FlexColor Focus Checking Tutorial

One of the most important things you want to do is to check the focus on your scanner. Here is a good technique to do this.

There is a focus calibration function in the maintenance menu. However, for whatever reason it does not seem to work perfectly. Often it will make focus worse.

Instead, I like to use the Descreen function to check focus and a Custom Setup to save it. On the scanners that are adjustable such as the Precision it is a good idea to check each of the frame sizes you use and make a Custom Setup for each. On the fixed focus scanners such as the Photo, you would have to adjust the focus manually. However, you can use this procedure to check it.
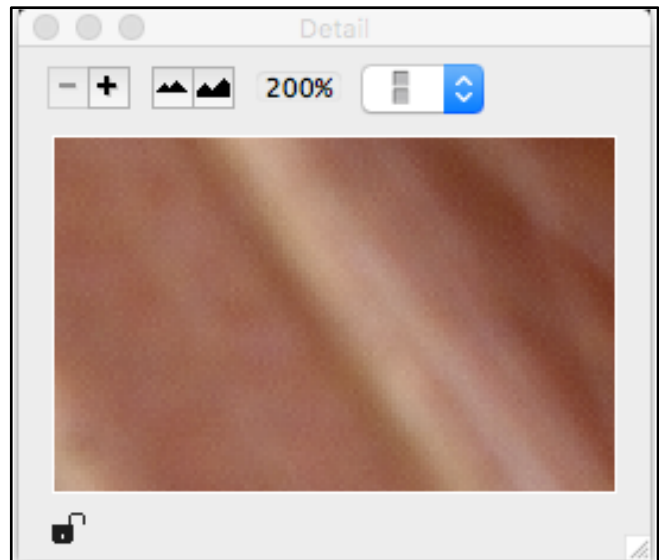
Descreen is a tool put into FlexColor for the publication industry. It is an old trick used on process cameras to remove the line screening dots on pictures that were previously printed. By moving the lens so that the dots were out of focus, you could rescreen the image to a new dot size. We can use this to achieve precise focus on our scanner.

First you need a suitable target to scan. The Precision scanner came with a target that was a series of lines. The built in calibration function would look at the contrast and make it's adjustment. I prefer to use something more real world. I like a grainy color negative, preferably a blank frame. I like to look at the sharpness of the actual grain.

One way we can test our focus would be to scan a small section of the image and open it in an application such as Photoshop. However, this is very time consuming.

Fortunately FlexColor provides a tool to achieve the same results. The tool that makes this easy to do is the Detail Window. It's the magnifying glass on the Tool Panel. Click on it and this window opens.

By clicking on the +/- buttons you can create up to 4 windows to look at different areas of the image
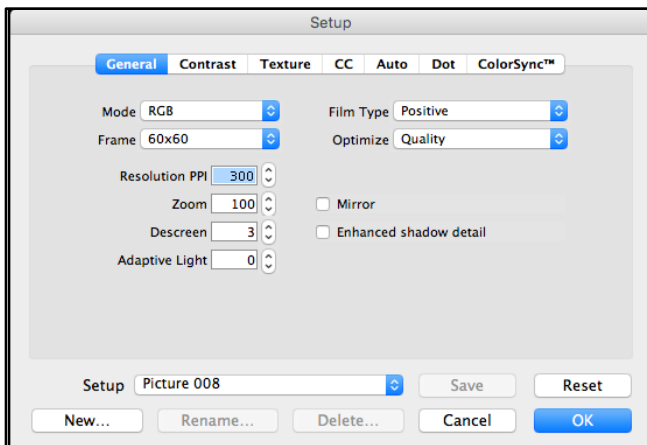

such as the middle and the corners. The buttons that look like mountains adjust the zoom, 100% or 200%. Here we are set to 200%. The far right button allows for how the windows are arranged. In a row or 2 x 2. By clicking on the window then clicking in the image it will select the area of the image to be viewed. You can click and drag on the bottom right corner to adjust the size of the window and the size of the image.

Now that we can see a zoomed area of our target we can begin to move our lens to achieve the best focus.

Before you begin, open the Texture Control Panel and set the Unsharp Mask to a value of -120 and apply it. See the Tutorial on Sharpening for more info on how to do that. That will insure no sharpening is being applied.

Below is the Setup Control Panel, General window.

Note we have set the Descreen to a value of +3. Set a value and view the result in the detail window. Move in small increments of 5 or less. If the image is improved, we are going in the right direction, keep going till the focus starts to fall off and move back to the best setting. If the first number did not improve

the focus, try going in the other direction such as -5. It's just like focusing a camera lens. Positive setting move the lens in one direction, negative setting move it the opposite direction.

Once the best focus is found, we are ready to add that setting to a Custom Setup. See the Tutorial on Creating a Custom Setup for how to do this. If you have already created a Custom Setup you want to use, you can select it, add the new Descreen position and save it again. If you don't already have one, then you can create a new one.

Remember to check other commonly used film sizes. Because the lens moves to a different position with each size, a different focus can occur for each. You may need a Custom Setup for each film size you use.

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