

Zampler

User Guide

A sampler, granular synth and pad sequencer with tape effects and a transport you can share across devices. For iPhone and iPad, and as an Audio Unit in your favorite music apps.

Version 1.1 · Pretty Kitty · nickhwang.com/zampler

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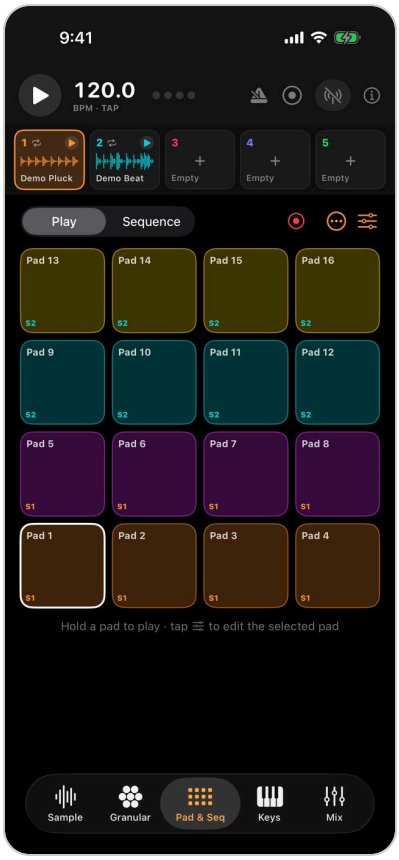
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1 Getting started

Zampler records any sound and turns it into an instrument: chopped across pads, played in key, stretched into grains and run through tape-style effects, all locked to one tempo.

The first time you open Zampler, a short welcome tour introduces the essentials. Two demo sounds, **Demo Pluck** and **Demo Beat**, are already loaded, so you can play straight away. You can bring the tour back at any time from **About (ⓘ) › Show the welcome tour**, and **Show tips again** brings back the tips that appear the first time you visit each tab.



The transport bar, the five-slot bank and the Pad & Seq tab on iPhone.

The screen at a glance

Every screen has the same three parts, from top to bottom:

- **The transport bar:** play and stop, tempo, metronome, session recording, Sync and About.
- **The sample bank:** five slots that hold your sounds. Everything in Zampler plays from these slots.
- **The tabs: Sample**, **Granular**, **Pad & Seq**, **Keys** and **Mix**. On iPhone they sit at the bottom; on iPad they are a row under the bank, and each tab uses the extra space to show more at once.

The transport bar

CONTROL	WHAT IT DOES
▶ **Play / Stop**	Starts and stops the transport. The sequencer, synced LFOs, the tape loop, automation and slot playback all follow it.
Tempo (BPM)	Drag up or down to set the tempo. Tap it repeatedly to tap in a tempo. The dots beside it show the beats of the bar.
Metronome	Turns the click on and off. The click is never recorded.
● **Record**	Records everything you hear as a session take. Long-press it to see your takes (chapter 7).
Sync	Opens Transport Sync, to play in time with other devices nearby (chapter 8).
ⓘ **About**	Version, quick tips, the welcome tour, the audio engine's sample rate, and Zampler's companion app, Zynther.

The sample bank

The five slots under the transport are always in reach. Tap a slot to select it: the Sample, Granular and Keys tabs work on the selected slot. Each slot has its own trim, loop, level, pan, filter and effect sends.

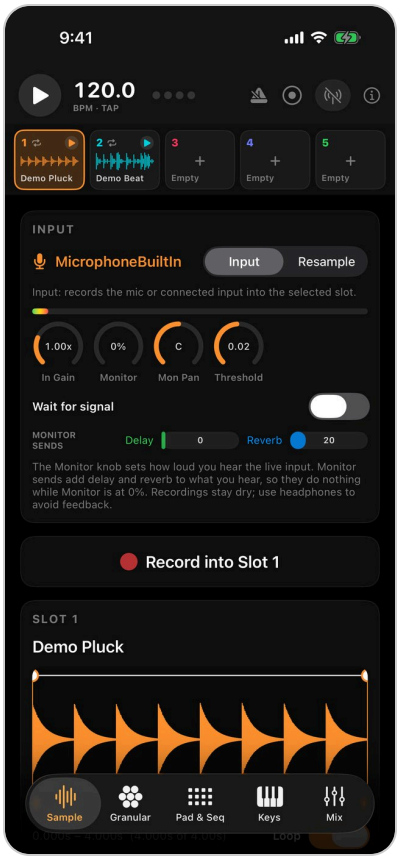
- **Tap ▶ on a slot** to play its trimmed region. While the transport runs, the slot waits for the next bar so it starts in time; tap again to cancel or stop.
- **Long-press a slot** for more: **Loop**, **Reset Trim**, **Copy to…** another slot, **Clear**, or **Open in Sample Tab**.

Gestures

Knobs	Drag up or down to turn. Drag sideways for fine adjustments. Double-tap to reset to the default.
Envelopes	Drag the corners to set times and levels. Drag the middle of a segment to bend its curve.
Waveforms	Drag the handles at the ends to trim. Drag the dots along the top to set fades.
Pads and keys	Multi-touch: play several at once.

2 Sample

Record a new sound, load one from the library or a file, and trim and edit it. Everything on this tab works on the selected slot.



The Sample tab: the Input panel, Record, and the slot's waveform.

Recording

Choose a source at the top of the Input panel:

- **Input** records the microphone or a connected input: a USB interface, a wired headset or Bluetooth. The name above shows the input that's currently selected.
- **Resample** records Zampler's own output, everything you hear except the metronome. Use it to layer ideas, or to print effects and pads into a new sample.

Then tap **Record into Slot N**. Tap **Stop Recording** when you're done. Recording replaces what was in the slot, and **Undo** brings it back.

INPUT CONTROLS

In Gain	How loud the input is recorded. Watch the meter and keep it out of the red.
Monitor	How loud you hear the live input. Use headphones to avoid feedback.
Mon Pan	Where you hear the input, left to right.
Wait for signal	Arms recording so it starts by itself when the sound begins. **Threshold** sets how loud "begins" is.
Monitor sends	Adds delay and reverb to what you hear while monitoring. Recordings always stay dry.

If microphone access is off, turn it on in the Settings app under Zampler. Resample still works without it.

Trimming, fades and edits

The waveform shows the selected slot. Drag the **handles** at each end to set the start and end points; everything that plays the slot (its ▶, pads, Keys) uses this region. The times below the waveform show the region and the sample's full length.

Fades: drag the dots along the top of the waveform to fade in from the start point and fade out to the end point. The fade lengths are shown below the waveform.

Loop	Plays the region over and over instead of once.
Crop	Cuts the sample down to the region, and bakes the fades in.
Norm	Normalizes: raises the level so the loudest peak reaches full scale.
Rev	Reverses the sample.
Undo	Takes back the last edit or recording.

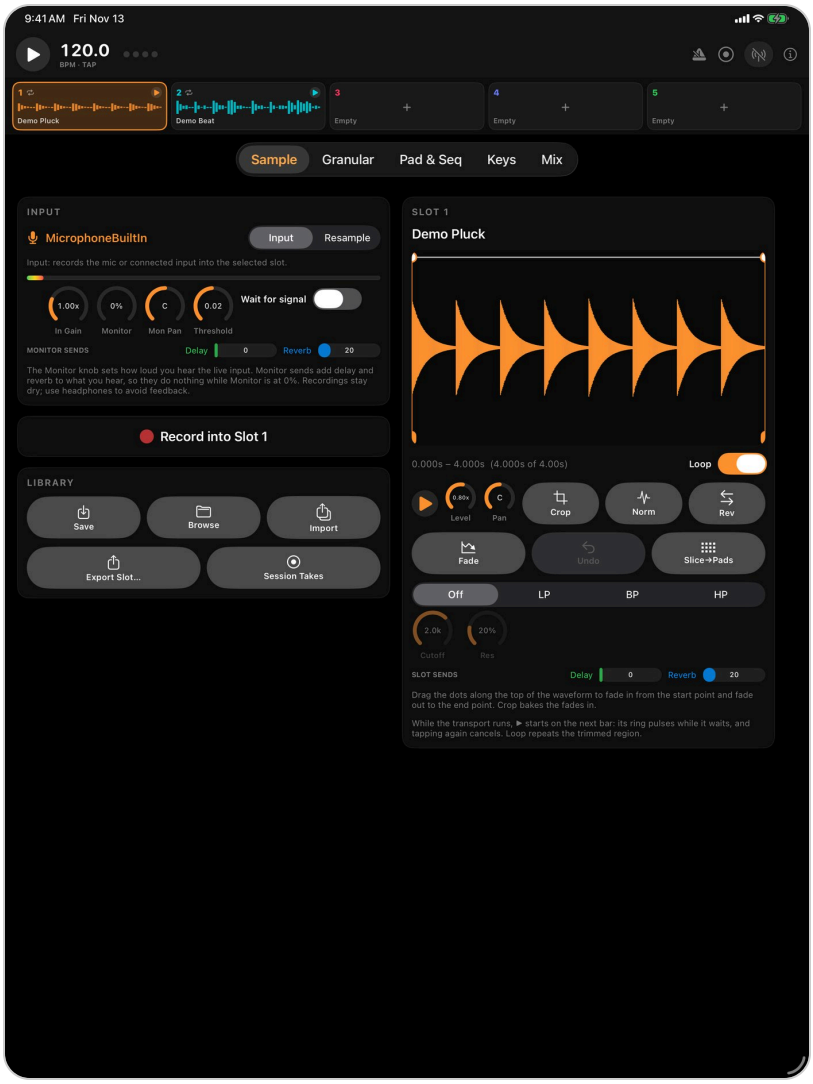
Shaping the slot

Below the waveform, each slot has its own **level** and **pan**, a **filter** (low-pass, band-pass or high-pass, with cutoff and resonance) and **sends** to the delay and reverb on the Mix tab.

The library

Save	Saves the slot's sample to your library, with a name.
Browse	Loads a saved sample, or one of the built-in demos, into any slot.
Import	Loads any audio file from the Files app.
Export Slot…	Saves the slot as an audio file (formats in chapter 7).
Session Takes	Opens your session recordings, to load one into a slot.
Slice→Pads	Spreads the slot across the 16 pads (chapter 3).

> Tip: The library is shared with Zynther and Zampler's Audio Unit. Audio you drop into the **Samples** folder of Zampler in the Files app also appears in the library.



On iPad, the Sample tab shows the input, the waveform and the library side by side.

3 Pad & Seq

Sixteen pads, each playing its own slice of any slot, with a step sequencer for every pad.

Playing the pads

Hold a pad to play it; play as many at once as you like. Pads light up as they sound. The label in each pad's corner (S1, S2…) shows which slot it plays.

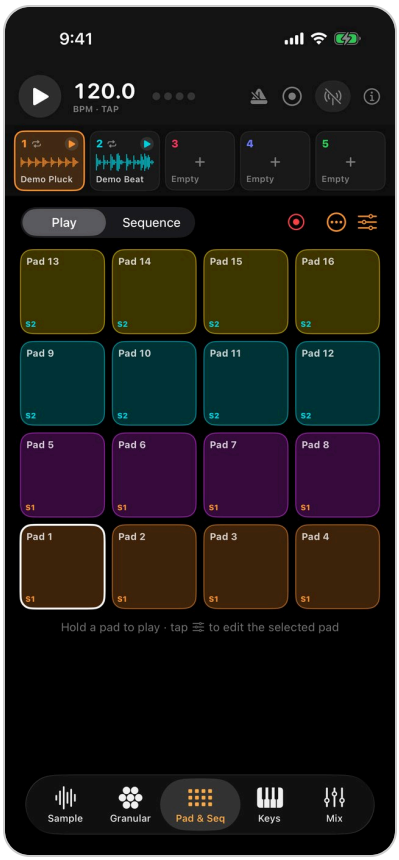
The selected pad has a white outline. Tap ≡ (on iPhone) to edit it; on iPad its settings are always on the right.

Slicing a sample across the pads

Tap ⋯ to map the selected slot to all 16 pads:

- **Slice evenly (16):** cuts the region into 16 equal parts, one per pad. Good for drum loops.
- **Slice at transients:** cuts where each hit begins.
- **Chromatic (whole region):** every pad plays the whole region, each a semitone higher.
- **One pad per slot (pads 1–5):** pads 1–5 play slots 1–5.

Slice→Pads on the Sample tab does the same as Slice evenly.



Pads 1–16. The ⋯ menu slices; ≡ edits the selected pad.

Pad settings

SECTION	CONTROLS
Sample	Which slot the pad plays, and its slice: drag the handles on the pad's waveform. **Audition** plays it.
Sound	**Pitch** (semitones), **Fine** (cents), **Gain**, **Pan**, and sends to **Delay** and **Reverb**.
Mode	**One-shot** plays the whole slice; **Gate** plays while you hold; **Loop** repeats while you hold.
Reverse	Plays the slice backwards.
Choke	Pads in the same choke group (1–4) cut each other off, like an open and closed hi-hat.
Colour, Name	Help you find your way around a kit.
Filter	Low-pass, band-pass or high-pass, with **Cutoff**, **Res** and **Env**. Env opens the filter as the envelope rises (negative values close it).
Envelope	Attack, decay, sustain and release, with curves.

The step sequencer

Switch from **Play** to **Sequence**. The grid shows the selected pad's steps: each square is one sixteenth note.

- **Tap a step** to turn it on or off. **Long-press** it to make it soft or accented.
- Select another pad to edit its steps. Each of the 16 pads has its own pattern.
- Press ▶ in the transport bar to hear the pattern.
- **Steps** sets the pattern length, up to 64 steps; **Page** moves through it 16 steps at a time. **Fill to 64** copies the pattern into the rest of the 64 steps, so turning Steps up later keeps the beat going.
- **Swing** delays every other sixteenth for a shuffled feel.
- **Mute** silences the selected pad's pattern.
- **Record pad hits into the pattern** (the red ●): play pads while the transport runs and your hits are written to the nearest step.
- The ⋯ menu can clear the selected pad's steps, or all of them.



On iPad, the pads, the sequencer and the selected pad's settings share one screen.

4 Keys

Play the selected slot at any pitch on a three-row grid that shows only the notes in your key.

Choosing notes

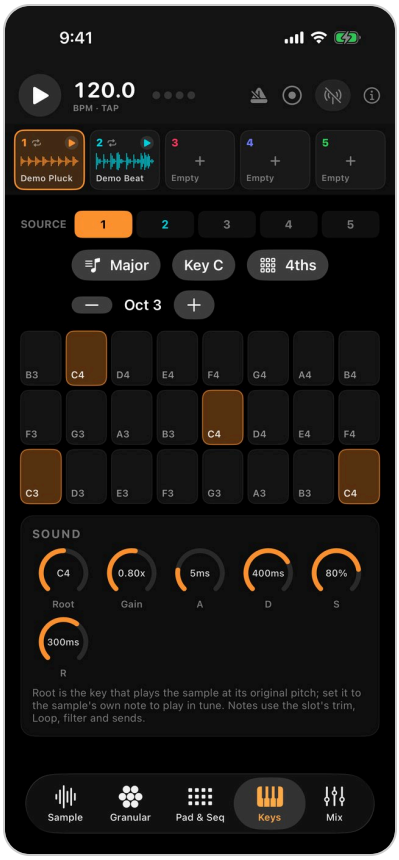
Scale	Chromatic, Major, Minor, Dorian, Mixolydian, Harmonic minor, Major pentatonic, Minor pentatonic or Blues. Only notes in the scale appear on the grid.
Key	The scale's home note. Home notes are highlighted on the grid.
Layout	**4ths:** each row is a fourth above the one below, so chord shapes stay the same anywhere. **Linear:** each row continues where the last one ended, for one long run of notes.
Oct – / +	Moves the grid down or up an octave.

Sound

Root is the note that plays the sample at its original pitch. Set it to the sample's own note so the grid plays in tune. **Gain** sets the level, and **A D S R** shape each note's envelope.

Notes use the slot's trim, Loop, filter and sends. Turn on **Loop while held** to keep a note sounding as long as you hold it.

> **Tip:** Recorded a sung or played note? Set Root to that note, pick its key, and you have a playable instrument in a minute.



Keys in C major with the 4ths layout.

5 Granular

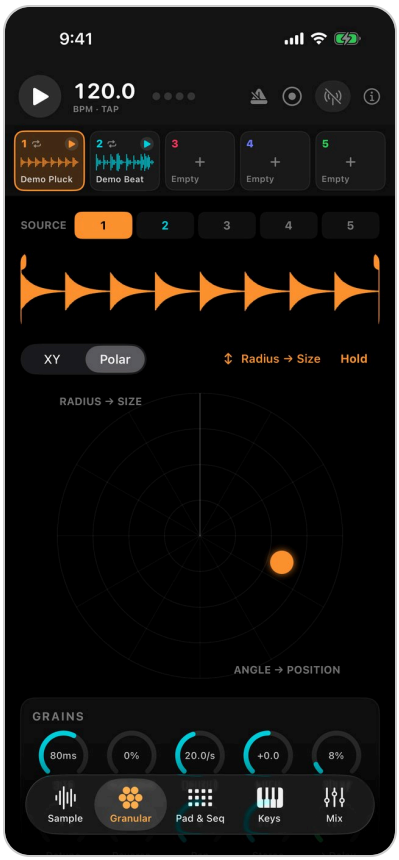
Turn any sample into a cloud of tiny overlapping grains, and play it by moving your finger.

Playing the cloud

Choose the **Source** slot at the top; the waveform shows where grains are playing. Then touch the pad and move your finger:

- **Polar:** going around the circle scans through the sample (angle → position), and the distance from the center controls a parameter you choose.
- **XY:** left to right scans through the sample, and up and down controls the parameter.

Tap the axis label (for example **Radius → Size**) to choose what the second axis controls. Turn on **Hold** to keep the cloud playing after you lift your finger.



The polar pad: around the circle scans the sample.

Grain controls

Size	How long each grain is. Short grains buzz; long grains smear.
Size Rand	Varies each grain's length.
Density	How many grains start each second.
Pitch	Transposes the grains, in semitones.
Spray	Scatters where grains start around the position.
Detune	Gives each grain a slightly different pitch.
Reverse	The chance, as a percentage, that each grain plays the sample backwards. At 0% every grain plays forwards; at 100% every grain plays in reverse.
Pan, Stereo	Where the cloud sits and how wide it spreads.
Gain	The cloud's level.

Window, sync and envelope

- **Window** is each grain's shape: **Hann** is smooth, **Triangle** is brighter, **Perc** has a sharp attack for rhythmic textures.
- **Sync to transport** starts grains on a beat division instead of freely, so the cloud pulses in time.

- The **Cloud Envelope** fades the cloud in when you touch the pad and out when you let go. Drag its corners and bend its curves.

6 Mix

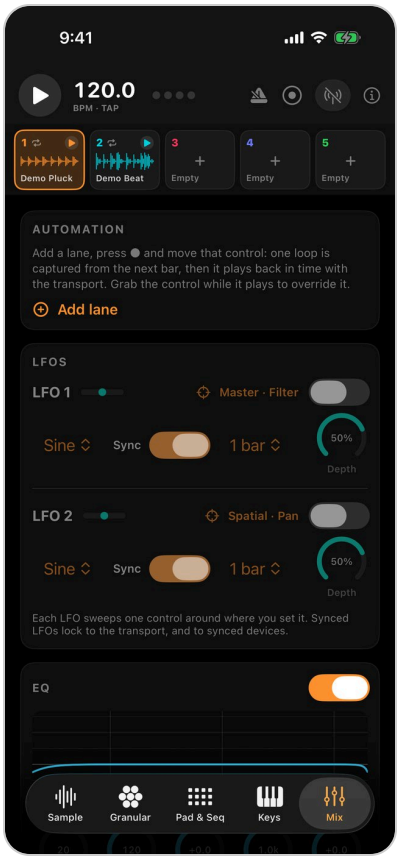
Effects for the whole mix, plus two ways to make controls move by themselves. Switch each effect on with its toggle.

Automation

Record a control's movement and it loops with the music. Tap **Add lane**, choose a control, press ● and move the control: one loop of 1 to 8 bars is captured from the next bar, then plays back in time with the transport. Grab the control while it plays to override it. You can run up to eight lanes, and mute, re-record or remove each one.

LFOs

Each of the two LFOs sweeps one control around where you set it. Choose the **target**, the **shape** (sine, triangle, saw, square or random), and the **rate**, either free or synced to a beat **division** such as 1 bar. **Depth** sets how far it moves. Synced LFOs lock to the transport, and to synced devices.



Automation and LFOs at the top of the Mix tab.

EQ

A five-band EQ with a live curve: **Low Cut**, **Low**, **Mid** (with **Q**), **High** and **High Cut**.

Lo-fi

Drive saturates, **Bits** and **Rate** crush the resolution and sample rate, **Tone** darkens, and **Crackle** adds vinyl pops and hiss. **Mix** blends it with the clean sound.

Tape Loop

A tape looper on the master. Tap **Record**: while the transport runs it records the set number of **Bars** from the next downbeat, locked to the beat; when stopped, it records until you stop it. **Overdub** layers more on top, and old layers pass through Feedback, Tone and Drive on every pass.

Speed varispeeds the tape (negative values reverse it); at 1× a synced loop stays phase-locked to the transport. **Wow**, **Flutter**, **Drive**, **Tone** and **Hiss** add tape character, and **Level** sets its volume.

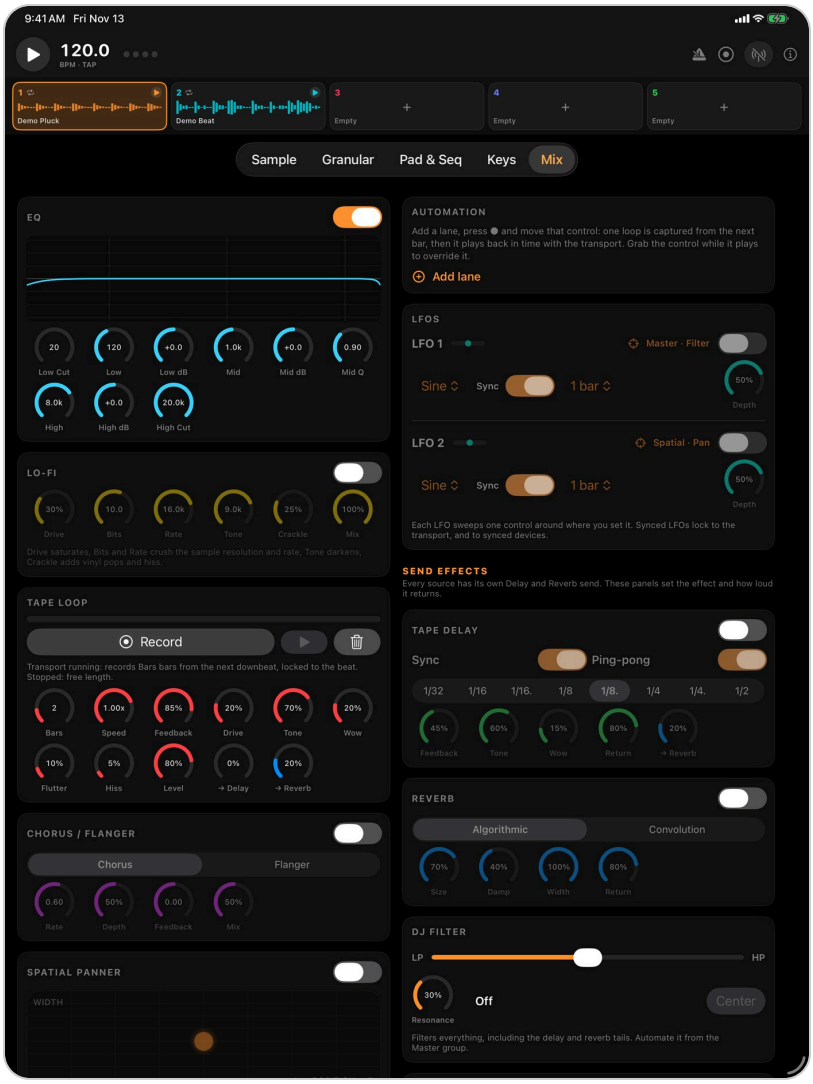
Send effects

Every slot and pad has its own Delay and Reverb send. These panels set the effect and how loud it returns.

- **Tape Delay:** synced to a beat division or free in milliseconds, with feedback, wow, tone and **Ping-pong** between left and right.
- **Reverb: Algorithmic** (size, damping, width) or **Convolution**. In Convolution mode, **Use current sample region as IR** turns part of your own sample into the space.

Master effects

Chorus / Flanger	Rate, depth, feedback and mix.
DJ Filter	One knob: left for low-pass, right for high-pass. It filters everything, including the delay and reverb tails.
Spatial Panner	Moves the mix around your head. **Head** adds the small delays and shadowing of real ears, so sound moves around you rather than just between speakers; best on headphones. Motion can follow the tempo, and you can record the dot's movement.
Limiter	A look-ahead limiter at the end of the chain that keeps the output from clipping. **Ceiling** sets the maximum level.
Panic	Stops every sound at once.



On iPad, the Mix tab lays its panels out in columns.

7 Recording and exporting

Recording your session

Tap ● in the transport bar to record everything you hear, except the metronome. Recording starts immediately, so keep playing. Tap it again to stop; the take is saved.

Long-press ● to see your takes. From there you can play, rename, delete, export or share a take, or load it into a bank slot to sample your own performance.

Exporting

Export a take, or a slot with **Export Slot…** on the Sample tab. Choose the format and, where it applies, the bit depth or bit rate. **Normalize to –1 dBFS** raises the level to just under full scale.

FORMAT	USE IT FOR
WAV, AIFF	Uncompressed audio that opens anywhere.
CAF	Apple's uncompressed format, for Logic and GarageBand.
FLAC, Apple Lossless	Smaller files with no loss of quality.
AAC	The smallest files, for sharing and messages.

Exports are also saved in the Files app under **On My iPhone › Zampler › Exports** (On My iPad on iPad).

Sample rate

Zampler records sessions at 44.1 or 48 kHz; choose under **About › Sample rate**. Changing the rate restarts the audio engine and clears the tape loop. If your audio device can't run at the chosen rate, takes are resampled at high quality when you stop.

8 Sync and Zynther

Play in time with friends: Sync shares the tempo, start and stop between nearby devices running Zampler or Zynther.

Syncing devices

Tap the Sync badge in the transport bar and turn on **Sync with nearby devices** on each device. They find each other over Wi-Fi or directly, peer to peer; no internet or account is needed. Allow local network access when iOS asks.

- One device is the **leader**; the others follow its tempo and its start and stop. Tap **Take the lead** on any device to make it the leader.
- Clocks lock together, so devices don't drift apart, even over a long jam.
- **Sequence length:** choose **Sync with the leader's length** or **Keep my own length**, for patterns of different lengths that still line up.
- **Latency:** if one device sounds early or late against the others, for example through Bluetooth speakers, nudge it until they line up.

Zynther, Zampler's companion

Zynther is a playable synth from the makers of Zampler, sold separately on the App Store. The two apps connect:

- Sync keeps them on the same tempo and beat, on one device or across several.
- Zynther saves its recordings to the shared Beatz library, ready to load into Zampler's slots with **Browse**.

9 Zampler as an Audio Unit

Zampler's pads, sequencer and effects also run inside music apps that host AUv3 instruments, such as GarageBand, Logic Pro for iPad, AUM, Loopy Pro, Cubasis and Drambo. It comes with the app; there is nothing extra to buy.

Loading it in GarageBand

1. Create a new song, or open one.
2. Swipe to **Audio Unit Extensions** in the instrument browser.
3. Choose **Zampler**. Its window opens above GarageBand's keyboard.

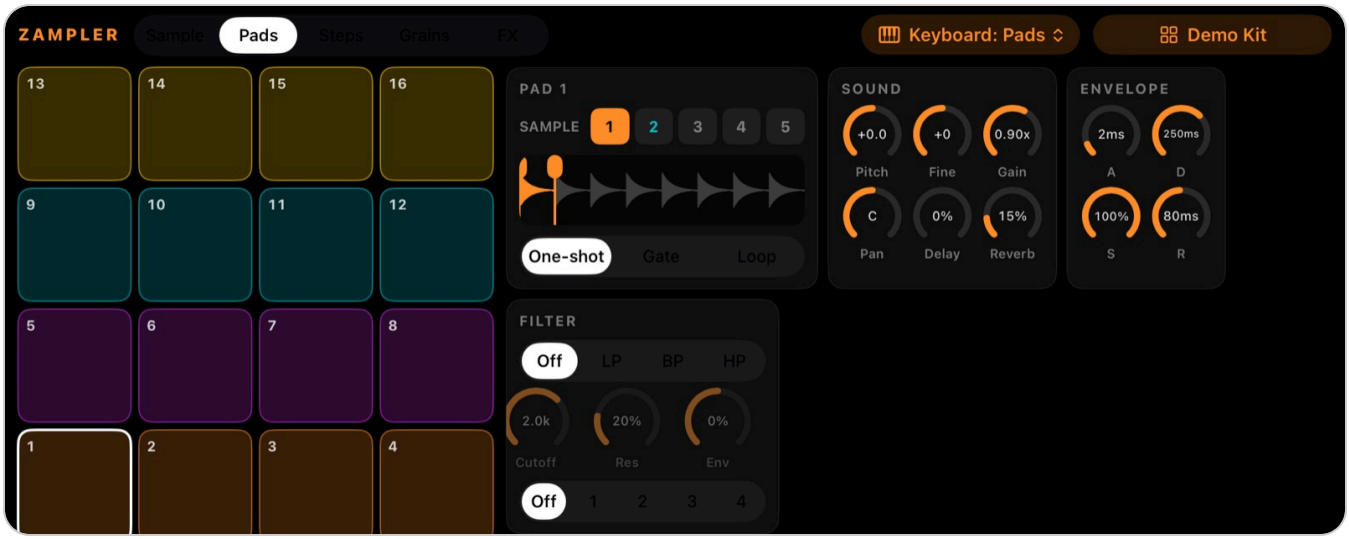
Other hosts list it as **Pretty Kitty: Zampler** among their instruments.

On a Mac

On a Mac with Apple silicon, Zampler also runs in Logic Pro and GarageBand. In GarageBand:

1. In **GarageBand › Settings**, check **Enable Audio Units** (under **Audio/MIDI**) and uncheck **Open Settings in Control View by Default**.
2. Create a **Software Instrument** track. In Smart Controls (press **B**), click the instrument slot at the top of **Plug-ins** and choose **AU Instruments › Pretty Kitty › Zampler**.
3. Click Zampler's name in the slot to open its window.

> **Only sliders?** GarageBand shows a plain list of controls instead of Zampler's window while **Open Settings in Control View by Default** is checked. Uncheck it and open the window again.



The plugin window's Pads page: pads on the left, the selected pad's settings on the right.

What the keyboard plays

Choose with the **Keyboard** menu at the top of the window:

Pads	Notes C1–D♯2 (MIDI 36–51) play pads 1–16, with velocity. Gate and Loop pads stop when you release the key.
Keys	Every note plays the Keys slot at its pitch, as on the app's Keys tab.
Grains	Held notes play the grain cloud over the Keys slot, pitched by the latest note.

The sustain pedal works in every mode.

The plugin window

Sample	The five slots: load from your Beatz library or the demos, play and trim, set fades, slice to pads, and choose the Keys settings.
Pads	The 16 pads and the selected pad's sample, sound, envelope and filter.
Steps	The selected pad's slice on top; below, a row of steps for every pad. The sequencer runs with the host's transport and tempo.
Grains	The XY or polar pad, the source waveform with live grains, every grain control and the cloud envelope.
FX	The effects, as on the app's Mix tab.

The kit menu at the top right loads one of the factory kits.

Songs, presets and automation

- Your kit is saved with the song: every setting, the pattern and the samples. Samples up to 30 seconds are stored in the song itself, so it reopens anywhere; longer ones are found by name in your library.
- Save your own presets through the host.
- Every control can be automated from the host.

> **Good to know:** Recording from the mic, resampling, the tape loop, the metronome, automation lanes and Sync stay in the app; in a host, the host does those jobs. Record or import sounds in the app, and they appear in the plugin's library.

10 Reference

Pad notes (Audio Unit and MIDI)

PAD	NOTE	PAD	NOTE	PAD	NOTE	PAD	NOTE
1	C1 · 36	5	E1 · 40	9	G♯1 · 44	13	C2 · 48
2	C♯1 · 37	6	F1 · 41	10	A1 · 45	14	C♯2 · 49
3	D1 · 38	7	F♯1 · 42	11	A♯1 · 46	15	D2 · 50
4	D♯1 · 39	8	G1 · 43	12	B1 · 47	16	D♯2 · 51

Files

In the Files app, open **On My iPhone › Zampler** (or On My iPad):

Exports	Exported slots and takes.
Sessions	Your session takes.
Samples	Drop audio files here to add them to the library.

Devices

Zampler runs on iPhone and iPad. On iPad, every tab uses the extra space; on iPhone Duo it spreads out when you unfold it. Any audio input iOS supports works for recording: the built-in mic, USB audio interfaces, wired headsets and Bluetooth.

Privacy

No accounts, no ads, no tracking. Your recordings stay on your device. The microphone is used only to record, and local network access only for Sync.

Help and feedback

Questions, ideas or problems: visit nickhwang.com/zampler. If Zampler helps you make music, a rating on the App Store helps others find it.

Quick tips

- Tap the BPM to tap the tempo; drag it up or down to set it.
- Tap ▶ on a slot to play it. While the transport runs it waits for the next bar; tap again to cancel.
- Long-press a slot to loop, reset its trim, copy or clear it.
- Drag knobs vertically, or horizontally for fine control. Double-tap to reset.
- Tap ● to record the session; long-press it for your takes.