



Kazrog LLC - masterDither

User guide - version 1.0.1
February 14, 2017
<http://kazrog.com>

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1. Using masterDither

masterDither is very simple to use, but we recommend reading this section to get the most out of the plugin.



1.1. Main Controls



1 Preset Browser



Browse, modify, and save presets here. Want to swap presets with your friends? Make note of the path in the "Save" dialog. All presets are saved in an open XML format for maximum cross-platform compatibility.

2 Target Bit Depth



Select the bit depth that you plan to bounce your master to. This setting affects the amount of dither noise to be applied.

NOTE: you must ensure that the bit depth you are bouncing to in your host matches this setting. masterDither does not reduce the bit depth of audio itself, it simply adds dither noise - it is expected that your host will perform the actual bit depth reduction during bounce.

3 Noise Type



Select the type of random dither noise you want to apply. For most applications, TPDF is the preferred industry standard, but the other two types are provided for versatility.

From [Wikipedia](#):

- 1.) **TPDF** stands for "Triangular Probability Density Function," equivalent to a roll of two dice (the sum of two independent samples of RPDF).
- 2.) **RPDF** stands for "Rectangular Probability Density Function," equivalent to a roll of a dice. Any number has the same random probability of surfacing
- 3.) **GPDF** (Gaussian PDF) is equivalent to a roll of a large number of dice. The relationship of probabilities of results follows a bell-shaped, or Gaussian curve, typical of dither generated by analog sources such as microphone preamplifiers. If the bit depth of a recording is sufficiently great, that preamplifier noise will be sufficient to dither the recording.

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Noise Shaping

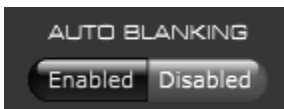


Select the type of noise shaping (if any) to be applied to the dither noise. Noise shaping is essentially a type of EQ that is applied to the dither noise, typically to reduce its audibility while still providing protection against quantization distortion. It is generally recommended to **not** use any noise shaping unless you are the final mastering engineer on a project. If you are the final mastering engineer, it is recommended that you experiment with a few different settings to see what most closely matches the session's native bit depth.

- 1) None - disables noise shaping.
- 2) K1 - Mildly aggressive high pass noise shaping, good for loud masters with low dynamic range.
- 3) K2 - Extremely aggressive high pass noise shaping, good for loud masters with low dynamic range
- 4) P1 - Psychoacoustic noise shaping designed for material with very low dynamic range, such as loud mastered pop or rock music.
- 5) P2 - Psychoacoustic noise shaping designed for simple program material such as spoken word podcasts, audiobooks, etc.
- 6) P3 - Psychoacoustic noise shaping designed for dynamic, complex mixes such as classical and jazz music.

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Auto Blanking



When enabled, auto blanking mutes the dither noise whenever the program material is silent (digital black.) This setting is recommended in most situations.

1.2. Version History

masterDither - Version 1.0.1 - February 14, 2017

- Refreshed to support new license types coinciding with other newly released plugins.

masterDither - Version 1.0.0 - October 28, 2016

- Initial release.

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