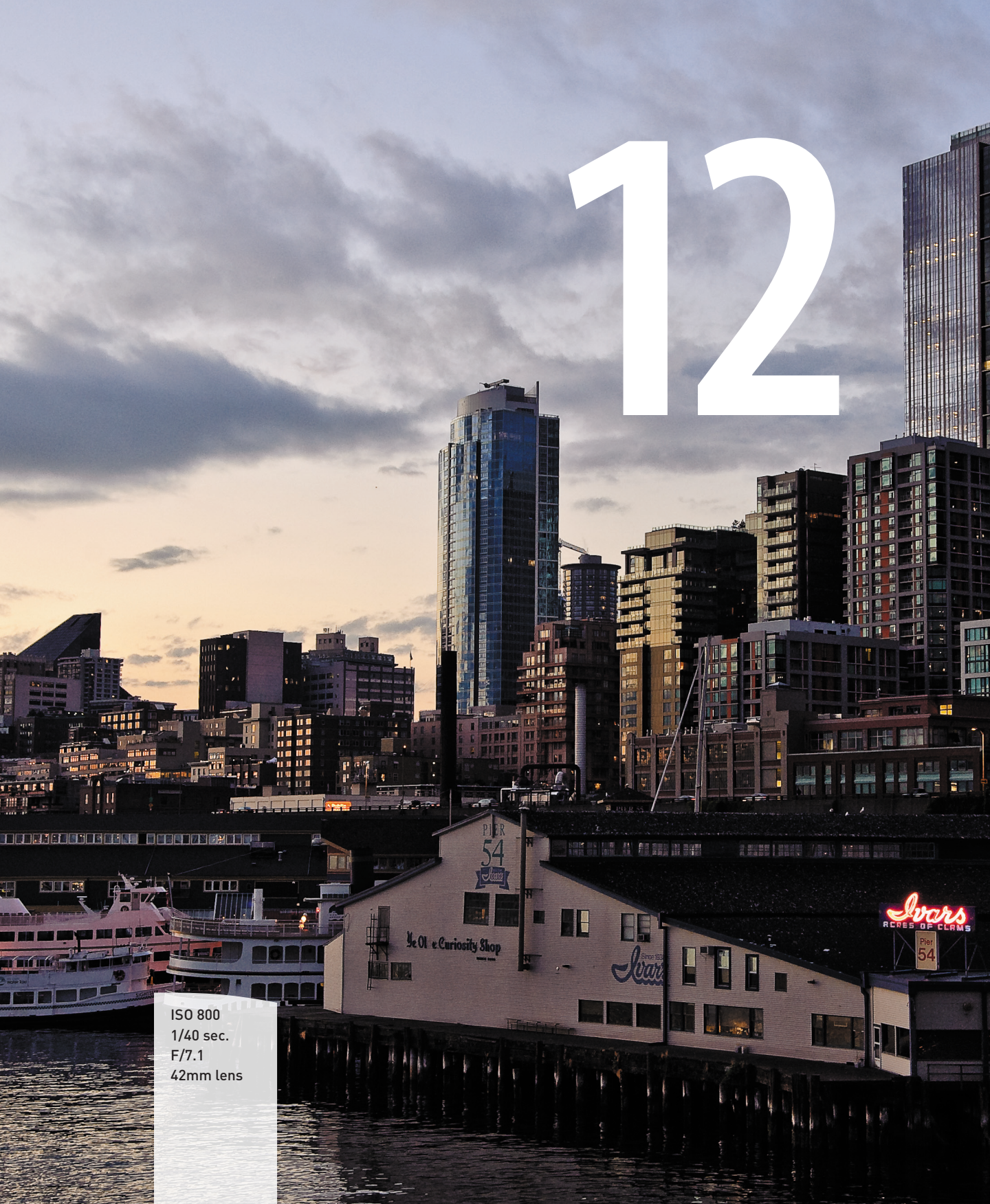


12



ISO 800
1/40 sec.
F/7.1
42mm lens



D5000 Video: Beyond the Basics

GETTING PROFESSIONAL LOOKING VIDEO FROM YOUR D5000

Back in Chapter 2 I took you through some of the basics for setting up and using the video recording functions of the D5000. In this bonus chapter, we will take a look at some of the creative things you can do with your video, including how to make some cool time-lapse videos that you can create right in your camera. First, though, let's take a look at why the video capture feature is such a big deal in a DSLR.

IT'S ALL ABOUT THE LENSES

Video cameras have been around for a long time, so why is it such a big deal that you can now use your DSLR camera to record video? The answer is simple: it's all about the lenses. If you have any experience using a video camcorder you know that it always seems like everything is in focus. While this isn't always a bad thing, it can also be pretty boring. Using DSLR video allows you to use faster lenses (larger apertures), which can give you more shallow depth of field in your videos. This shallow depth of field can add a sense of dimension and depth that is normally lacking in most of your standard video cameras. The truth is that many videographers are turning their attention from video cameras costing many thousands of dollars to the much more affordable DSLR video camera to produce similar high-definition results.

Using the D5000 will not only allow you to capture video with a more shallow depth of field, you also have the flexibility of using different lenses for different effect. While you may only own one lens right now, you have the ability to buy specialty lenses to enhance your video as well as your still capture. Any lens that you can use for still photography on your D5000 can also be used for video, including ultra-wide lenses such as the AF DX Fisheye-Nikkor 10.5mm f/2.8 ED lens, the AF-S VR Zoom NIKKOR 70-300mm f/4.5-5.6G IF-ED, or even the AF Micro NIKKOR 60mm f/2.8D for getting extreme close-up videos.



FIGURE 12.1
Using specialty lenses such as this 10.5mm fish-eye will add a different perspective to your video.

SPEAKING OF FILTERS...

CLOSE-UP

While we are on the subject of close-up video, if you read the other bonus chapter you might recall the section on close-up accessories such as the Nikon close-up filter and the extension tube. Well, guess what? You can use those same accessories for getting great close-up video of those tiny little subjects such as insects or flowers.

POLARIZING

The polarizing filter is going to offer the same benefits to your videos that it does for your photographs. By utilizing this filter you can eliminate the bluish color cast that can happen on those blue-sky days, bring accurate color and contrast to vegetation, reduce annoying reflections from water and glass, and darken your blue skies, giving them more depth and character. (See the bonus Chapter 11 for more detail on the polarizing filter.)

NEUTRAL DENSITY

Shooting in bright daylight conditions can overwhelm any attempts to get a larger aperture (see the section on shallow depth of field). To help combat this problem you might want to employ the use of a neutral density filter to darken the scene. The filters come in varying densities or darkness values so you will need to determine how much light you need to cut down to get the effect you desire. A great filter for this is the Sing-Ray Vari-ND filter, which lets you vary the amount of density by up to eight stops. The problem with this filter is that it only comes in 77mm and 82mm sizes and they are pretty expensive. You can create your own variable ND filter by purchasing a linear polarizing filter and a circular polarizer, which cost much less. Place the linear polarizer on your lens and then the circular on top of that. Then just rotate the circular polarizer and watch the scene get darker and darker. Just dial in the amount of density you want and then start filming.

TRIPODS

Another topic that was covered in the other bonus chapter was the use of tripods to stabilize the camera for the purpose of achieving sharper images. The use of a tripod for video is not quite the same as for still image applications. When you are shooting video, you want to present a nice, smooth video scene that is fairly free of camera shake. One particular case for this is the pan shot. When you are following a subject from side to side, you will want the viewer's attention to be focused on the subject, not the shaky look of the video. To help in this cause, your preferred weapon of choice should be a tripod with a fluid head. A fluid head looks a little different than a standard tripod head, usually with one long handle for controlled panning. To really make things smooth, the head uses system of small fluid cartridges within the panning mechanisms so that your panning movements are nice and smooth. You can

get a nice fluid pan head for around \$75-85, which will mount on your existing tripod legs (if your existing tripod has a removable head).

You can find some nice fluid pan heads at www.bogentripodparts.com



FIGURE 12.2

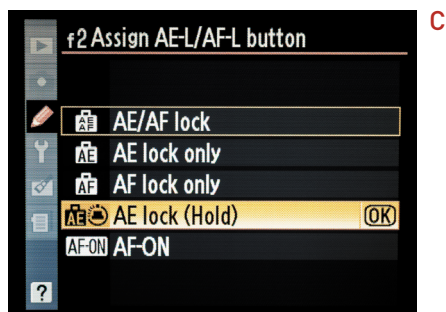
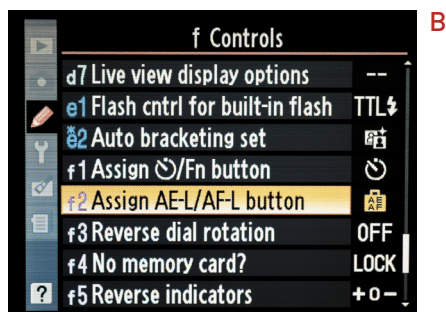
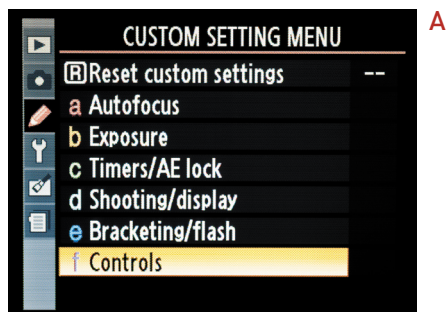
A nice fluid head like the Bogen 700RC2 will make your video tripod work nice and smooth.

GETTING SHALLOW DEPTH OF FIELD

As I said earlier, getting the look of a production cinema camera means working with shallow depth of fields. The problem that you might encounter when trying to get a large aperture in your video will be that the camera wants to use an auto-exposure mode to establish the correct camera settings for recording video. To get the benefit of a large aperture, you are going to need to fool the camera for just a bit. To get a large aperture, you need to point your camera at a dark part of the scene and then press down on the shutter release button enough to activate the camera meter. Then, while the meter is evaluating the light, you will need to press the AE-L/AF-L button to hold the exposure setting and then activate the video. This can be difficult to do, especially if you are handholding your camera. To make life easier, set your AE-L button so that it will hold the exposure by just pressing the button once and letting go. The camera will hold the exposure while you activate the video or until you press the AE-L button a second time or the meter's auto-off system kicks in.

SETTING UP THE AE-L BUTTON

1. Press the Menu button and then navigate to the custom menu section (A).
2. Locate custom menu F and then press the OK button.
3. Scroll down to the item F2: Assign AE-L/AF-L button and press the OK button (B).
4. Highlight the AE lock (Hold) setting and press the OK button (C).
5. Press the Menu button twice to return to camera mode and you are now ready to activate the AE Lock with a single press of the AE-L/AF-L button.



GIVING A DIFFERENT LOOK TO YOUR VIDEOS

USING PICTURE CONTROLS

Something that a lot of people don't realize is that you can use the picture controls to give your video a completely different look. Sure, you can use the Standard

control for everyday video, but why not

add some punch by using the Vivid setting? Nothing says "HD" like bright, vivid

colors. Or maybe you want to shoot a landscape scene. Go ahead and set the picture

control to the Landscape setting to improve the look of skies and vegetation. If you

really want to get creative, try using the Monochrome setting and shoot in black and

white. The great thing about using the picture controls is that you will see the effect

right on your LCD screen as you record, so you will know exactly what your video

is going to look like. Want to take things up a notch? Try customizing the picture

controls and do things like shoot sepia-colored video. Check out the "Classic Black

and White Portraits" section of Chapter 6 to see how to customize the look of your

Monochrome picture control.

WHITE BALANCE

Another great way to change the look of your video is to select a white balance that either matches your scene for accurate color rendition or, better yet, choose one that doesn't match to give a different feel to your video. You can completely change the mood of the video by selecting a white balance setting that is different from the actual light source that you are working in. Don't be afraid to be creative and try out different looks for your video.

TIPS FOR BETTER VIDEO

SHOOT SHORT CLIPS

When the D5000 was introduced, there were a lot of people that voiced concern over the fact that the camera would only shoot in five-minute clips in the HD 720P mode. So here's the deal: most professional video shot today is actually made up of very short video sequences that are edited together. If you don't believe me, watch any TV show and see how long you actually see a continuous sequence. I am guessing that you won't see any clip that is longer than about 10 seconds. You can thank music videos for shortening our attention span, but the reality is that your video will look much more professional if you shoot in shorter clips and then edit them together, which brings me to the next tip.

STAGE YOUR SHOTS

If you are trying to produce a good-looking video, take some time before you begin shooting to determine what you want to shoot and where you want to shoot it from. You can mark the floor with tape to give your "actors" a mark to hit. You can also use staging to figure out where your lens needs to be set for correct focus on these different scenes.

MANUAL FOCUS

This will be difficult to do at first but the fact is that if you want to change the point of focus in your video while you are recording then you will need to manually focus the lens. The auto-focus system only works when you have the camera in Live View mode, and you can't use it while the camera is recording. To change your focus, you need to set the camera to manual focus and then use the focus ring on the front of

the lens. This will be difficult at first, especially if you have never had to manually focus in the past but with a little practice you can become fairly adept to the process.

PUT YOUR CAMERA IN A DIFFERENT PLACE

It's very possible that the one feature that really intrigued you to buy the D5000 was the articulating LCD screen. Being able to see the screen from just about any angle will give you a lot of flexibility in where you put your camera while recording. You can place the camera on the ground or hold it way over your head and still see all of the action taking place. Use this to your advantage to capture video from angles that are different from the standard shooting position that most people use when shooting video.

AVOID THE QUICK PAN

Your camera uses something called a rolling shutter while recording video that, as the name implies, rolls from top to bottom of the frame. If you are panning quickly from one side to another you will see your video start to jiggle like it is being shot through Jell-O. This is something that can't be overcome except by using a slower panning motion.

USE A FAST MEMORY CARD

Your video will be recording at 24 frames per second and as it is recording, it is placing the video into a buffer, or temporary holding spot, while the camera writes the frames to your memory card. If you are using a slower bargain card, it might not be able to keep up with the flow of video with the result being dropped frames. The camera will actually not record some frames because the buffer will fill up before the images have time to be written. This will be seen as small skips in the video when you watch it later. You can prevent this from happening by using an SD card that has a speed rating of class 4 or 6. These cards have faster writing speeds and will keep the video moving smoothly from the camera to the card.

GET YOURSELF A MINI-HDMI CABLE

When you are ready to play back your video, you can run the video directly from your camera to your TV. If you want to get the best quality picture on your TV, you will want to use a TV capable of displaying high-definition video, which also means that you will want to use an HDMI cable to connect the camera to the TV. HDMI (High Definition Multimedia Interface) cables will carry your uncompressed video

to your HD TV in all its glory. The only problem is that your camera didn't have an HDMI cable included in the box when you bought it. This means that you will have to purchase one to take advantage of the HD playback. If you are thinking that you already own an HDMI cable for connecting your other media components to your TV, you might want to take another look. Your camera uses a mini-HDMI connection so most standard cables designed for video components won't work. If you do decide to purchase one, make sure you get a mini-HDMI-to-HDMI cable. You can find them at most electronics stores where HD cameras and TVs are sold.

TURN OFF THE SOUND

In Chapter 2, I told you how to turn off the audio option while recording your video. The truth is that the mono microphone does not produce audio that is up to the quality of the video. To make your videos stand out, try turning it off and then add a music soundtrack. You will be amazed at how the right music can really enhance a video. Of course, you will need to do this on your computer, which will require special video editing software, which leads us to our next section.

WATCHING AND EDITING YOUR VIDEO

WATCHING VIDEO

There are a couple of different ways for you to watch your videos. Actually there are three: in your camera, on your TV, and on your computer. To watch your video clips on your camera, simply press the Playback button and press the OK button to activate the play command. Pretty simple.

To watch on your TV, you can use the mini-HDMI cable discussed above and connect to your HDMI compatible TV. You'll need to tune your TV to the channel used for HDMI input and then just play the video just as you would if you were watching it in-camera.

If you don't have an HDMI cable or compatible TV, you can use the standard A/V cable that came with your camera. It plugs into the AV port on the side of your camera and then plug the yellow and white RCA plugs into the color-coded RCA A/V input jacks on your TV. There will only be one audio cable (white) to plug in, since the D5000 records mono, not stereo, sound.

If you would like to watch your video on your computer, you will first need to either download the files or access them using an SD card reader. For Apple owners, you

can use Apple's QuickTime Player to watch the video. If it is too large for your screen try pressing the Command-0 to make the video half-size, or Command-3 to fit the video to your screen. For Microsoft Windows users, you can open the videos using your Windows Media Player. This should be the default player for AVI files on your computer so you should be able to just double-click on the file and have it open in the Media Player. Resize the video by pressing Alt-1 for a 50% view.

EDITING VIDEO

If you are a Mac owner, you can edit your HD video using the iMovie '08 application. Windows XP users will have to purchase an editing program for editing HD video since the Windows Movie Maker application doesn't do a very good job in handling HD video resolutions. There are many different applications for Windows editing, such as Adobe's Premiere Elements 7 video editing software. You can find more information and download a trial version at <http://www.adobe.com/products/premiereel>.

CREATING A TIME-LAPSE VIDEO

CAPTURE

Time-lapse video is actually not video in the way that most people think of video. It is a series of still photographs taken over a period of time and then processed into a movie. The result is a video that shows time appearing to be moving at a much faster rate than normal. You can do some amazing things with time-lapse video, like record a sunset or maybe a flower blooming and then compress it all into a few seconds. It requires some patience and a little thought to get a great effect. First, you need to select your subject. It should be something that will change over a period of time. Next, you will need to figure out just how long you want to capture the event. Something like a sunset could take about 30 minutes to an hour, but capturing a flower growing and then blossoming could take days. You need to have this figured out ahead of time so that you can determine just how often the camera needs to take each picture. The final ingredient for a successful time-lapse is a steady tripod. Since you will be recording a scene for minutes or even hours, it's important for the camera to remain completely stationary.

If you have figured out what you want to shoot in time-lapse fashion, you can then move on to setting up your camera to begin the capture process.

SETTING UP FOR A TIME-LAPSE VIDEO

1. First, you will need to select a mode for your shooting. I prefer to let the camera do most of the work by selecting the Program mode.
2. Next, focus on something in your image and then set the camera to manual focus. This is important because if you don't use manual focusing, your camera will try and re-focus before every shot.
3. Now press the Menu button and navigate to the Shooting menu and select Interval timer shooting and press OK (A).
4. From here, you will need to set up all of the parameters for your time-lapse capture. If you want to begin shooting right away, highlight the Now item and press OK (B). If you want your time-lapse to begin at a specific time, just select the Start Time option and press OK to set the time (you need to have the correct date/time set up in your camera).
5. The next screen will let you set up how often you want the camera to take a photograph. The first option is for hours. Use the up/down cursor on your Multi-selector to set the appropriate intervals. Press the selector to the right to move to the minutes and seconds section. Once you have set the interval, press OK (C).



A

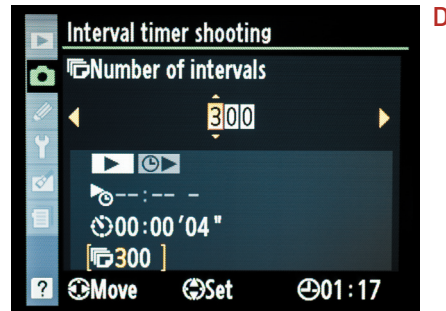


B



C

6. The next step is to select the number of total shots that you want captured. The camera is capable of shooting up to 999 images but you will need to know just how many you think you need for your project. Use the Multi-selector to set the total number of intervals (pictures) and press OK (D). (Note: If you are going to be using the camera to create the video as described in the next section, you will only be able to use a total of 100 images.)
7. Once the intervals have been set, you will be returned to the start screen. To begin shooting, just make sure that the On option is highlighted and then press the OK button (E). Your camera will begin taking photos about three seconds later.



Here are a few other things to consider when shooting a time-lapse interval sequence. Depending on how long your interval session will last, you will want to consider the camera power. If you are shooting a fairly short session—say, 30 minutes to an hour—you can probably get away with using the camera's battery but it should be fully charged before you begin. If, however, you intend to shoot over several hours/days, you will probably want to invest in an EH-5a AC adapter along with the EP-5 power connector. This will let you run your camera from household current instead of the battery. If you are running on battery power, you can conserve power by turning the rear LCD screen to its closed position so that the screen is facing inwards towards the camera. This will prevent it from turning on to display each shot, which can eat battery power.

If at any time you want to stop the interval shooting session you can simply turn off the camera power or turn the mode dial to a different setting.

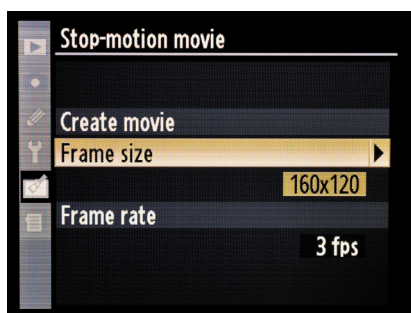
CREATING THE VIDEO

Now that you have captured your sequence of images, let's look at how you can use the Retouch menu to turn them into a time-lapse video.

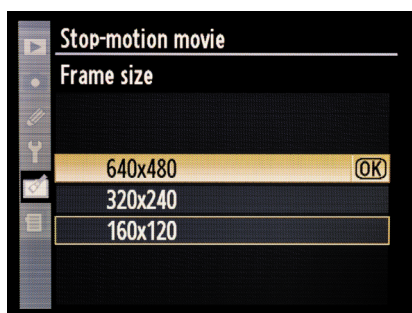
1. First, press the Menu button and navigate to the Stop-motion movie item and press the OK button (A).
2. Use the Multi-selector to highlight the Frame size option and then press the Multi-selector to the right (B).
3. Select the desired resolution (I prefer 640x480) and press OK to return to the previous screen (C).



A

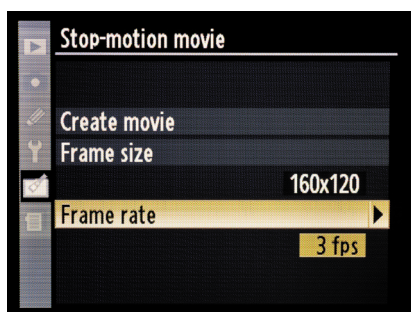


B

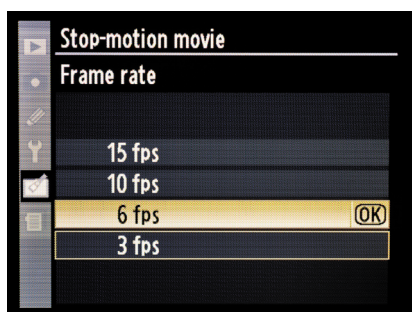


C

4. Now move down to Frame rate (D) and select the number of frames you want to use per second (E). This option will determine how fast the time moves in your video so you might want to change this but start with 6 fps to start with. You can change it later if it doesn't give the result you want. To change the frame rate simply press right on the Multi-selector, pick the desired frame rate, and press the OK button.

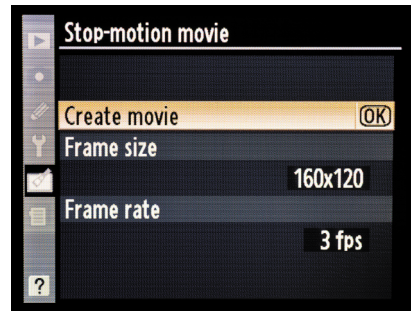


D



E

5. Now highlight the Create movie option and press the OK button (F).
6. The next screen lets you select the images that will be used to create the video. Use the Multi-selector to navigate to the beginning frame and press OK (G), and then scroll to the right to locate the End frame and press OK once more. When you are done, just highlight the Save option and press the OK button.
7. Before you complete the Save operation, be sure to use the Preview option to see how your final video will look. If you don't like the playback speed, just highlight the Frame rate option and select a new one. You can choose between 3, 6, 10, and 15 frames per second. Use Preview to see the result for each setting, and then press Save again to finish the video.



F



G

Once you are done, you can watch the video using one of the methods discussed earlier in the chapter.

If you would like to see an example of a time-lapse video I made of the Seattle skyline, check out this link: <http://www.youtube.com/watch?v=AEh7X-jbg4M>