternative to the Night Scene setting when you are using a tripod after dark. You might want to try this approach to take advantage of the different color processing that the camera uses with this option. In Figure 3-41, I used this setting for a shot of a downtown expressway after sunset, to capture a few trails of automobile headlights and taillights during the two-second exposure.

HIGH SENSITIVITY

This final Scene mode setting is another option for low-light shooting. The camera disables the flash and continuous shooting, but it allows use of the self-timer.

The camera is likely to use an ISO of 3200 or higher, all the way to the maximum of 25600 if the light is dim enough to require it. However, unlike the case with Hand-held Twilight and Anti Motion Blur, the camera takes only a single shot. As a result, there is no special processing of multiple images to reduce visual noise, so the image may be rather grainy. You cannot set Quality to Raw or Raw & JPEG.

If you need to shoot in dim light without a tripod and produce an image that is as smooth and noise-free as possible, you probably should use Hand-held Twilight or Anti Motion Blur instead of High Sensitivity. However, there might be occasions when you don't mind the grainy, noisy appearance that a high ISO can bring. It's good to have various choices available when you are confronted with a dimly lit location.

Note that you cannot set the ISO to 25600 with the ISO setting on the Shooting menu; as discussed in Chapter 4, the highest setting available on that menu is 12800. To get the camera to use the 25600 value for ISO, you have to use the Multi Frame Noise Reduction setting on the ISO menu or this High Sensitivity setting of Scene mode.



Figure 3-42. High Sensitivity Example

In Figure 3-42, I used the High Sensitivity setting to photograph an artist at work copying a painting in the art museum in a dimly lighted room. The camera set the

ISO to 3200 with a shutter speed of 1/80 second, so I was able to take the photograph without a tripod.

Sweep Panorama Mode

The next setting on the Mode dial is designed for the shooting of panoramic images. The RX100 V, like many other Sony cameras, has an excellent capability for automating the capture of panoramas. If you follow the fairly simple steps involved, the camera will stitch together a series of images internally to create a wide (or tall) view of a scenic vista or other subject that lends itself to panoramic depiction.



Figure 3-43. Mode Dial at Sweep Panorama

On the Mode dial, select the icon that looks like a squeezed rectangle, as seen in Figure 3-43. You will see a message telling you to press the shutter button and move the camera in the direction of the arrow that appears on the screen, as shown in Figure 3-44.



Figure 3-44. Message on Display for Sweep Panorama Mode

At that point, you can follow the directions and likely get excellent results. However, the camera also lets you make several choices for your panoramic images using the Shooting menu. Press the Menu button, and you will go to the menu screen that is currently displayed.

Navigate to the Shooting menu, which limits you to fewer choices than in most other shooting modes because several options are not appropriate for panoramas. For example, the Image Size, Aspect Ratio, and Quality settings are dimmed and unavailable. Also, options such as Drive Mode, Flash Mode, and Focus Area are of no use in this situation and cannot be selected. In addition, you will not be able to zoom the lens in; it will be fixed at its wide-angle position. (If the lens was zoomed in previously, it will zoom back out automatically when you switch the Mode dial to the Sweep Panorama selection.)

You will, however, see two options on the second screen of the Shooting menu that are not available for selection in any other shooting mode: Panorama Size and Panorama Direction, as shown in Figure 3-45.

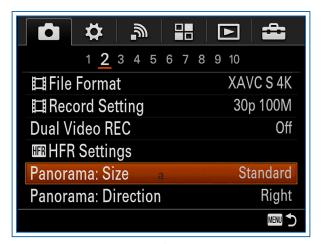


Figure 3-45. Panorama Size and Panorama Direction on Menu

Panorama Size has two options, Standard and Wide. With Standard, a horizontal panorama will have a size of 8192 by 1856 pixels, which is a resolution of about 15 megapixels (MP). If you choose Wide, a horizontal panorama will have a size of 12416 by 1856 pixels, resulting in a resolution of about 23 MP. (This figure is larger than the camera's maximum resolution of 20 MP because with the panorama settings, the camera is taking multiple images and stitching them together.)

A vertical panorama at the Standard setting is 3872 by 2160 pixels, or about 8.3 MP; a vertical panorama at the Wide setting is 5536 by 2160 pixels, or about 12 MP.

The Panorama Direction option selects Right, Left, Up, or Down for the direction in which you will sweep the camera. If the Control ring is set to the Standard option through the Custom Key (Shooting) item on the Custom menu and you are not using manual focus or DMF, you can turn the Control ring, and the camera will cycle

through the four arrows for the four directions, so you will not have to use the Shooting menu for that purpose. You also can turn the Control wheel to change the direction, regardless of the setting for the Control ring.

You can use the Direction settings with different orientations of the camera to get different results than usual. For example, if you set the direction to Up and hold the camera sideways while you sweep it to the right, you will create a horizontal panorama with 2160 pixels in its vertical dimension rather than the standard 1856.

Those are the main settings for most panoramas. There are a few other options you can select for panoramas on the Shooting menu, including Focus Mode, Metering Mode, White Balance, Creative Style, and SteadyShot. I will discuss all of these menu options in Chapter 4. My preferred settings for shooting panoramas are the ones shown in Table 3-1, at least as a starting point.

Table 3-1. Suggested Settings for Panoramas

| Focus Mode | Single-shot AF |
|---------------------------|----------------------------|
| Metering Mode | Multi |
| White Balance | Auto White Balance |
| Creative Style | Standard |
| SteadyShot (Still Images) | On (unless using a tripod) |

One other setting you can make when shooting panoramas is exposure compensation, which is set using the Down button on the Control wheel. I will discuss that function in Chapter 5. In the context of shooting panoramas, this feature can be useful because the camera will not change the exposure if the camera is pointed at areas with varying brightness. For example, if you start sweeping from a dark area on the left, the camera will set the exposure for that area. If you then sweep the camera to the right over a bright area, that part of the panorama will be overexposed and possibly washed out in excessive brightness. To correct for this effect, you can reduce the exposure using negative exposure compensation. In this way, the initial dark area will be underexposed, but the brighter area should be properly exposed. Of course, you have to decide what part of the panorama is the most important one for having proper exposure.

Another way to deal with this issue is to point the camera at the bright area before starting the shot and press the shutter button half-way to lock the exposure, and then go back to the dark area at the left and start

sweeping the camera. In that way, the exposure will be locked at the proper level for the bright area.

Once you have made the settings you want, follow the directions on the screen. Press and release the shutter button and start moving the camera at a steady rate in the direction you have chosen. I tend to shoot my panoramas moving the camera from left to right, but you may have a different preference. You will hear a steady clicking as the camera takes multiple shots during the sweep of the panorama. A white box and arrow will proceed across the screen; your task is to finish the camera's sweep at the same moment that the box and arrow finish their travel across the scene. If you move the camera either too quickly or too slowly, the panorama will not succeed; if that happens, just try again.

Panoramas usually work best when the scene does not contain moving objects such as cars or pedestrians because when items are in motion, the multiple shots are likely to capture images of the same object more than once in different positions.

It is advisable to use a tripod if possible so you can keep the camera steady in a single plane as it moves. If you don't have a tripod available, you might try using the electronic level that Sony provides with the RX100 V. You have to activate the level with the Display Button option on screen 2 of the Custom menu, as discussed in Chapter 7. Then press the Display button until the screen with the electronic level appears. Make sure the outer tips of the level stay green as much as possible, and the resulting panorama should benefit from the level shooting.

In addition to exposure, as discussed above, focus and white balance are fixed as soon as the first image is taken for the panorama.

When a panoramic shot is played back in the camera, it is initially displayed at a small size so the whole image can fit on the display screen. You can press the Center button to make the panorama scroll across the display at a larger size, using the full height of the screen.

Figure 3-46 is a sample panorama, shot from left to right using the Standard setting for Panorama Size.



Figure 3-46. Panorama: James River, Richmond, Virginia, Using Standard Size Setting

Memory Recall Mode

There is one more shooting mode left to discuss, apart from Movie mode and HFR mode, which I will discuss in Chapter 8. This last mode, called Memory Recall, is a powerful tool that gives you expanded options for your photography.



Figure 3-47. Mode Dial at MR

When you turn the Mode dial to the MR position (shown in Figure 3-47) and then select one of the seven groups of settings that can be stored there, you are, in effect, selecting a custom-made shooting mode that you create with your own favorite settings.

You can set up the camera just as you want it—with stored values for items such as shooting mode, shutter speed, aperture, zoom amount, white balance, ISO, and other settings—and later recall all of those values instantly just by turning the Mode dial to the MR position and selecting one of the seven stored memory registers on the Memory Recall screen, depending on which one you used to store the settings. With the RX100 V, unlike some other camera models, you can

store settings for any shooting mode, including the Intelligent Auto and Scene modes.

Here is how this works. First, set up the camera with all of the settings you want to recall. For example, suppose you are going to do street photography. You may want to use a fast shutter speed, say 1/250 second, in black and white, at ISO 1250, using continuous shooting with autofocus, Large and Extra Fine JPEG images, and shooting in the 4:3 aspect ratio.

The first step is to make all of these settings. Set the Mode dial to Shutter Priority and use the Control wheel to set a shutter speed of 1/250 second. Then press the Menu button to call up the Shooting menu and, on screen 1, select L for Image Size, 4:3 for Aspect Ratio, and Extra Fine for Quality. Then move to screen 3 and choose continuous shooting (Mid speed) for Drive Mode. On screen 5, set ISO to 1250, and set the white balance to Daylight. Next, move to the Creative Style option on screen 6 and select the B/W setting, for black and white. You also may want to push the zoom lever all the way to the left for wide-angle shooting. You can set any other available Shooting menu options as you wish, but the ones listed above are the ones I will consider for now.



Figure 3-48. Memory Item Highlighted on Shooting Menu

Once these settings are made, navigate to the Memory item, shown in Figure 3-48, which is the final item on the last screen of the Shooting menu.

After you press the Center button, you will see a screen like the one in Figure 3-49, showing icons and values for all of the settings currently in effect.

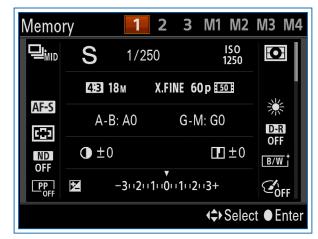


Figure 3-49. Memory Settings Screen

The word Memory appears at the upper left of the screen, and the indicators 1, 2, 3, M1, M2, M3, and M4 at the upper right. In the example shown here, the number 1 is highlighted. Now press the Center button, and you will have selected register 1 to store all of the settings you just made. Registers 1, 2, and 3 are stored in the camera's internal memory. Registers M1, M2, M3, and M4 are stored on the memory card that is currently inserted in the camera.

Note the short gray bar at the right side of the Memory screen shown in Figure 3-49. That bar indicates that you can scroll down through other screens to see additional settings that are in effect, such as ISO Auto Maximum and Minimum, AF Illuminator, AF Drive Speed, Center Lock-on AF, SteadyShot, and several others. Use the Up and Down buttons to scroll through those screens.

Next, to check how this worked, try making some very different settings, such as setting the camera for Manual exposure with a shutter speed of one second, Creative Style set to Vivid, continuous shooting turned off, the zoom lever moved all the way to the right for telephoto, and Quality set to Raw. Then turn the Mode dial back to the MR position and press the Center button while the number 1 is highlighted for Register 1. You will see that all of the custom settings you made have instantly returned, including the zoom position, shutter speed, and everything else. You can then continue shooting with those settings.

This is a wonderful feature, and it is more powerful than similar options on some other cameras, which can save menu settings but not values such as shutter speed and zoom position, or can save settings only for the less-automatic shooting modes, but not the Scene and

Auto modes. What is also quite amazing is that if you now switch back to Manual exposure mode, the camera will restore the settings that you had in that mode before you turned to the MR mode. (The position of the zoom lens will not revert to where it was, though.)

You can store settings from the Shooting menu, as well as the aperture, shutter speed, exposure compensation, and optical zoom settings. So, for example, you could set up one of the seven memory registers to recall Scene mode using the Macro setting, with the lens zoomed back to its wide-angle position. In that way, you could be ready for closeup shooting on a moment's notice. A Program Shift setting cannot be stored.

Note that you can recall the M1, M2, M3, or M4 settings only if the memory card that has those settings saved is inserted in the camera. On the positive side, this means that you can build up an inventory of different groups of settings, and store them in groups of four on different memory cards. If those cards are clearly labeled or indexed, you can select a card with the four settings you need for a particular shooting session.

This feature is powerful and useful. With a twist of the Mode dial and the press of a button, you can call up a complete group of settings tailored for a particular type of shooting. It is worth your while to experiment with this feature and develop various groups of settings that work well for your shooting needs.