Software Review: AKVIS Noise Buster

By Mark Mattson, Computer Users of Erie

Over the past few years, I've done the occasional review on one or the other of the AKVIS plug-ins for

Photoshop. Those previous reviews have been on creative effects plugins, ones that allow you to manipulate your image to enhance its visual appeal.

This time around, however, I'm taking a look at an important one that every serious digital photographer should have in their arsenal: Noise Buster.

For the most part, digital imaging is fairly foolproof. It's easier to obtain a good image the first time with a digital camera than it was in the film days. But, there are also times when things don't always go right, and you need some help in cleaning up your shots.

Noise appears in digital photos for many reasons, but it is most apparent in those images that are shot using a high ISO setting (anywhere from around 400 on up to 1600 and above), and especially in low-light scenes. It can appear as many things, but mostly as colored pixels or areas that are not consistent with the surrounding color. This is similar to the effects seen in film based images (particularly transparencies), where you had dye clouds of random colors showing up in a smooth tone area such as a sky). While this noise may not be a problem for those of you producing snapshots for family members or for your personal photo albums, it is a factor if you are a working professional producing fine-art images for sale.

The noise in your images comes mainly from your image sensor. There can be some processing noise introduced internally in the camera's processing circuitry, but the vast majority of it comes from your image pickup. As your exposure times increase, especially for low-light scenes, the sensor heats up. As it heats, it causes noise to appear due to the differences in sensitivity of the various CCD cells that make up the sensor. These variations in output from the CCD cells can make the camera's circuitry think it is seeing a different color than what it actually is, thus giving you a different color pixel at that point.

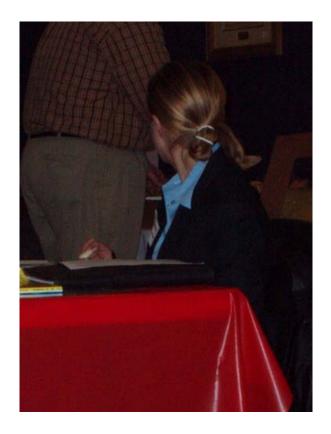
A different way to think of it as would be to imagine you have a radio set to a blank spot between sta-

tions, where all you hear is the static. The static represents a monochromatic (single color) image. If you would heat up the internal circuitry of the radio beyond normal operating temperatures (even by only a few degrees), you would start to hear a shift in the sound of the static. This shift represents the noise your camera sensor is giving off, and would be seen visually as a shift in the color of your image.

Noise Buster (and products similar to it) have been developed to help you reduce or eliminate these noise artifacts from your photos. They ex-

amine your files and, using a complex mathematical formula, determines when an area in a photo needs to be color corrected.

Here is an example of a photo showing noise:



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I realize it may not be too evident, especially in the hardcopy form of the newsletter, but here is an area zoomed in to show it better:



Notice the colored grain effect in the pant leg on the left of the image.

Noise Buster, like many of the other AKVIS products, comes as a plug-in as well as a standalone version. You can run it either way, depending on what else you need to do with your image. For this example, I used the stand-alone version.

Launching the app, I opened the photo into it, and checked out the preview window:

If you can see it, the area inside the boundary box is showing a much smoother, even color distribution, showing that the noise is being eliminated. If the noise reduction is not where you need it to be, you can adjust the sliders to the right of the preview window to adjust the degree of cleaning.

When launched, the plug-in starts with Auto settings in effect. The software makes a

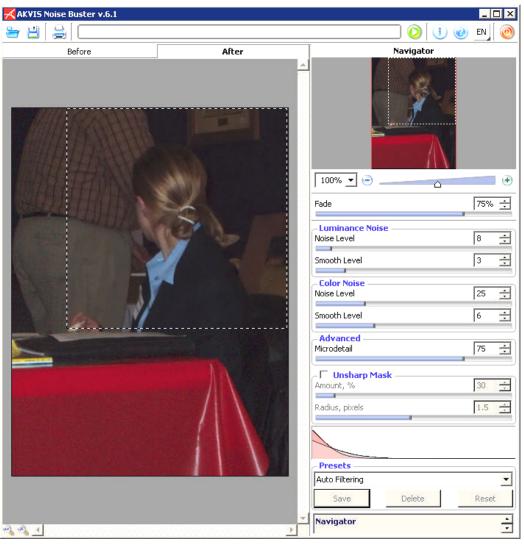
judgment at the settings needed to eliminate the noise present. Most of the time, the settings produce a high degree of improvement. For those times when you have a more difficult image, you CAN manually adjust the controls to increase the noise cleaning effect, until the artifacts are cleaned up. Once you have the noise eliminated in the preview window, you apply the settings to the image file, rendering it completely free of noise artifacts.

Installation and System Requirements

Installation is straight-forward, similar to most every other modern application. You launch the installer, it asks several standard questions, and the software is installed, ready for use.

System requirements are not highly demanding. If your machine will handle most any modern image editor, such as Photoshop or Paint Shop Photo, it will run the AKVIS software.

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There are versions available for both Mac and PC platforms, both versions of which supply the plug-in as well as the standalone versions in the same distribution archive.

The following system requirements are direct from the vendor website:

Operating system:

Windows 2000/XP/Vista/Win 7 Mac OS X 10.4-10.6

PC Platform

Minimal system--

Pentium III, 1 Gb RAM, 100 Mb HDD; screen resolution 1024x768; video card Direct X8 compatible, 32 Mb, color depth 32 bits

Recommended--

Core Duo, 2 Gb RAM, 2 Gb HDD; screen resolution 1280x1024; video card Direct X8 compatible, 128 Mb, color depth 32 bits

Mac Platform

Minimal system--

Intel/G4, 1 Gb RAM, 100 Mb HDD; screen resolution 1024x768

Recommended--

Intel/G5, 2Gb RAM, 2 Gb HDD; screen resolution 1280x1024

Pricing and Availability

Noise Buster v6.1 is available for immediate download from the AKVIS website, at http://akvis.com (NOTE: do NOT put www in front of the domain name).

For home users, the software is available as either a plug-in or a standalone version, priced at \$49 per version.

If you wish to have BOTH the plug-in as well as the standalone version together, it will run you \$55.

For business use, the software will run you \$89 to license. License keys are emailed to you upon purchase. Until you receive your key, the software is fully functional for 10 days, giving you time to use it while waiting for your key.

Naturally, if you'd like to try before you buy, the 10 day free trial gives you a chance to test it on your own images to see how it works.

Final Thoughts

Film grain in the analog days of photography was a way of life. Many times an image would have the grain enhanced to bring out a certain mood in the viewer. It was easier to do in black and white prints than color, but it was possible in both mediums.

Digital grain, or noise, is inherent in most all digital cameras., particularly the low-end point and shoots...although DSLRs can exhibit it as well, particularly in low-light high ISO situations.

As I mentioned earlier, if you are producing snapshots in a small size (4x6, 5x7), you might not have to worry about noise, especially if the prints are for an album, or even to email to someone. But, if you are a professional photographer, making your living out of your craft, you need to seriously pursue noise reduction/elimination in your prints.

There are other solutions for noise reduction on the market, some costing hundreds of dollars to license. If you're just getting started, and working on a tight budget, this plug-in from AKVIS might be what you need to get you through until you can upgrade to a heftier product. But for the price, it does an amazing job on images...who knows, you may not ever need a different product than this one.

The only way to find out is to try it and see for yourself. You'll be glad you did.

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