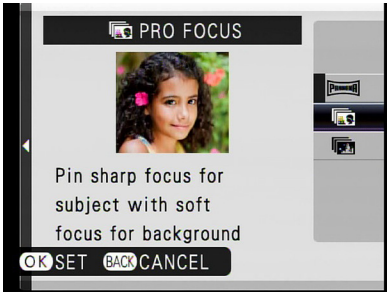
Here is a tip for getting the maximum resolution for your panoramas. With the X10, the resolution for each type of panorama is greater for vertical panoramas than for horizontal ones. For example, if you are shooting a 120-degree panorama in the horizontal mode, the resolution is 3840 tall x 1080 pixels wide. However, if you shoot a 120-degree panorama in the vertical mode, the resolution is 3840 tall x 1624 wide.

So, if you want to shoot a horizontal panorama with the maximum resolution, just set the camera to shoot a vertical panorama, but hold the camera sideways, with the left or right side in the air, and pan it around horizontally.

Pro Focus

The next selection for Advanced Mode on the Shooting menu is the Pro Focus mode.



This feature simulates the blurred background or "bokeh" that is more readily produced by DSLRs and other cameras with larger sensors. As I discussed in connection with Aperture Priority mode, bokeh ordinarily is produced when you take a picture at a wide-open aperture such as f/2.0. The effect is particularly distinctive when the lens is zoomed in, the foreground subject (which is to be sharply focused) is fairly close to the lens, and the background (which is to be blurred) is separated from the main subject by a fair distance.

With a camera such as the X10, which does not have as large a sensor as a DSLR, it is somewhat difficult to create the blurred-

background effect. The Pro Focus mode gives you another way to achieve this sort of effect, through a different approach.

With the Pro Focus mode, the camera takes a rapid burst of shots, either two or three, with different focus points. In other words, it takes one shot with normal focus and then at least one other with the background purposely de-focused. The camera then combines the multiple shots internally to produce a composite image with a background that is more blurry than would be possible using the wide-aperture effect alone.

After selecting Pro Focus from the Advanced Mode sub-menu, press the Back button to return to the live image. You then can turn the main command dial or the sub-command dial to select the intensity of the effect, from level 1 through 3. The camera will then display a number on the screen showing how many images will be taken to achieve the effect; that number may be the same as the intensity level, or it may be different.

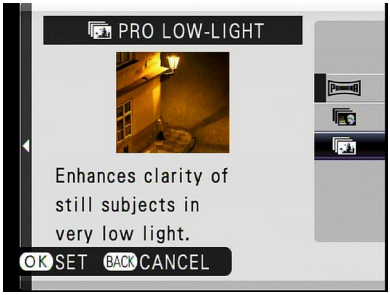
To use this mode, the subject to be in focus must be fairly far in front of the background; if they are not sufficiently separated, the camera will give you a warning message, Cannot create effect! In that case, rearrange the shot and try again.

I have found this effect to be most useful when using the lens at its wider-angle settings. When the lens is more zoomed in, it is fairly easy to achieve this effect just by using a wide aperture. But when you use Pro Focus, even at the widest angle of 28mm, the effect is quite dramatic, as shown below.

This shooting mode, like other special modes, comes with several limitations, most notably that the composite images produced will be no larger than Medium in size, and, of course, cannot be RAW. If you would like to save the unprocessed images that are used to create the composite image, you can do so if you turn on the Save Org Image option on the Setup menu, as discussed in Chapter 7.

Pro Low-Light

The third and final choice on the Advanced Mode sub-menu is the Pro Low-Light mode.



As I noted earlier, the X10 gives you several tools for taking usable images in dim light, including the Night and Night (Tripod) choices in Scene Position mode. You also can use settings in the EXR shooting mode, including the Advanced Anti Blur setting in EXR Auto mode and the High ISO & Low Noise sub-mode of EXR mode. Of course, you also have the option of using Program mode or another standard shooting mode and selecting a high ISO setting, up to the elevated level of 12800 ISO. With that sort of setting, however, comes the inevitable visual "noise," or graininess that can mar the image.

Pro Low-Light mode is designed to give you the benefits of a high ISO setting without so much of the bothersome noise. With this setting, when you press the shutter button the camera rapidly takes four shots at high ISO settings (if called for by the lighting conditions) and then quickly combines them internally into a composite image. If all goes as planned, the final

result will be well exposed and will not exhibit as much noise as a single shot would at that ISO level, because the camera is able to combine the pixels from the four images in such a way as to smooth out the grain and reduce the noise.

The Pro Low-Light mode is useful when you need to shoot in a dimly lighted area with no flash or other artificial lighting, and no tripod. (If you put the camera on a tripod, you could lower the ISO and use a long shutter speed, thereby reducing the risk of noise in the image.) When handholding the camera in this mode, you need to hold the camera quite still so it can shoot several images that are able to be combined into a composite. For the example below, I handheld the camera for a shot with dim lighting, and the result was quite acceptable.

This mode has limitations similar to those for Pro Focus mode, including the use of images no larger than Medium size. And, as with the previous mode, you can save the component images using the Save Org Image selection on the Setup menu.

Finally, it's worth noting that the Pro Low-Light setting is actually the functional equivalent of the Advanced Anti Blur option, which can be used only in the EXR Auto shooting mode. However, if you turn on Advanced Anti Blur, the camera will decide whether or not to use it. If you want to make sure the camera uses this sort of multiple-shot processing in low-light conditions, you should use the Pro Low-Light setting.

The Custom Shooting Modes: C1 and C2

The final two shooting modes are labeled C1 and C2 on the mode dial. When you turn the mode dial to one of these two settings, you are not selecting a shooting mode that has its own set of characteristics, like the modes discussed above. Instead, these two modes are really like two blank slates, or like empty bins into which you can store a set of your favorite settings from the four standard shooting modes: Program, Aperture Priority, Shutter Priority, and Manual, as well as most EXR modes, along with certain menu settings.

Each of these two slots gives you the ability to set up several parameters on the Shooting menu for a particular type of shooting session and then save them to this spot on the mode dial for instant recall by turning the dial to that position.

In other words, using the two Custom shooting mode slots, you can store your two favorite combinations of settings, and, with a quick turn of the mode dial, you can recall either one of those two sets at any time.

This system is convenient because it lets you quickly set up the camera for a particular type of shooting without having to go into several menu items individually to change their settings.

Here is how this option works. First, using the mode dial, select one of the shooting modes whose settings can be stored in the C1 or C2 slot: Program, Aperture Priority, Shutter Priority, Manual, EXR-Resolution Priority, EXR-High ISO & Low Noise, or EXR-D-Range Priority. (You cannot store values for EXR Auto or for any modes other than those listed here.)

Next, go into the Shooting menu and set the following items as you want them: ISO, Image Size, Image Quality, Dynamic Range, Film Simulation, WB Shift, Color, Sharpness, High-

light Tone, Shadow Tone, Noise Reduction, Intelligent Digital Zoom, Face Detection, Face Recognition, AF Mode, Flash, and External Flash. (All of these settings are discussed in Chapter 4.)

Then, on the Setup menu, adjust the settings for AF Illuminator and RAW as you like.

Finally, using the camera's physical controls, as discussed in Chapters 2 and 5, select your desired values for metering, White Balance, Drive mode (burst or bracketing), Macro focus, Flash mode, Program Shift, shutter speed, aperture, and monitor display options as set by the Display/Back button.

Because of the wide range of options that can be stored to the C1 and C2 slots, this feature is quite powerful. It is probably best illustrated with a specific example. Let's say you have a hobby, or a business, involving miniature figures, and you periodically need to photograph a new figure using a certain group of settings. Rather than laboriously entering all of those settings into the camera every time you have a new photo session, you can store those settings to one of the Custom slots and recall them instantly whenever you need to.

For example, let's say the settings you use for the images of the miniatures are the following:

Sample Settings for Custom Shooting Mode	
Shooting Mode	**Aperture Priority**
ISO	**200**
Image Size	**L 4:3**
Image Quality	**Fine**
Dynamic Range	**100%**
Film Simulation	**Velvia**
WB Shift	**Neutral**
Color	**Medium-High**
Sharpness	**Medium-Hard**