FUN DITHER

USER MANUAL



A thoughtful final touch for your sound.

16 / 24 BIT · TPDF DITHER · NOISE SHAPING

Windows VST3 / Version 1.0.0

funtasiaaudio.github.io

QUICK START

Choose the bit depth of your final file, then follow these five steps.

01

INSERT LAST

Place FUN Dither as the final effect on your master chain. Do not place EQ, limiting, gain changes, or other processing after it.

02

SET BYPASS TO OFF

The large switch reads BYPASS OFF when processing is active. ON passes the incoming floating-point audio unchanged.

03

CHOOSE 16 BIT OR 24 BIT

Select 16 BIT for a final 16-bit integer PCM file, or 24 BIT for a final 24-bit integer PCM file.

04

CHOOSE NOISE SHAPING

ON is the default. OFF still applies TPDF dither and bit-depth quantization. Choose the sound you prefer by ear.

05

CONFIGURE YOUR DAW EXPORT

Disable additional DAW dither and noise shaping. Export integer PCM at the same bit depth selected in FUN Dither.

IMPORTANT RULE

Processing after FUN Dither may change the intended quantization grid and noise distribution. Check the master fader, export gain options, and any built-in DAW dither.

THE CONTROL PANEL

The on-screen labels are in English in every edition. The three audio controls operate independently.



1 BYPASS
ON passes the input unchanged; OFF enables dither processing.

2 16 BIT / 24 BIT
Match the final PCM file's bit depth. The initial setting is 16 BIT.

3 NOISE SHAPING
ON shapes the quantization error spectrum; OFF keeps TPDF dither without shaping. Default: ON.

4 STYLE
Choose one of seven color themes or the Classic GUI. Default theme: Original Sage.

SEVEN COLOR THEMES

These names match the actual STYLE menu.

- Original Sage
- Charcoal
- Deep Brown
- Lapis Lazuli
- Lavender
- Coral Red
- Mikan Orange

SIGNAL PATH & EXPORT

Inside the plug-in, floating-point samples are placed on a 16- or 24-bit quantization grid. Your DAW writes the actual integer PCM file.



THREE PROCESSING STATES

BYPASS ON

Incoming floating-point samples pass unchanged. The bit-depth and Noise Shaping selections are retained.

BYPASS OFF · SHAPING ON

Applies TPDF dither, noise shaping, and quantization to the selected bit depth.

BYPASS OFF · SHAPING OFF

Disables shaping only. TPDF dither and bit-depth quantization remain active.

RECOMMENDED EXPORT SETTINGS

16-bit PCM	**16 BIT**	DAW dither: OFF
24-bit PCM	**24 BIT**	DAW dither: OFF

CAUTION: FUN Dither is not a limiter. Signals beyond the integer PCM range can clip. Leave adequate peak headroom.

DISPLAY, STATE & SUPPORT

FREQUENT QUESTIONS

BYPASS vs. Noise Shaping OFF?

BYPASS ON skips the processing. Noise Shaping OFF only disables spectral shaping; TPDF dither and quantization remain active.

Why is the difference subtle at 24 BIT?

24-bit quantization noise is extremely low. Differences may be subtle at normal listening levels. Judge the whole track without excessive gain after dither.

Can I resize or change the interface?

The seven-color GUI resizes from 360 × 360 px. Switch to Classic via STYLE; the Classic opening size is 710 × 355 px.

Are my settings and font retained?

Bit depth, BYPASS, Noise Shaping, GUI style, and theme are saved in the DAW project. Kaisei Opti is embedded; no font installation is needed.

TECHNICAL NOTES

- Format: Windows VST3 / mono and stereo
- Reported plug-in latency: 0 samples
- Individual GUI audio controls are not exposed for DAW automation
- GUI font: Kaisei Opti (see bundled font license)

FUNtasia Audio official site

https://funtasiaaudio.github.io/funtasia-audio/