



## KPT 2.0 Sample Filters

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Instructions: Click on the red buttons to view more information.


 Installation: KPT 2.0 Sample Filters

 Diffuse More

 3-D Stereo Noise

 Pixel Wind

 Sharpen Intensity

 Find Edges Soft

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## Installation: KPT 2.0 Sample Filters

**KPT is not a standalone application, it is a plug-in filter. It will not run by itself! You must run it from within a plug-in 'host' application such as Adobe Photoshop, Fractal Design Painter, Corel Photo-Paint or Picture Publisher.**

Included with this product are sample versions of the following one-step filters: 3D Stereo Noise, Diffuse More, Find Edges Soft, Pixel Wind, and Sharpen Intensity.

To use these filters, all the following files must be copied to your host application's plug-in FILTERS directory:

DIFFUSEM.8BF  
NOISE3D.8BF  
PIXELWND.8BF  
SHARPEN.8BF  
SOFTEDGE.8BF

NOTE: Each host program has its own method of specifying the FILTERS directory. For more information on selecting or finding the correct directory, refer to the documentation provided with each program.

## Diffuse More

This is an example of an improvement to an already useful standard Photoshop tool. Photoshop's Diffuse shuffles the pixels in a small cell area of less than 25 pixels. Diffuse More simply gives you a bigger brush, set to about 4 times the cell size. This is not simply saving you three repeats of the normal Diffuse filter. No matter how many times a Diffuse filter is applied, the pixels affected will always be within a 25 x 25 pixel cell size. Diffuse More operates on a much larger set of pixels at once, so the diffusion effect will take place on a broader basis. Number key and keypad controls ranging from "1"(least) to "0"(representing 10, the most ) will vary the intensity of the Diffuse More effect.

## 3-D Stereo Noise

A researcher at Bell Labs discovered an algorithm which creates a special dithered noise where certain points will be seen by both eyes as if they converge on a plane. The result has incredible stereo 3-D depth properties and can be seen without special glasses. The images that produce the best results with the 3-D Stereo Noise filter use gray levels, are blurred slightly, and don't use extreme contrast. The filter generates a pixellated noise pattern that has horizontal frequencies that correspond to the gray levels of the initial image. This means that white maps to the highest frequency and appears closest to the viewer; black maps to the lowest frequency, appearing furthest away.

Create a gray scale image that uses text and simple objects. Although the filter will apply in all modes, the best images use gray levels initially. The smaller and more detailed the image you choose, the harder it will be to focus the stereo image. Applying a standard "Blur" filter will soften the edges of the image for easier viewing. Apply the 3-D Stereo Noise filter to the entire image. The results appear to be a random array of black and white noise.

### Viewing 3-D Stereo Noise pictures

After you have created a stereo noise picture, it is time to focus your eyes and energy on seeing the image. Don't feel bad if you don't see it right away; it may take a few tries. There are several ways to view the image in-depth. Try placing two black dots about a half-inch apart at the bottom of the image. Unfocus your eyes and gaze through the image as if you were looking in the distance. The dots you placed at the bottom will separate into four. If you focus so the middle two dots fuse, depth should pop in or out. Another way is to try crossing your eyes to fuse the four dots into three. You may also try holding a thin object like a floppy disk or your hand between your eyes to separate each eye's vision.

### Controlling Depth in Stereo Images

When you see a 3-D object close-up, the object seems to be in a slightly different place depending on which eye looks at it. Hold your finger about five inches from your computer monitor and look at it with one eye, then the other. Observe how it seems to move left and right with respect to objects on the screen. This discrepancy gives your brain information on how far away the object is. Against the background of your screen, for instance, your finger that is five inches away is displaced about one inch depending on which eye views it.

The amount of depth is modulated by the keypad, using keys "1" through "9." The default setting is "5." Using the "1" key setting is very shallow, whereas "9" is so deep that it can be very difficult to see the effect up close.

### RGB Files

This filter may be applied to individual channels as well as entire documents. For best results, create your image in gray scale mode and then convert to RGB mode. Apply the filter to each channel (Red, Green, Blue) in your document (be sure that you only write to the channel you are working on). When you are done, you have a tri-colored noise image.

## **Pixel Wind**

PixelWind diffuses pixels based on approximately 80 pixels and features an apply mode that diffuses and enhances the image.

The amount of diffusion can be controlled by using keys "0" through "9" on the keyboard or keypad. "1" is assigned as the lowest amount of diffusion and "0" the greatest.

## **Sharpen Intensity**

Sharpen Intensity applied to an image will yield stronger contrast and brighter colors. This is a good tool for brightening up an image. Use it as a first step. For correcting scanned images it will "punch up" the colors. In the best situations, the resulting image will look so much more vivid, that an undo to the previous version will seem as if it had a drab hazy gauze layer over it. Repeated applies of Sharpen Intensity will posterize an image. With extreme repetition you may converge on black and over saturate your image, but used in controlled dosage the filter is extremely effective.

### **Using Sharpen Intensity**

Modulating Sharpen Intensity: The degree of Sharpen Intensity's effect is controlled with the keyboard/keypad where 0 is equal to 100 percent (the most correction) and 1 is equal to 10% (the smallest amount of correction.) The default value, with no numerical key held down, is 50 percent.

## Find Edges Soft

Find Edges Soft is a softer algorithm than the original Photoshop Find Edges, creating an effect that is less harsh and intense. This one will, for instance, not create full rectangles around single bright pixels, but rather smooth edge outlines.

Number key and keypad controls (1 = 10 percent - 0 = 100 percent) will vary the intensity of the Find Edges effect from very light to very intense. Use the CAPS LOCK key to toggle the invert function on and off.

