

Noise Shaping

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Thursday, February 25, 2021

This document is really just meant as a quick reference sheet, for how Noise Shaping can be computed. It does not explain the theory behind Noise Shaping, nor does it explain its own terms.

Normal Usage (dither amplitude < 1.0):

$$y[i] = x[i] - b e[i-1] + dither$$

$$e[i] = y_{Quantized}[i] - y[i]$$

Special Usage (dither amplitude ≥ 1.0):

$$y[i] = x[i] - e[i-1] + dither$$

$$e[i] = e[i-1] + b(y_{Quantized}[i] - x[i])$$

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