



SAMPLE DICER

User Manual

A four-layer one-shot sampler for variable sound design, music, and media production.

Plug-in version: 1.5.0
Formats: VST3, Audio Unit, Standalone
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This manual moves from first launch to advanced MIDI and randomization workflows.

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Fast route

If Sample Dicer is already installed, begin with Quick Start, then read Editing the Waveform and DICE and Controlled Randomization.

1. What Sample Dicer Is

Sample Dicer is a four-layer one-shot sampler. By default, a single MIDI note triggers every loaded layer at once. Each layer can use its own file, level, pitch, start point, delay, and end point.

The core idea

Instead of preparing dozens of nearly identical effects by hand, define safe variation limits and let Sample Dicer create controlled alternatives. The main DICE button can change both samples and parameters in every unlocked slot.

Typical uses

- Game development: gunshots, explosions, impacts, magic, creatures, and foley without obvious repetition.
- Film, video, and podcasts: footsteps, crowds, battles, machinery, and evolving ambience.
- Music: glitch, IDM, layered percussion, fills, transitions, and variable one-shots.
- Sound design: discover new effects by combining and randomizing several sources.
- Live performance: controlled unpredictability, Burst, and Round Robin without rendering every variation first.

Supported audio files

WAV, AIFF/AIF, FLAC, and MP3. WAV or AIFF is recommended for predictable professional workflows.

One-shot behavior

Releasing the MIDI key does not cut off a sample that is already playing. Note Off only stops Burst from generating additional repeats.

2. Installation and First Launch

Choose the format required by your operating system and DAW. The macOS release includes VST3, Audio Unit, and standalone formats. The Windows release includes VST3 x64.

macOS

Control	Range	Purpose
VST3	Cubase, Ableton Live, Reaper, and others	Copy Sample Dicer.vst3 to ~/Library/Audio/Plug-Ins/VST3/.
Audio Unit	Logic Pro, GarageBand, and other AU hosts	Copy Sample Dicer.component to ~/Library/Audio/Plug-Ins/Components/.
Standalone	Run without a DAW	Move Sample Dicer.app to Applications or another convenient location.

Restart the DAW or run a plug-in rescan after copying. macOS may ask you to confirm the app in Privacy & Security on first launch.

Windows

Copy the complete Sample Dicer.vst3 folder to:

```
C:\Program Files\Common Files\VST3
```

Restart the DAW or rescan VST3 plug-ins.

Create an instrument track

- Create an Instrument Track and select Sample Dicer as the virtual instrument.
- Make sure the track receives MIDI from a keyboard or MIDI clip.
- Send any Note On to test it. With KEY disabled, note number does not affect sample pitch.
- In standalone mode, select the audio and MIDI devices in the standard JUCE audio settings.

Cubase

Cubase uses the VST3 build on macOS. The Audio Unit component is intended mainly for Logic Pro and other AU hosts.

3. Quick Start

A basic Sample Dicer setup takes less than a minute.

1. Load samples

Drag an audio file from Finder, Explorer, or another file source onto the waveform area of a slot. Repeat for other slots. You do not need to fill all four.

2. Send a MIDI note

By default, one note triggers all loaded slots. Balance the layers with VOLUME and set final output level with MASTER.

3. Set variation depth

Use RANDOM AMOUNT to define ranges for VOLUME, PITCH, START, and SHIFT. At 0% the parameter remains unchanged; 100% permits the widest deviation. The default is 15%.

4. Press DICE

DICE selects files from the current sample folders and changes parameters. The die face changes with every press but does not represent a separate setting.

5. Go back if needed

<< BACK recalls the previous generation. After recall, pressing it again may alternate between the current and previous states.

Empty slots

Sample Dicer remembers the last sample folder. Pressing DICE with empty slots makes the plug-in attempt to populate them with random files from that folder.

Safe starting point

Begin with 10-20% for VOLUME, PITCH, START, and SHIFT. Increase one range at a time after every generated result sounds usable.

4. Interface Overview

The interface contains four identical sample slots, a global randomization area, and playback controls.



Top row

Options provides 60%, 100%, 120%, 150%, and 200% scale presets, color themes, and Glitch Mode. About shows version, author links, and support details. MASTER controls final output level.

Bottom area

RANDOM AMOUNT and playback settings are on the left. BACK, the main DICE button, SAMPLES, and PARAMS are on the right. In version 1.5.0, RR is located beside KEY and PTE; the screenshot illustrates the overall layout.

5. Slot Controls

Each slot stores one audio file and its own parameter set.

Control	Range	Purpose
<	Previous file	Loads the previous supported file from the same folder.
>	Next file	Loads the next supported file from the folder.
Mini Dice	Random file	Selects a random different file from the current sample folder. Its die face also changes.
X	Clear	Removes the sample from the slot without deleting the source file from disk.
LOCK	Protection	Excludes the slot from global DICE and PTE.

Folder navigation

The < and > buttons step through supported files in the folder. This is convenient when related gunshots, steps, impacts, or textures are stored together.

How LOCK works

LOCK protects both the current file and its randomized parameters from the main DICE action. It also prevents PTE variation for that slot. Manual knobs, < and >, Mini Dice, and Clear remain available.

Waveform and playhead

The waveform displays the file, playback range, envelopes, and the current position of the active voice. The playhead updates smoothly in real time. Waveform amplitude follows the slot VOLUME setting.

Project files
DAW state stores sample paths. If a file is moved, renamed, or unavailable on another computer, reload it manually.

6. Editing the Waveform

The main playback boundaries can be edited directly on the waveform.

START and FADE markers

- Hover a marker to highlight it.
- Drag the left marker to change START.
- Drag the right marker to change FADE, the playback end point.
- START cannot move beyond FADE, and FADE cannot move before START.
- If the markers overlap, use the upper half for START and the lower half for FADE.

Move the selected range

Hover between START and FADE. The range highlights slightly. Dragging moves the whole range while preserving its length. At a file boundary, the range contracts only as much as required.

Mouse wheel

Action	Gesture or control
Adjust slot volume	Wheel between START and FADE
Adjust fade-in duration	Wheel over the left marker or fade-in line
Adjust fade-out duration	Wheel over the right marker or fade-out line
Shape the fade-in curve	Alt/Option + wheel over fade-in
Shape the fade-out curve	Alt/Option + wheel over fade-out

SHIFT on the waveform

SHIFT adds a delay before a layer begins. The waveform moves right on the shared visual timeline so the offset remains visible. The source file is not edited.

Do not confuse these controls

The FADE knob sets the playback end point as a percentage of the file. The wheel over a fade line sets the duration of the smooth envelope leading to that point.

7. Per-Slot Parameters

Control	Range	Purpose
VOLUME	-60...+6 dB	Layer level. Also changes the displayed waveform amplitude.
PITCH	-24...+24 st	Pitch in semitones. Normal movement snaps to integers; hold Shift for 0.1-semitone precision.
START	0...99%	The point where file playback begins.
SHIFT	0...250 ms	A positive delay relative to the other slots.
FADE	1...100%	Playback end point. It cannot be placed before START.

Fine PITCH control

Without a modifier, the control snaps to whole semitones. Hold Shift while dragging or using the wheel for tenths of a semitone. DAW automation may remain continuous.

Building a layered effect

- Slot 1: main transient or body.
- Slot 2: low-frequency weight with slightly negative PITCH.
- Slot 3: click or mechanical detail with a short SHIFT.
- Slot 4: tail, space, or supporting texture.

START and FADE consistency

The markers automatically constrain each other, preventing a negative playback range. Fade-in and fade-out durations are also limited by the available region between START and FADE.

Reset

Most JUCE knobs can be returned to their default value with a double-click. MASTER defaults to 0 dB.

8. DICE and Controlled Randomization

Sample Dicer separates file selection from parameter variation, so you can change only the part you need.

Control	Range	Purpose
DICE	Files + parameters	Changes samples and VOLUME, PITCH, START, and SHIFT in every unlocked slot.
SAMPLES	Files only	Chooses other samples while keeping current parameter values.
PARAMS	Parameters only	Changes VOLUME, PITCH, START, and SHIFT while keeping the files.
<< BACK	Previous state	Restores the previous generated file and parameter combination.

RANDOM AMOUNT

Four global sliders define the maximum deviation from the current value. They affect DICE/PARAMS and PTE.

Control	Range	Purpose
VOLUME	0...100%	Depth of level variation.
PITCH	0...100%	Depth of pitch variation.
START	0...100%	Depth of start-point variation.
SHIFT	0...100%	Depth of delay variation.

Practical strategy

- For natural foley, keep PITCH and VOLUME around 5-20%.
- For weapons, try 5-15% PITCH, 10-30% VOLUME, and a small SHIFT amount.
- For experimental music, increase several ranges to 40-80%.
- When a layer is already right, enable LOCK before generating again.

What is not randomized
FADE, fade durations and curves, MASTER, VOICES, RATE, and mode switches are not controlled by RANDOM AMOUNT.

9. MIDI and Playback Modes

Control	Range	Purpose
VOICES	1...16	Maximum simultaneous voices in each slot. A voice is reused when the limit is reached.
BURST	On/Off	Generates repeated triggers while a MIDI note is held.
RATE	1...30 Hz	Burst repetition frequency.
KEY	On/Off	Chromatic keytracking relative to MIDI note 60.
PTE	On/Off	Creates a new parameter variation on every Note On without changing files.
RR	On/Off	Triggers one random loaded slot without an immediate slot repeat.

KEY

With KEY off, every key triggers the sample at its PITCH setting. With KEY on, note 60 uses the base pitch, note 61 adds +1 semitone, note 59 adds -1 semitone, and so on.

PTE

Per-trigger randomization applies a fresh VOLUME, PITCH, START, and SHIFT variation to each voice. It does not change files, and LOCK excludes the corresponding slot. The implementation is designed for a real-time-safe audio path.

Round Robin

RR is useful for collections of related variants. Four slots may contain four gunshots or impacts, but each Note On plays only one random slot. With more than one ready slot, the same slot is not selected twice in a row.

Combining modes

KEY, PTE, RR, and BURST can run together. For example, RR + PTE selects one layer and varies its parameters; BURST repeats the same logic at the selected RATE.

10. Options, Glitch Mode, and Appearance

The Options panel controls interface preferences and the experimental mode.

Interface scale

Use - and + to select 60%, 100%, 120%, 150%, or 200%. The selection is remembered. The window can also be resized freely while preserving its proportions.

Color schemes

Use < and > to browse 20 built-in dark, light, and colorful themes. The chosen theme is saved globally.

Glitch Mode

Glitch Mode is intentionally unpredictable. Every MIDI Note On may temporarily change the color scheme, distort labels, add waveform artifacts, and introduce random audio variations.

Recommendations

- Lower MASTER or the DAW channel level before enabling it.
- Use it for IDM, transitions, fills, and unexpected texture discovery.
- Record good performances to audio when you need repeatable results.
- Disable Glitch Mode in Options if the visual flashes are distracting.

Update check

At most once per day, the plug-in checks GitHub for a newer release. When one is available, an in-plug-in notification links to the Releases page.

Automation

Global and per-slot audio parameters are stored in APVTS and can be saved or automated by the host. Scale and color theme are interface preferences, not automation parameters.

11. Practical Recipes

Variable gunshot sequence

- Load four similar gunshots, or four layers of one weapon.
- Enable RR for alternate shots; leave RR off for a layered design.
- Try VOLUME 10-20%, PITCH 5-12%, START 3-8%, and SHIFT 5-15%.
- Enable PTE and play a MIDI sequence.

Footsteps and foley

- Distribute surfaces or step variants across the slots.
- Enable RR so every note chooses one variant without an immediate repeat.
- Use small PITCH and VOLUME ranges; keep START low to preserve the attack.
- Perform the rhythm or use a MIDI clip.

Cinematic impact

- Slot 1: transient; slot 2: low end; slot 3: metal or debris; slot 4: tail.
- Keep RR off so all layers play together.
- Separate layers with a few milliseconds of SHIFT.
- LOCK the successful layers, then use SAMPLES or PARAMS on the rest.

IDM and glitch

- Load short percussion and texture one-shots.
- Enable BURST, set RATE to 8-20 Hz, and enable PTE.
- Add KEY for melodic control and RR for a sparse texture.
- Enable Glitch Mode and record the output to audio.

Commit the result

When you find a strong combination, save the DAW project and bounce or render if needed. Keep source samples with the project when moving it to another system.

12. Troubleshooting

The plug-in does not appear

- Check the format: VST3 for Cubase and most DAWs, AU for Logic Pro.
- Make sure the complete bundle is in the standard plug-in folder.
- Restart the DAW and run a full plug-in rescan.
- On Windows, use a 64-bit DAW.

No sound

- Make sure at least one slot contains a sample.
- Check the instrument track MIDI input and monitoring state.
- Check slot VOLUME, MASTER, and the DAW channel level.
- Make sure START is not immediately next to FADE.

DICE does not change a file

- Disable LOCK for the slot.
- Make sure the folder contains another supported audio file.
- For an empty slot, load one file first so the working folder is remembered.

A sample is missing after reopening

- Check whether the file still exists at the saved path.
- Reconnect the external drive or restore the folder location.
- Reload the file if the project was moved to another computer.

Clicks or overload

- Lower MASTER and the individual slot levels.
- Increase the DAW audio buffer.
- Reduce VOICES or RATE in heavy sessions.
- Test again with Glitch Mode disabled.

13. Quick Reference

Action	Gesture or control
Load a sample	Drag a file onto the waveform
Previous/next file	Slot < and > buttons
Random file in one slot	Mini Dice
Clear a slot	X button
Protect a slot from DICE and PTE	LOCK
Change START or FADE	Drag the corresponding marker
Move the selected range	Drag between the markers
Adjust volume on the waveform	Wheel between START and FADE
Change fade-in/fade-out duration	Wheel over the fade line
Change fade curve shape	Alt/Option + wheel over the fade
Fine PITCH adjustment	Hold Shift while dragging or scrolling
Random files and parameters	DICE
Random files only	SAMPLES
Random parameters only	PARAMS
Recall previous generation	<< BACK
Repeat while a note is held	BURST + RATE
Chromatic playback	KEY
Variation on every Note On	PTE
Play one random slot	RR

KEY reference note

MIDI note 60. With KEY enabled, it plays the current PITCH without additional keytracking transposition.

14. Version, License, and Support

This manual describes Sample Dicer 1.5.0.

Links

Website: ilyaorange.tilda.ws

Bandcamp: ilyaorange.bandcamp.com

Gumroad: ilyaorange.gumroad.com

Releases: [GitHub Releases](#)

Contact

Facebook: facebook.com/orange303

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Thank you for using Sample Dicer.