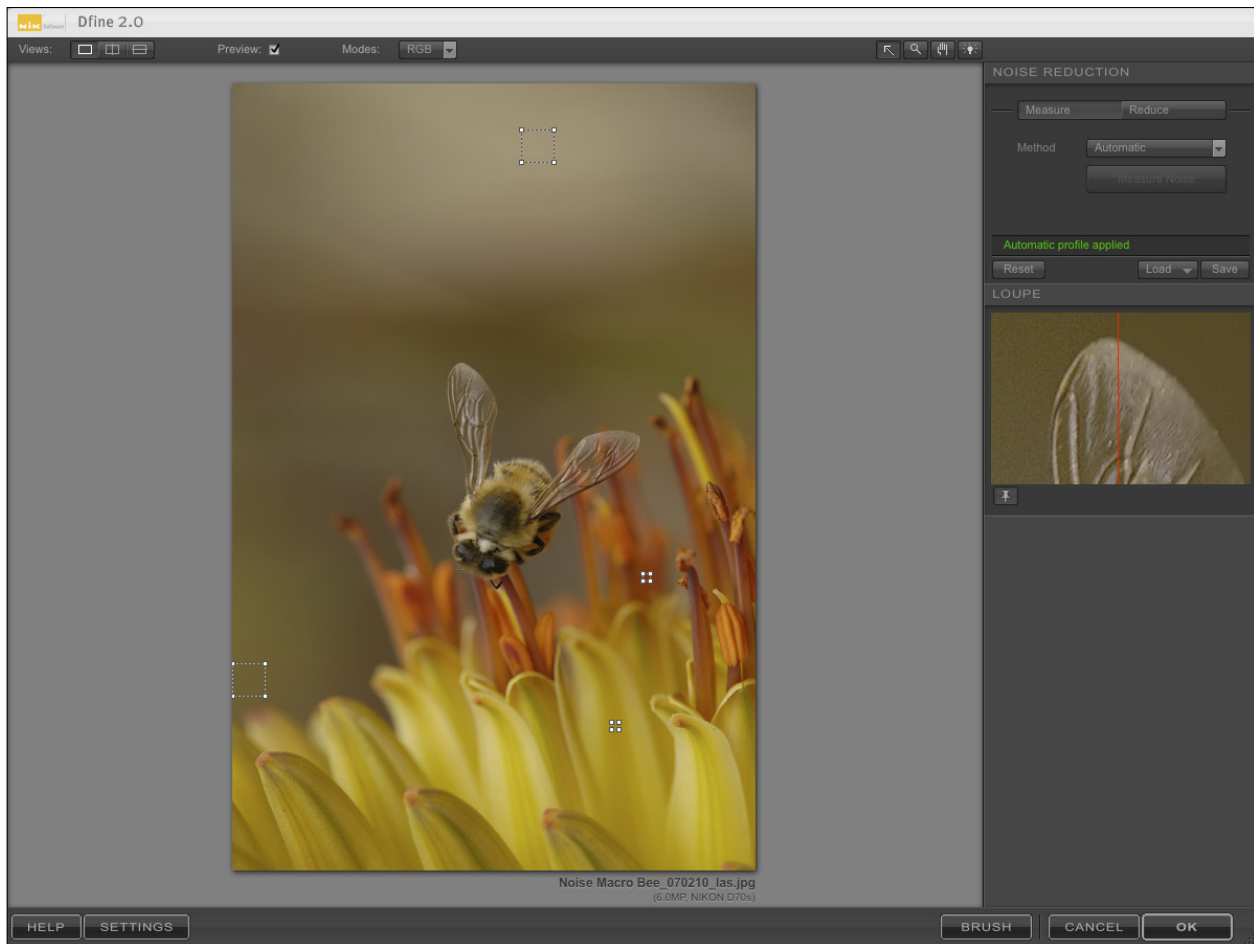




# Dfine® 2.0 Lesson

## Automatic Noise Measurement and Reduction

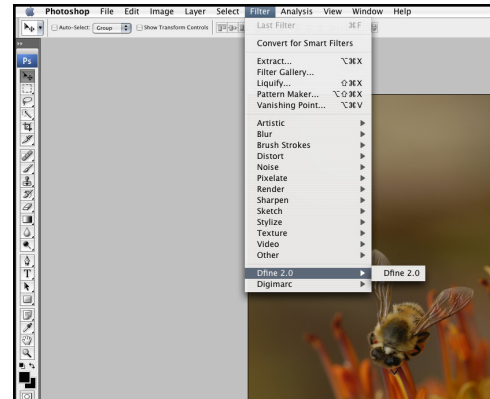
Optimizing Your Image Quality



Working with digital noise reduction requires a two-step process; first, identify if and where noise is present in an image, and second, decide how much noise reduction should be applied and where the noise reduction will be applied to the image.

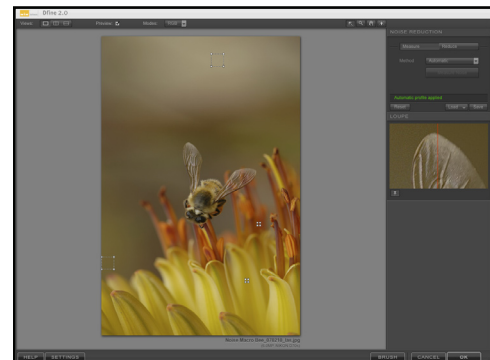
Dfine 2.0 has been developed to offer high quality noise reduction using the Automatic method for measurement. Once the selected image is open in Photoshop, zoom in on the image to see what areas of the photograph need noise reduction. Noise is the unwanted details that a camera will capture and can appear as chromatic aberrations, which are areas where there are mismatched colors (a blue sky with lots of other colors). After evaluating the image and identifying possible noise, access the Dfine 2.0 filter by clicking on the Filter drop down menu in Photoshop. Then, locate and click on Dfine 2.0 to launch the software.

(figure 1)



(figure 1)

Filter Menu

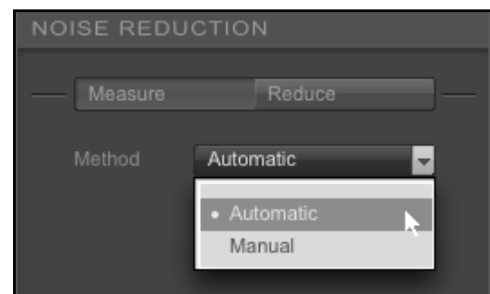


(figure 2)

Dfine 2.0 UI

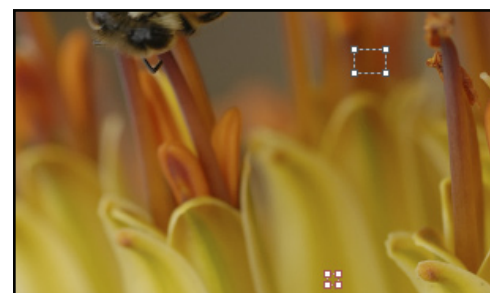
Notice the Measure and Reduce buttons on the upper right side of the interface (figure 2). Click on Measure, select the Automatic Method, then click on Measure Noise (figure 3). The software searches for areas in the image that are smooth and without texture in order to read the amount and type of noise that might be present in the image. A series of square and rectangular shaped boxes will appear on the image in the preview window indicating that these areas have been measured for digital noise (figure 4). When the software has completed measuring the noise, the words Automatic Profile Applied will appear.

The Nav Loupe in the lower right hand corner will display the image before noise reduction to the left of the red line, and after noise reduction has been applied to the image to the right of the red line (figure 5). The Nav Loupe's display area matches the placement of the cursor in the



(figure 3)

Automatic Measurement Method



(figure 4)

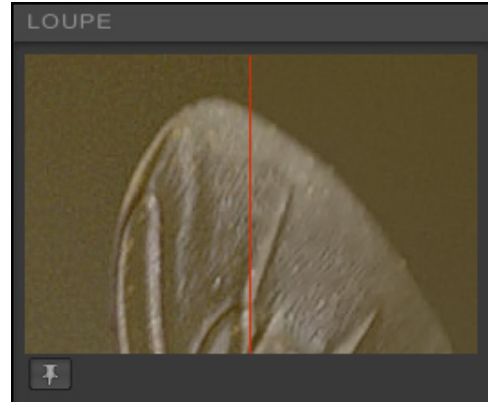
Measured Noise

preview window. By double clicking on the image in the preview window, you can quickly zoom to 100% view and the Nav Loupe switches to the Navigator mode (figure 6). In the Navigator mode, click and drag on the red box to pan throughout the image.

The second step in noise reduction is to apply the measured noise reduction. Dfine 2.0 offers three different methods of applying noise reduction; to the whole image, to specific color ranges and selectively with Control Points. For this lesson, we will focus on applying noise reduction with the Whole Image method (figure 7).

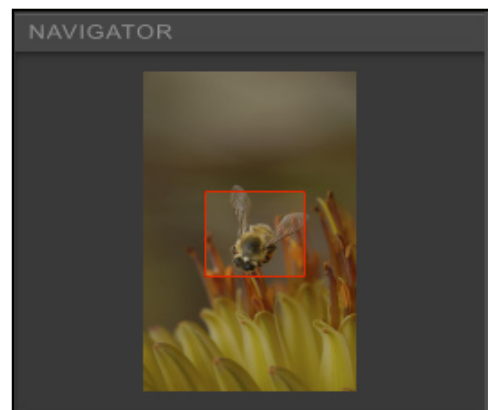
After the image has been measured for noise reduction, click on the Reduce button in the top right of the interface. The default method for reduction is applying to the whole image, the noise reduction will be applied to the entire photograph. In most cases, this is the appropriate and recommended method. You can adjust the amount of color and contrast noise reduction by moving the sliders. After making your final adjustments, click OK in the lower right corner. Dfine 2.0 automatically creates a new layer in Photoshop and names the layer. (figure 8)

Dfine 2.0 has been designed to reduce noise without losing important details in the image so that you can reduce noise in your images with confidence. Dfine 2.0 makes automatic noise reduction fast and easy.



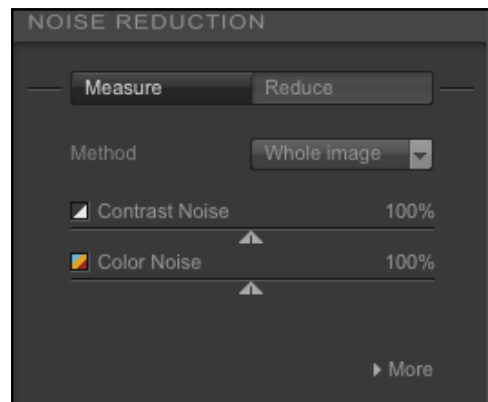
(figure 5)

Loupe Tool



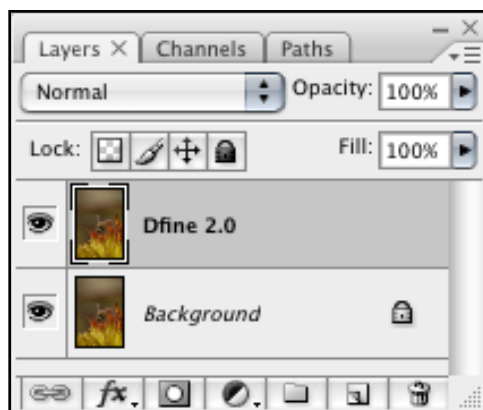
(figure 6)

Navigator Tool



(figure 7)

Measured Noise



(figure 8)

New Layer