

11



ISO 100
1/160 sec.
f/8
200mm lens



Pimp My Ride

UPGRADES AND ACCESSORIES TO EXPAND YOUR CAMERA'S CREATIVE POTENTIAL

If you bought your camera with a lens, then you basically have everything you need to begin shooting with your D5100. I took great care to ensure that almost all of the techniques in this book can be utilized with your basic camera setup. That being said, there are some accessories that are essential for certain types of photography. Other accessories aren't necessarily essential, but they will improve the look of your images.

Let's take a look at some items that I believe are must-have accessories for your photography.

FILTERS

You should have several filters in your camera bag. Each one serves a unique purpose. Some say that digital-imaging programs such as Adobe Photoshop can duplicate the effects that filters offer. This may be true for some effects, but some filters affect exposure time (like a neutral density filter for that silky waterfall look) and are nearly impossible to realistically re-create in Photoshop.

POLARIZING

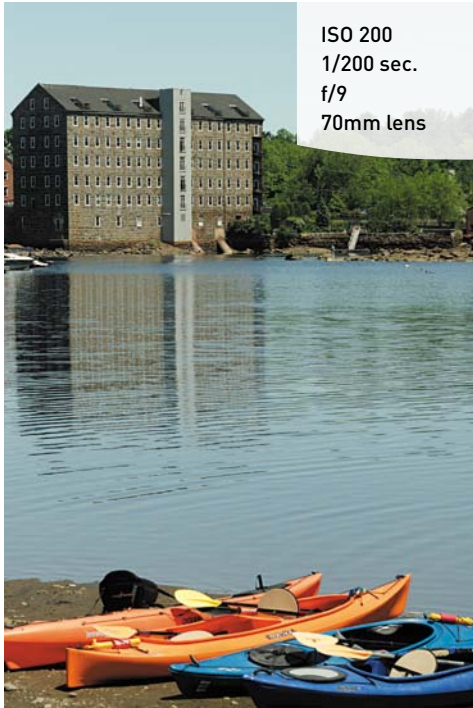
This one ranks right up there at the top of the list of must-own photography accessories. You won't find a self-respecting landscape photographer who doesn't have at least one polarizer in his or her camera bag (**Figure 11.1**).

Light travels in straight lines, but the problem is that all those lines are moving in different directions. When they enter the camera lens, they are scattering about, creating colorcasts and other effects. The polarizer controls how light waves are allowed to enter the camera, letting only certain ones pass through. So what does that mean for you? Polarizing filters will make blue skies appear darker, vegetation color will be more accurate, colors will look more saturated, haze will be reduced, and images can look sharper (**Figures 11.2 and 11.3**). Not bad for a little piece of glass.

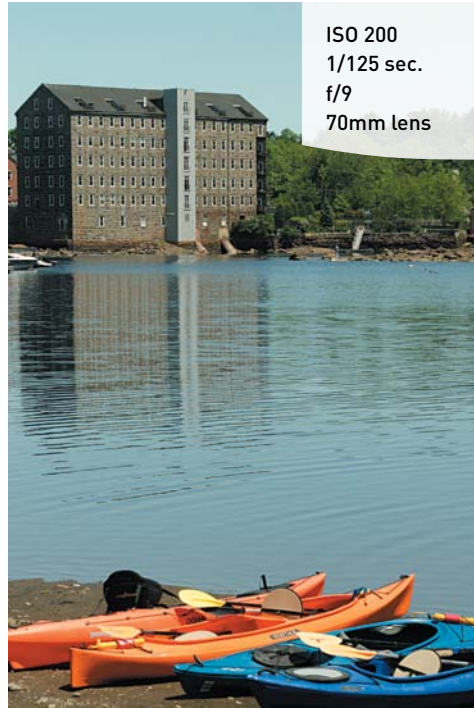
Most polarizers are circular and allow you to rotate the polarizing element to control the amount of polarization that you want. As the filter is rotated, different light waves will be allowed to pass through, such as a reflection on a body of water (**Figure 11.4**). Turn the filter a little and the light waves from the reflection are blocked, making the reflection disappear (**Figure 11.5**). Another benefit of the filter is that it is fairly dark, so when used in bright lighting conditions, it can act as a neutral density filter (you'll learn more in the next section), allowing you to use larger apertures or slower shutter speeds. The average polarizing filter requires an increase in exposure of about one-and-a-half stops. This won't be an issue for you because you will be using the camera meter, which is already looking through the filter to calculate exposure settings. You should consider it, though, if your intention is to shoot with a fast shutter speed or use a small aperture for increased depth of field.



FIGURE 11.1
A Tiffen circular polarizing filter.



ISO 200
1/200 sec.
f/9
70mm lens



ISO 200
1/125 sec.
f/9
70mm lens

FIGURE 11.2
(left) Without using the polarizing filter, the scene looks a little low on contrast and has a blue colorcast from the sky.

FIGURE 11.3
(right) After adding a polarizer, the colors are much more accurate, the blue sky is darker, and the colorcast is now gone.



ISO 200
1/320 sec.
f/9
200mm lens



ISO 200
1/250 sec.
f/9
200mm lens

FIGURE 11.4
(left) Before adding a polarizer, the sky and kayaks are strongly reflected in the water.

FIGURE 11.5
(right) After adding a polarizer, you can see through the surface of the water.

NEUTRAL DENSITY (ND)

Sometimes there is just too much light falling on your scene to use the camera settings that you want. Most often this is the case when you want to use a slow shutter speed but your lens is already stopped down to its smallest aperture, leaving you with a shutter speed that's faster than you want.

A classic example of this is shooting a waterfall in bright sunlight. To get a silky look to the water, the shutter speed needs to be about 1/15 of a second or slower. The problem is that a proper exposure for bright sunlight is f/16 at 1/100 of a second with the camera set to ISO 100 (this comes from the Sunny 16 rule). If my lens has a minimum aperture of f/22, the slowest shutter speed I will be able to use is 1/50 of a second.

The way around this problem is to use a neutral density (ND) filter to make the outside world appear to be a little darker. Think of it as sunglasses for your camera. ND filters come in different strengths, which are labeled as .3, .6, and .9. They represent a one-stop difference in exposure for each .3 increment. If you need to turn daylight into dark, the .9 ND filter will give you an extra three stops of exposure (**Figure 11.6**). This means that, in my earlier example, I could get an exposure of f/16 at about 1/10 of a second. This would be an ideal exposure for capturing a shot of silky-smooth water (**Figure 11.7**).

To see more B+W filters, check out www.schneideroptics.com.



FIGURE 11.6
A B+W 77mm .9 ND filter.

GRADUATED ND

Another favorite of the landscape photographer, the graduated ND filter has the benefits of the standard ND filter but graduates to a clear portion (**Figure 11.8**). This allows you to darken just the upper or lower part of your scene while leaving the other part unaffected. This filter is most commonly used to darken skies that are too bright without affecting the ground area. If a regular ND is used, the entire area will get darker and there will be no visible change in the brightness ratio between the sky and the ground.

You can purchase the graduated ND as a screw-on filter, but most photographers prefer to use the larger 4x6 version, which allows them to control exactly where the filter transitions from dark to transparent. There are many options in graduated ND filters, such as the density factor (number of stops) and how gradual the transition is from dark to clear.



FIGURE 11.7
Using a .9 ND filter allowed me to use a long shutter speed in daylight and transform the waves into mist.



FIGURE 11.8
Graduated filters come in different strengths and transitions, from soft to hard, and allow you to expose for the darker areas (ground) without blowing out the brighter regions (sky).

TRIPODS

If you buy only one accessory for your photography, do yourself a favor and make it a tripod. In general, any tripod is going to be better than no tripod at all. A tripod makes your photos sharper and lets you shoot in any lighting condition. There are more choices in tripods than there are in dSLRs, so how do you go about choosing the right one for you? The main considerations are weight, height, and head.

The weight of your tripod will probably determine whether or not you will actually carry it along with you farther than the parking lot. Many different types of materials are used in tripods today. The lightest is carbon fiber, which is probably the most expensive as well. More than likely, you should consider an aluminum tripod that is sturdy and has a weight rating that is suitable for your camera as well as your lenses.

Make sure that the tripod extends to a height that is tall enough to allow you to shoot from a comfortable standing position. Nothing ruins a good shoot like a sore back. Taller tripods need to be sturdier to maintain a rigid base for your camera. You will also want to consider how low the tripod can go. If you want to do macro work of low-level subjects such as flowers, you will need to lower the tripod fairly close to the ground. Many new tripods have leg supports that allow you to spread the legs very wide and get the camera low to the ground.

The other determining factor when purchasing a tripod is the type of head that it employs to secure the camera to the legs. There are two basic types of tripod heads: ball and pan. Ball heads use a simple ball joint that allows you to freely position the camera in any upright position and then clamp it down securely. This type of head is flexible and quick to use, but it can sometimes be difficult to switch between portrait and landscape orientations. They tend to be slightly more expensive as well.

Pan heads employ a swivel and usually two hinged joints that allow the camera to pan left and right, move up and down, and adjust the position along the horizontal axis. Handles are typically employed to allow movement of the camera and lock down the position. The pan head is by and large the most popular tripod head style on the market. If you plan on shooting a lot of video with your D5100, you might want to consider the pan head style since it will deliver more functionality for your videography, specifically in panning from side to side.

If you really want to make your tripod shooting move faster, consider buying a tripod that utilizes a quick-release head. There are many styles of quick-release brackets; most use a small plate that screws into the bottom of the camera and then quickly locks into and releases from the tripod head.

The other thing to consider when purchasing a tripod is the leg locking system. Whether it is a lever lock, locking rings, or some other system, make sure that you test it thoroughly to see how easy it is to lock and unlock the leg positions. Also check to see how smoothly the legs retract and extend. Avoid legs that stick because they will probably only get stickier over time.

There are many different brands of tripod to choose from, but I suggest sticking to Gitzo (www.gitzo.com), Giotto's (www.giottos.com), Manfrotto (www.manfrotto.com), and Really Right Stuff (www.reallyrightstuff.com) for rock-solid tripods and tripod accessories.

REMOTE OR CABLE RELEASE

When shooting long exposures, you can use the self-timer to activate the camera or you can get yourself a wireless remote or a cable release. The wireless ML-L3 (Figure 11.9) uses an infrared beam (just like your TV remote) to fire the shutter from a distance of up to around 16 feet. The MC-DC2 remote release cord, which is an electronic release, attaches to the camera via the remote port and lets you trip the shutter. A remote release is the preferred tool of choice when shooting with the camera set to Bulb (see Chapter 10). The idea of the release is that it allows shutter activation without having to place your hands on the camera. This is the best way to ensure that your images will not be influenced by self-induced camera shake. The ML-L3 sells for around \$20 and the MC-DC2 sells for around \$35, and both will work not only with the D5100 but with several other Nikon dSLR models on the market. A remote also comes in handy for shooting macro work, where the tiniest vibration can affect the sharpness of your image.



FIGURE 11.9
The Nikon ML-L3 wireless remote lets you activate the shutter without touching the camera.

MACRO PHOTOGRAPHY ACCESSORIES

EXTENSION TUBES

Extension tubes are like spacers between your lens and your camera. The tubes are typically hollow, and their sole purpose is to move the rear of the lens farther away from the camera body.

A lens can get only so close to a subject and still be able to achieve a sharp focus. This is because as the subject gets closer, the focal point for the lens moves back to a point where it is behind the image sensor. Using an extension tube lets you move that focal point forward by placing the rear of the lens a little farther away from the camera sensor, thus letting you get the lens closer to the subject and enlarging it in your picture.

The tubes come in varying sizes, which are typically measured in millimeters. The more common sizes are 12mm, 20mm, and 36mm. The longer the tube, the greater the magnification factor (up to 1:1). The tubes are best used with lenses that are 35mm in focal length and longer. A wide-angle lens will have such a short focusing distance that you will be right on top of your subject. Nikon manufactures several extension tubes, or you can buy them from third-party manufacturers. Prices vary, but you will pay more for tubes that utilize optics in their design. You can also purchase sets of tubes with varying lengths that can be used individually or stacked together for greater magnification.

CLOSE-UP FILTERS

Another great way to jump into macro work is by purchasing a close-up filter (**Figures 11.10** and **11.11**). Close-up filters also come in varying magnifications but tend to be a little more expensive than extension tubes. This is because they are usually made of high-quality glass that works in concert with the lens. The filters and lenses can have some advantages over tubes, too. Because they screw onto the front of your lens, they don't interfere with any of the communication functions between the lens and the camera body. They also result in less loss of light, so exposures can be slightly shorter than when you're using extension tubes. They do, however, work similarly to tubes in that they allow you to shorten the minimum focus distance of your lens so that you can move closer to your subject, thereby increasing the size of the subject on your sensor. Close-up lenses usually come in magnification factors like +1, +2, +3, +4, and +5. They can also be stacked, strongest to weakest, to increase the magnification factor.



FIGURE 11.10
The Canon 500 D close-up filter.



FIGURE 11.11
The Canon 500 D close-up filter on the Nikon 60mm 2.8 lens was used to help capture this dime.

The other difference is that they are usually screw-threaded onto your lens, which means that you have to purchase a specific thread diameter. So if your favorite lens has a 68mm filter thread, that is the size you would use for the close-up filter. The big downside is that if you want to use different lenses that have different thread sizes, you will have to buy multiple filters. One solution is to work with a zoom lens so that you can have a range of focal lengths to use with just one filter. Also, just as with most glass filters, the larger the diameter, the higher the price. Another solution to this problem is to use a step-up ring, which allows you to thread a large filter to a smaller lens (check out www.stepupring.com for more information on step-up and step-down rings). I purchase all my filters at 77mm and then use step-up rings to attach them to smaller-diameter lenses.

HOT-SHOE FLASHES

Earlier in the book I covered the built-in flash and what you can accomplish with it. Now that we have covered that, let me say that you really, really need to get yourself a hot-shoe mounted flash if you want to take better flash images (**Figure 11.12**). For one thing, the external flash is going to be much more powerful than the pop-up version. Also, there is much more flexibility built into the Speedlite system of flashes than you could ever hope to get from the built-in version.

Nikon currently has several Speedlight flashes for sale, but my recommendation is that you purchase the SB-600 or, better still, the SB-900 Speedlight. They will run somewhere in the neighborhood of \$300 for the SB-600 and \$500 for the SB-900, which can be a pretty hard pill to swallow at first. The pill will go down much easier once you have used one of these powerful and flexible flashes. Not only will your on-camera flash photography be much better, but you also gain the option of moving to a wireless, off-camera flash system down the road. This is one of the reasons that the SB-900 is so much more expensive—it can be used as a commander unit to wirelessly control other Speedlights in the Nikon Creative Lighting System.



FIGURE 11.12
The Nikon SB-900 Speedlight.

DIFFUSERS

While I am covering flashes, let's discuss a tool that lets you improve the light you are using in your portrait photography. A diffusion panel is a piece of semitransparent material, usually white, that you place between your light source and your subject. The fabric does as the name implies: It diffuses the light, spreading it out into a soft, low-contrast light source that makes any subject look better. You could make your own or buy one of the many commercially available versions. I like the Lastolite TriGrip diffuser (www.lastolite.com) because it folds up small and fits in my Think Tank bag. Another option to check out is the 5-in-1 reflector kit made by Westcott (www.fjwestcott.com). It not only has a very nice diffusion panel, but it also has

reflective covers that slip over the diffusion panel so that you can bounce some fill light into your scene. Best of all, the entire system is collapsible, so it fits into a pretty small package for traveling.

CAMERA BAGS

This topic is tricky because there is no one-size-fits all answer. How much gear you want to carry, how big you are, and your own style will all influence your bag purchasing decision.

For me, I like to travel with my photo gear. Typically, my travel involves flying. This means that all of my camera equipment will be traveling in the cabin with me, not in the luggage compartment. I can't emphasize this enough: *Do not pack your camera in your checked luggage!* Thousands of cameras, lenses, and accessories are lost and stolen from checked luggage every year. The best way to ensure that doesn't happen to you is to bring your equipment on board and place it in the overhead storage. I like to bring my laptop as well, so I have found a couple of backpack camera storage systems that allow me to fit a camera body, several lenses, some accessories, my laptop, and even some snacks into one backpack-style bag that still fits under the seat in front of me or in the overhead bin. I also prefer a backpack because I like the freedom of slinging the bag over my shoulder, leaving my hands free for other luggage. I am currently using a Think Tank Photo Airport Acceleration bag (www.thinktankphoto.com) for all of my travel needs.

The other bag that you should look into is a more traditional, shoulder-style bag. These bags are made to handle all sorts of camera bodies, lenses, and accessories, and they're usually completely configurable with moveable padded partitions so that you can completely customize the bag for your own needs. My current bag of choice is a Boda lens bag (www.goboda.com). This small-looking bag easily holds a single camera body, two or three lenses, my iPad, extra batteries, multiple memory cards, and plenty more.

These two bags are the ones that I am using currently, but finding the perfect camera bag is truly the Holy Grail for photographers. The fact is that you can go through a lot of them searching for one that perfectly fits your every need and never find it. I have several bags presently taking up residence in my closet.

Another company that makes great bags is Lowepro. You can check out the full line of Lowepro camera gear at www.lowepro.com.

BITS AND PIECES

Since I just covered camera bags, let me share with you a couple of items that always travel in my bag.

The battle against dust is always a losing one, but that doesn't mean that you can't have your small victories. To help in the war against the dust speck, I carry three weapons of cleanliness.

THE LENS CLOTH

A good microfiber lens-cleaning cloth always comes in handy for getting rid of those little smudges and dust bunnies that seem to gravitate toward the front of my lens. There are lots of different brand names, and any one will work. I use one called a Spudz, which folds into its own pouch and has the added benefit of being gray. This means that I can use it as a gray card to get meter readings in Spot metering mode, or as a way to correct the white balance in my images down the road when I bring them into my imaging software. Have a few of these on hand.

More information on Spudz cleaning cloths can be found at www.alpineproducts.com.

THE LENS PEN

For really stubborn smudges on my lens, I pull out my trusty LensPen (**Figure 11.13**). This nifty little device has a soft, retractable dust removal brush on one end and an amazing cleaning element on the other that uses carbon to clean and polish the lens element.

More information on LensPen products can be found at www.lenspen.com.



FIGURE 11.13

The LensPen lens cleaning tool.

AIR BLOWERS

Some folks prefer to use canned compressed air to blow away dust, but the cans can sometimes release fluid when they are tilted. For this reason, I always use my Rocket-Air blower from Giotto's (www.giottos.com) (**Figure 11.14**). This funny-looking device is great for getting rid of tough dust, and it uses a clean air path so that the dust that you are blowing away doesn't get sucked back into the ball and redeposited on your equipment the next time you use it.



FIGURE 11.14

The Giotto's Rocket-Air dust blower.

12



ISO 100
1/2000 sec.
f/2.8
200mm lens



D5100 Video: Beyond the Basics

GETTING PROFESSIONAL-LOOKING VIDEO FROM YOUR D5100

Back in Chapter 2, I took you through some of the basics for setting up and using the video recording functions of the D5100. In this bonus chapter, we will take a look at some of the creative things you can do with your video. 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 shallower 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 D5100 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 effects. 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 D5100 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, the AF Micro NIKKOR 60mm f/2.8D for getting extreme close-up videos, or even a Lensbaby (www.lensbaby.com) for creating movies with only small selective areas of the image in focus (**Figure 12.1**). The Lensbaby has to be used in Manual mode and is all manual focus, but the results are really different than those of a normal lens (and kinda fun). Here's a video clip to illustrate what I mean:

D5100 and a Lensbaby Composer video clip: <http://vimeo.com/24702712>



FIGURE 12.1

Using specialty lenses such as this Lensbaby will add a different perspective to your video.

Before you start buying new lenses, which can require quite an outlay of cash, I highly recommend that you check out a lens rental service like Borrow Lenses (www.borrowlenses.com) or LensPro ToGo (www.lensprotogo.com). This way you can try out a really nice expensive lens for a few days or a few weeks and see if it is really something you want to add to your gear bag. I've done this several times and find the process and the cost to be very reasonable.

USING FILTERS

CLOSE-UP

If you read the other bonus chapter (Chapter 11) you might recall the section on close-up accessories such as the 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 to your photographs. By utilizing this filter you can eliminate the bluish colorcast 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 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, later in this chapter). 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 Singh-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 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, in that it usually has one long handle for controlled panning. To really make things smooth, the head uses a system of small fluid cartridges within the panning mechanisms so that your panning movements are nice and smooth. For \$75–\$85, you can get a nice fluid pan head that will mount on your existing tripod legs (if your existing tripod has a removable head).

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

GETTING SHALLOW DEPTH OF FIELD

As I said earlier, getting the look of a production cinema camera means working with shallow depth of field. 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 autoexposure mode to establish the correct camera settings for recording video. To get the benefit of a large aperture, you are going to need to start in Manual or Aperture Priority mode and set your aperture before switching to Live View. To illustrate what I am talking about, I uploaded two video clips for comparison. One clip was shot with the aperture set to $f/3.2$ (**Figure 12.2**), and in the other all I did was change the aperture to $f/22$ (**Figure 12.3**):

- Video clip at $f/3.2$: <http://vimeo.com/24819482>
- Video clip at $f/22$: <http://vimeo.com/24819658>

Can you see the difference in the depth of field in the two clips? Deciding what is in focus is a very powerful cinematic technique, and controlling the depth of field is a great way to home right in on the most important part of the scene.



FIGURE 12.2
Frame of video shot at $f/3.2$
showing narrow
depth of field.



FIGURE 12.3
Frame of video shot
at $f/22$ showing
wider depth of field.

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.

USING EFFECTS MODES

As discussed in Chapter 3, the effects modes can also be used when capturing video. You'll be hard-pressed to find an easier way to make your videos look different than shooting with the Miniature Effect mode, which not only makes things appear smaller, but also speeds up the timeline when recording video. The Color Sketch effect not only affects the color of the video, but also gives it a sort of stop-motion animation effect as well. Try shooting some video using each effect to see the different results:

- Miniature Effect video clip: <http://vimeo.com/24798674>
- Color Sketch video clip: <http://vimeo.com/24798174>

WHITE BALANCE

Another great way to change the look and feel of your video is to select a white balance that doesn't match your scene. 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

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 see an actual 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 at first, especially if you have never had to manually focus in the past, but with a little practice you can become fairly adept at the process. One benefit of using manual focus is that, depending on the lens you are using, you will avoid the noise of the autofocus motor, which can be picked up by the mic if you are recording audio. More importantly, it puts you in the driver's seat for controlling what is in focus, which leads the viewer's eye to what you want to show. While in Live View, you can enable AF-F (not all of the effects modes support AF-F), which will try to continually keep the subject in focus even when recording video, but it may be too slow for your needs or it may try to focus on something other than what you have in mind. Brushing up your manual focus skills is only going to serve you well down the road. Set the camera lens to manual focus and then use the focus ring on the front of the lens.

PUT YOUR CAMERA IN A DIFFERENT PLACE

It's very possible that the one feature that really compelled you to buy the D5100 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

While recording video, your camera uses something called a rolling shutter, which, as the name implies, rolls from the top to the 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, 25, or 30 frames per second (depending on your settings). 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 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 HDTV 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 that sell HD cameras and TVs.

GET AN EXTERNAL MICROPHONE

If you want or need to record sound with your videos, I highly recommend you look into getting an external mic that you can plug into the mic jack on the side of the D5100. Nikon released the ME-1 mic when the D5100 came out, and it is a nice step up from the built-in mic if for no other reason than that it records in stereo. You can watch and listen to a thorough review of the ME-1 along with some comparisons to other external mic choices here: <http://bit.ly/d5100Mic>.

TURN OFF THE SOUND

If a mic upgrade is not in your near future, then you might consider going silent. 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 adding 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 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. Plug it 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 D5100 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 Command-0 (zero) 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 the Windows Media Player. This should be the default player for video files on your computer, so you should be able to just double-click the file to open it in the Media Player. Resize the video by pressing Alt-1 for a 50% view. You can also download and install the free QuickTime Player on Windows (www.apple.com/quicktime).

EDITING VIDEO ON YOUR CAMERA

The D5100 has a very simple editing feature built into the camera's software that can be used for trimming the beginning or ending of a clip, but it is a bit slow to use and drains your battery faster. To really edit your clips, I suggest copying the clips to your computer and using dedicated video editing software, which will give you greater control and a much more user-friendly workspace.

EDITING VIDEO ON YOUR COMPUTER

If you are a Mac owner, you can edit your videos using iMovie '11. Windows 7 and Vista users can start with Windows Live Movie Maker, since it should come with your computer and is fine for basic editing. Whichever operating system you use, I also recommend checking out Adobe Premiere Elements 9 (or higher). You can find more information and download a trial version at www.adobe.com/products/premiereel.

TAKING IT TO THE NEXT LEVEL

These tips are intended to get you started with shooting video, but if you really want to take your video production to the next level, I highly recommend *From Still to Motion: A photographer's guide to creating video with your DSLR* (New Riders). You won't find a better resource dedicated to the topic of shooting video with your dSLR.