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

(191003)

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

The tool consists of two independent software filters; one used after the other, in succession. The first filter converts a digital color positive image to a digital color negative image. The second filter, exactly inverts the numeric value of color within every picture element, or pixel. Nothing is added or subtracted before, during or after the filtering process.

The sole purpose of this tool 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 process is static and consistent.

This filter cannot make a bad image good, it only helps you see better, making it acceptable for use in court, provide the original is presented beside it.

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 to light and (5) not to dark?
- Is the image, (6) aligned and (7) not twisted?

If you can answer "Yes" to all of the seven elements listed above, then you are looking at good image. If you answer "No" to any one or more of the elements shown above, then you are looking at a bad 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 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.

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 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
https://www.dpreview.com/forums/thread/2160198
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