

Digital Camera Histograms

By

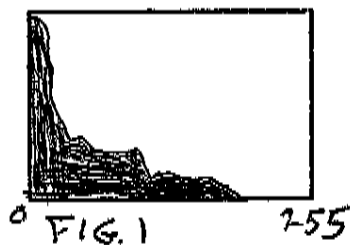
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A histogram is a bar graph showing a range of values from pure black (0) to pure white (255).

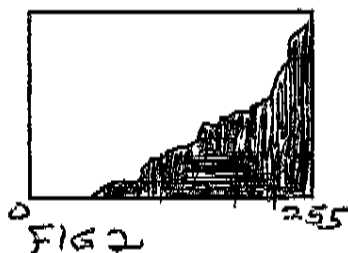
Exposure: expose for the highlights. Post processing will generally improve shadow detail. If you shoot raw files, this is a moot point. Our goal as photographers is not to “clip” highlight or shadow information in the 0 to 255 range.

Clipping can result in a posterization of data. Clipped highlights will have no detail. Special cases are high and low key shots.



Underexposed-shadows blocked up

Correction: increase exposure or add flash



Overexposed

Correction: reduce exposure or add neutral density filter



FIG. 3

Good Exposure, a white and black and nice midtones

Other Considerations:

- fastest way is to adjust exposure is with +/- exposure compensation
- Many cameras use blinking to indicate over exposure
- What about bracketing?

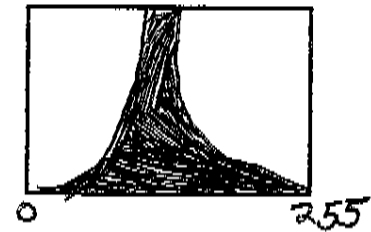


FIG. 4

Digital sensors have about a 5 stop Range. This example exceeds the Capacity of the sensor.

Correction: use HDR technique

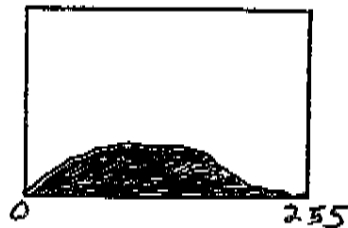


FIG. 5

Flat exposure. Usually pictures with Higher contrast are more interesting

Most cameras measure the R, G, and B together. Some cameras can provide a histogram for each color. It may be possible that an exposure is correct but it could clip some of the color. Post processing can have adjustments in levels. Using eye droppers tags the pure black and pure white. Ever see the comb?

Conclusion: nail the exposure with the use of the histogram and life will be great.