



SDFI® Negative Invert Filter, NIF® and Adobe® Photoshop Image Histogram Equalization

SDFI's Negative Invert Filter, NIF **CANNOT AND DOES NOT** determine intent or cause, consent or non-consent, guilt or innocence, diagnose, analyze, or distinguish right from wrong, or "see" under the skin.

SDFI's Negative Invert Filter, NIF is **NOT** a bruising filter, a negative inverse filter or a histogram equalization filter. It is **NOT** a light or a light filter, an ALS or a contrast light.

SDFI's® Negative Invert Filter, NIF® and Adobe® Photoshop's Image Histogram Equalization tool are completely unrelated in nature, function and purpose. Each tool is used for different reasons and, each is used with the expectation of vastly different results.

SDFI's® Negative Invert Filter, NIF® is a forensic imaging filtering tool that can be consistently applied to any image, regardless of its source or quality, good or bad.

SDFI's® Negative Invert Filter, NIF® tool consists of two independent software filters; one used after the other, in succession.

The first part of the Negative Invert Filter, NIF®, the "Negative" part, was originally developed to convert scanned negative color print film to a digital color positive image. It compensated for the extra orange tint that existed in scanned color negatives and boosted contrast during the conversation process. Today, this filter is used to convert images captured by digital cameras to color negatives using the opposite process. "Negative" filtered image results are consistent. You can apply the negative filter to the same image as many times as you want, and you will always get the same results. *(Note: You must save your results in an uncompressed .TIFF file format to ensure consistency.)*

The second part of the filter, the "Invert" part, inverts the numeric values of the RGB colors found in the pixels within the "Negative" filtered image. "Invert" filtered image results also consistent. You can apply the invert filter to the same image as many times as you want, and you will always get the same results. (Again, you must save results in an uncompressed .TIFF file format to ensure consistency..) **IMPORATNT NOTE:** Users of this filtering tool do NOT have any control of the result. This means that a Negative Invert Filter, NIF user/processor cannot use this filtering tool to manipulate an image to "make it better" for a purpose.

The sole purpose of SDFI's® Negative Invert Filter, NIF® is to help you see it better, the same way putting on a pair of sunglasses helps you see better on a bright sunny day. The entire process is static and consistent.

SDFI's® Negative Invert Filter, NIF® cannot make a bad image good, it only helps you see better, making it acceptable for use in court, provided the original is presented beside it.

SDFI's Negative Invert Filter, NIF® is **NOT** a "Bruising Filter". ⁽¹⁾

SDFI's Negative Invert Filter, NIF® is **NOT** a "Negative Inverse Filter". ⁽²⁾

SDFI's Negative Invert Filter, NIF® is **NOT** a "Histogram Equalization Filter". ⁽³⁾



To determine if an image is good or bad, look at the image and decide on the following seven image elements:

- Does the image (1) represent the subject matter?
- Is the image (2) clear and (3) in-focus?
- Is the image, (4) not too light and (5) not too dark?
- Is the image, (6) aligned and (7) not twisted?

Note that these seven elements do not reference the contents of the image, but the forensic photographer's subjective opinion of the image captured.

If you can answer "Yes" to all of the seven elements listed above, then you are looking at a good image. If you answer "No" to any one or more of the seven elements listed above, then you are looking at a bad image. A bad image is not a useless image. If you do capture a "bad" image, retake the shot and capture a "good" image.

http://www.sdfi.com/downloads/Using_The_SDFI_Negative_Invert_Filter_In_Court.pdf

http://www.sdfi.com/downloads/SDFI-TeleMedicine_Negative_Invert_Filter.pdf

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The Adobe® Photoshop's Histogram Equalization software tool is typically used to improve and/or fix problems with "bad" images in an effort to make them look good for a specific reason or purpose, for example, for use in a fashion magazine or on a fashion web page.

The Adobe® Histogram Equalization tool is used by professional photographers and computer graphic artists during post-production to "Photoshop" an image, to make a bad image look good by redistributing the brightness values of the pixels so that they more evenly represent the entire range of brightness levels. The Adobe Histogram Equalize tool remaps image pixel values so that the brightest value represents white, the darkest value represents black and intermediate values are evenly distributed throughout the grayscale values. After completing the equalization process, the artist always has the option of manually "tweaking" the image to suit their needs. This process is subjective, dynamic and intended to produce specific results.

### **SDFI® Negative Invert Filter, NIF® and Adobe® Photoshop Image Histogram Equalization**

During the equalization process, the equalize tool applies adjustments directly to the image and typically deletes image information in the process. This tool is used to reach a goal, specifically to make a bad or poor image look good for a purpose, making it unacceptable for use in court.

<https://helpx.adobe.com/photoshop/using/viewing-histograms-pixel-values.html>

<https://helpx.adobe.com/photoshop/using/making-quick-tonal-adjustments.html>

1. **Warning!** Do not use the term "bruising filter". It may get you into legal trouble. SDFI's Negative Invert Filter, NIF® does not see bruising, on or under the skin, people do.
2. **Warning!** This term does not correctly describe SDFI's Negative Invert Filter, NIF®. Do not use "Negative Inverse Filter". It is something else from somewhere else. It may be related to Histogram Equalization.
3. **Warning!** Do not use a histogram equalization filter. The primary purpose of a histogram equalization filter is to make your image look better for a purpose. This effectively negates their use in court.