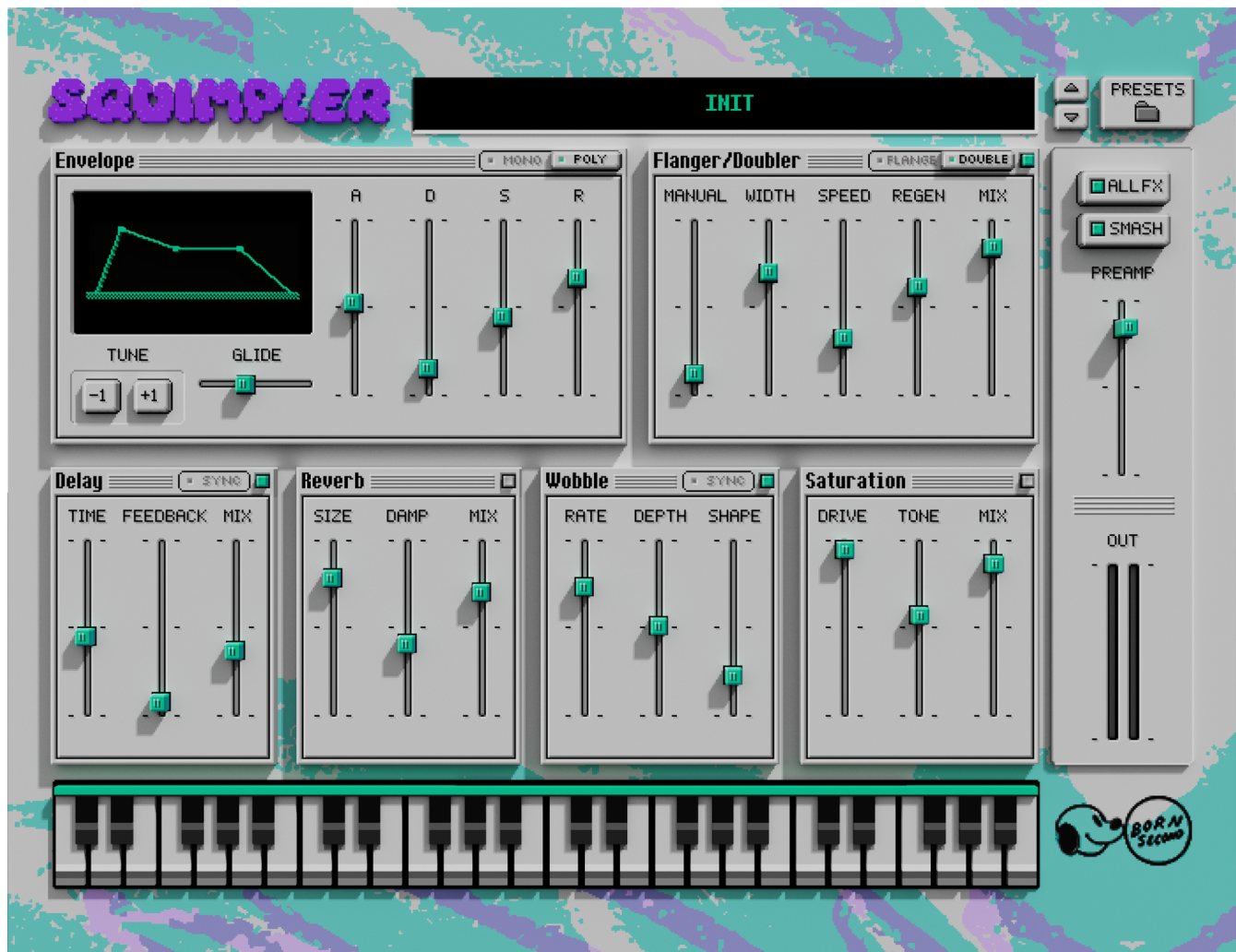


# SQUIMPLER

RETRO PIXEL SAMPLER \* USER MANUAL \* VERSION 1.0



# Welcome to Squimpler

Squimpler is a character sampler. Drop in any sound and play it across the keyboard through a chain of seven lovingly modelled effects: a bucket-brigade style flanger/doubler, a tape-flavoured delay, a room reverb, an authentic tape-wow wobble, transistor saturation, a three-band upward smasher, and a transformer preamp output stage - capped with a genuine transistor-ladder filter sweep. It auto-tunes, auto-loops, auto-levels, and remembers everything inside a single portable preset file.

Every module was calibrated against real reference hardware and software renders, and the pixel interface is drawn the old way: one pixel at a time.

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# 1. Installation

Open the Squimpler DMG and double-click the installer package. Choose your formats - Audio Unit, VST3, and the standalone app - and keep **Factory Presets** ticked to install the sound library. The installer places everything automatically:

| CONTROL         | WHAT IT DOES                                                      |
|-----------------|-------------------------------------------------------------------|
| Audio Unit      | /Library/Audio/Plug-Ins/Components                                |
| VST3            | /Library/Audio/Plug-Ins/VST3                                      |
| Standalone      | /Applications                                                     |
| Factory presets | Library/Application Support/Born Second/Squimpler/Factory Presets |
| Your presets    | Documents/Squimpler Presets (created on first save)               |

After installing, rescan plug-ins in your DAW if it does not pick Squimpler up automatically. A fresh instance opens playing the first factory preset so you hear something immediately.

## TIP

The installer is notarized by Apple - no security dialogs, no rigamarole. If your copy came from anywhere other than Born Second, verify before installing.

# 2. Quick Start

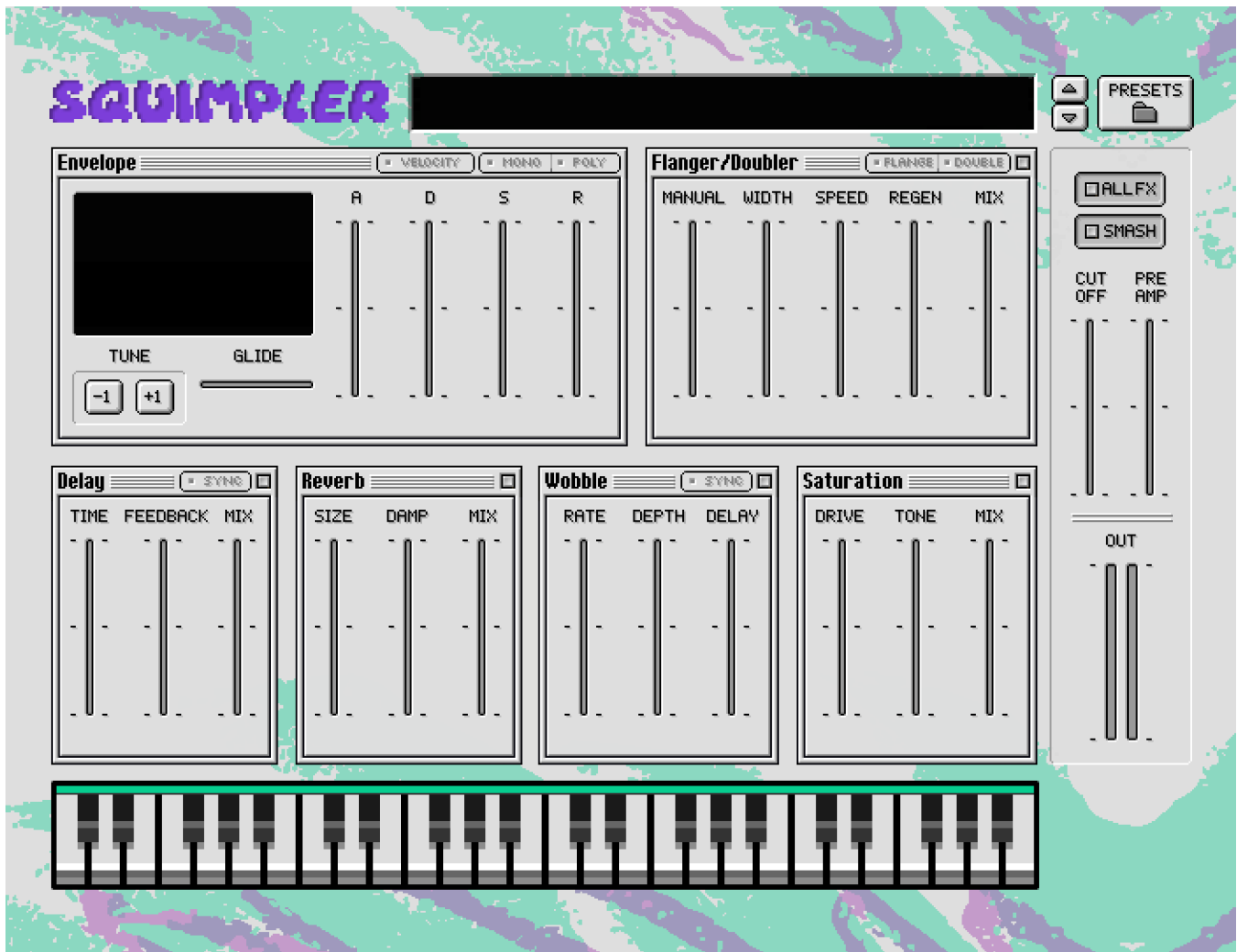
**Play something.** Click the on-screen keys or play your MIDI keyboard. The arrows next to PRESETS step through the library; the PRESETS button opens the full menu.

**Load your own sound.** Drag any audio file from Finder or your DAW browser straight onto Squimpler - a green frame confirms the drop. WAV, AIF, FLAC, OGG, MP3 and M4A all load. Your sample is levelled automatically and mapped with its original pitch on middle C (played one octave up by default - pull it down with TUNE if you prefer).

**Shape it.** Drag the envelope handles right on the green screen, sweep CUTOFF for instant drama, and hit the ∞ button to make any sound sustain forever, in tune.

**Save it.** When the name grows a \*, click the floppy icon. Done - the preset contains the audio itself, so it works on any machine.

# 3. The Interface

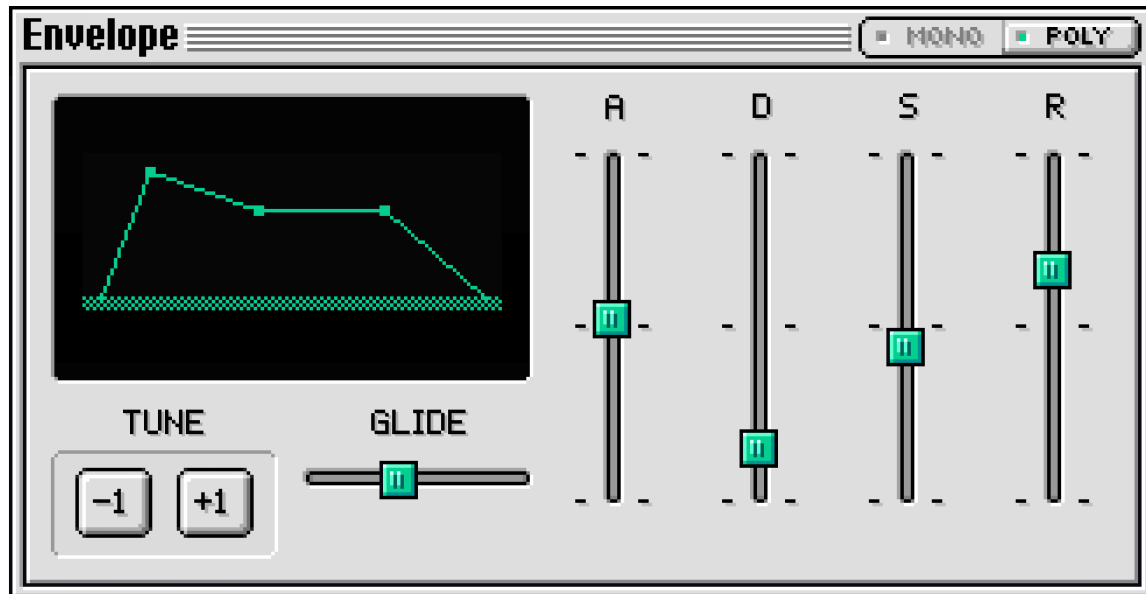


The full Squimpler surface. Panels: Envelope (with screen, tuner and infinite loop), Flanger/Doubler, Delay, Reverb, Wobble, Saturation, and the output column with ALL FX, SMASH, CUTOFF, PREAMP and meters.

Everything is a fader, a toggle, or the green screen. Faders drag vertically and show their value beneath while touched. Module power squares sit in each panel corner; SYNC buttons lock Delay and Wobble to your host tempo. Right-click anywhere for interface zoom (0.5x to 3x, pixel-perfect at every step).

The signal path runs: sampler → Flanger/Doubler → Delay → Reverb → Wobble → Saturation → SMASH → CUTOFF → PREAMP → output. ALL FX bypasses the six effect modules at once (with a click-free crossfade) while the CUTOFF and PREAMP stages stay live.

## 4. Envelope, Tuning + Infinite Loop



| CONTROL           | WHAT IT DOES                                                                                                                                                                                               |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A / D / S / R     | Attack, decay, sustain and release. Changes apply in real time - even to notes already sounding, including mid-release.                                                                                    |
| The screen        | A live picture of your envelope. Grab the handles: attack peak (horizontal), the decay corner (horizontal = decay, vertical = sustain), the sustain node (vertical) and the release endpoint (horizontal). |
| TUNE -1 / +1      | Shifts the sample root in semitones (range +/-24). Hold SHIFT and click for one-cent fine tuning.                                                                                                          |
| Mini tuner        | Top-right of the screen: shows how the sustained sample sits against the nearest note. Centre green with the circle lit = in tune (within 5 cents); flat or sharp lights the side markers.                 |
| GLIDE             | Portamento time in mono mode - up to 2 seconds of pitch slew.                                                                                                                                              |
| MONO / POLY       | One voice with glide and legato, or up to 16 voices. Polyphonic level is automatically compensated so chords get bigger, not louder.                                                                       |
| VELOCITY          | Enables velocity sensitivity with a musical squared curve. Off by default so presets always play at full strength.                                                                                         |
| ∞ (in the screen) | Infinite loop - see below.                                                                                                                                                                                 |

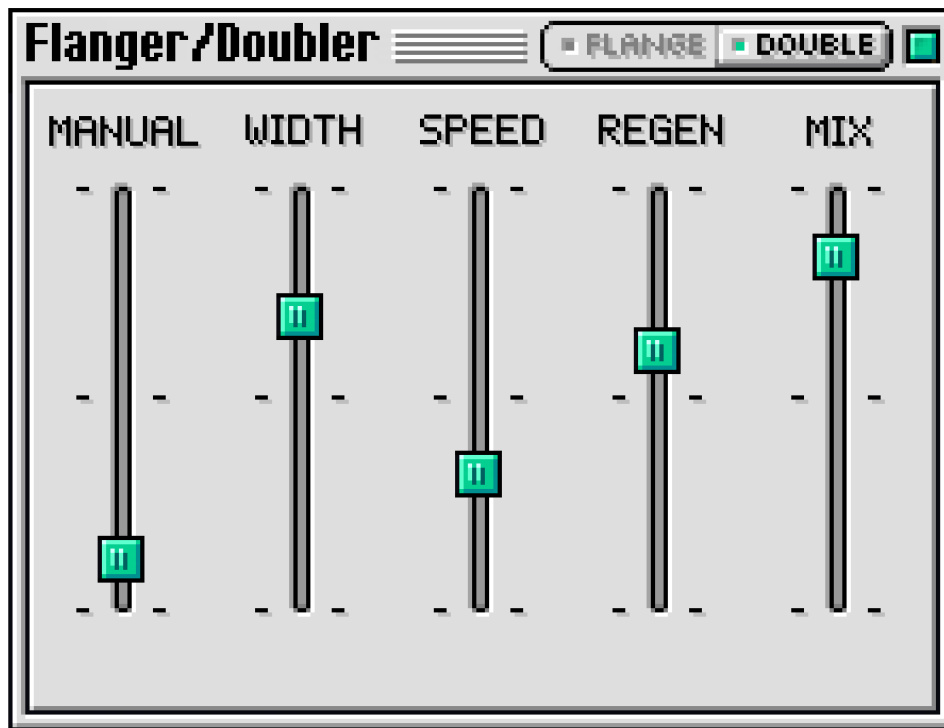
### The Infinite Loop

Click the ∞ glyph and any held key sustains forever. When a sample loads, Squimpler finds its most seamless loop region (an exact whole number of waveform cycles from the sustain portion), automatically tunes that region to the nearest note, and bakes a crossfaded seam so the wrap is inaudible. Release the key and the loop keeps cycling under the release fade, like a proper synthesizer. The original sample is never altered - switch ∞ off and the one-shot returns exactly as imported. Samples shorter than half a second do not loop.

**TIP**

The mini tuner reads the looped sustain - with  $\infty$  on, a centred tuner means your drone is locked to concert pitch.

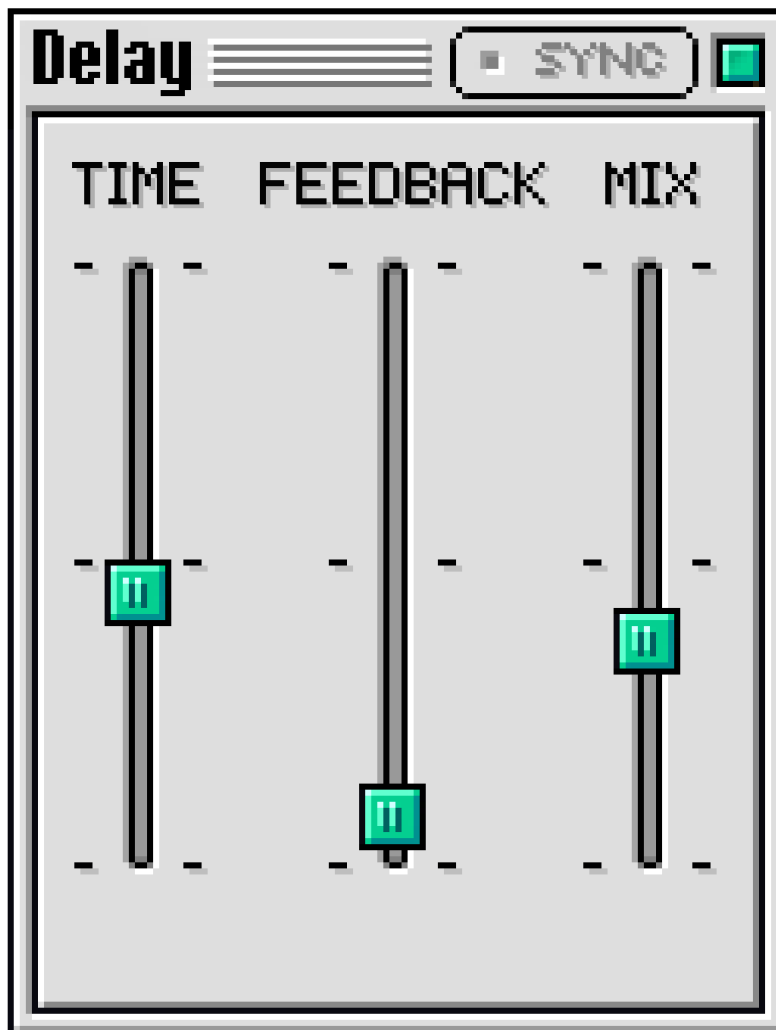
## 5. Flanger / Doubler



A bucket-brigade style modulation unit in the spirit of the classic studio flanger/doubler rack units, with the dark repeats and soft clip of real BBD chips.

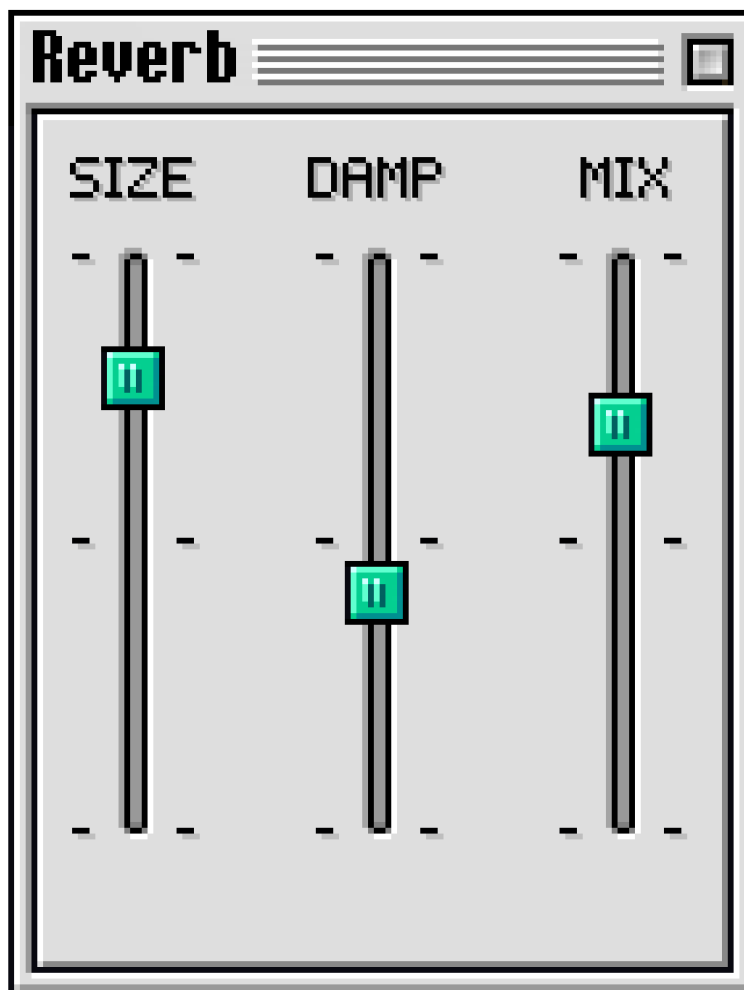
| CONTROL                | WHAT IT DOES                                                                                     |
|------------------------|--------------------------------------------------------------------------------------------------|
| <b>FLANGE / DOUBLE</b> | Two ranges: tight comb-filter flanging, or the longer delay times of tape-style double tracking. |
| <b>MANUAL</b>          | The centre point of the sweep - park it for static comb colours.                                 |
| <b>WIDTH</b>           | How far the sweep travels around the manual point.                                               |
| <b>SPEED</b>           | Sweep rate.                                                                                      |
| <b>REGEN</b>           | Feedback around the delay line - jet-engine territory at the top.                                |
| <b>MIX</b>             | Dry/wet balance.                                                                                 |

## 6. Delay



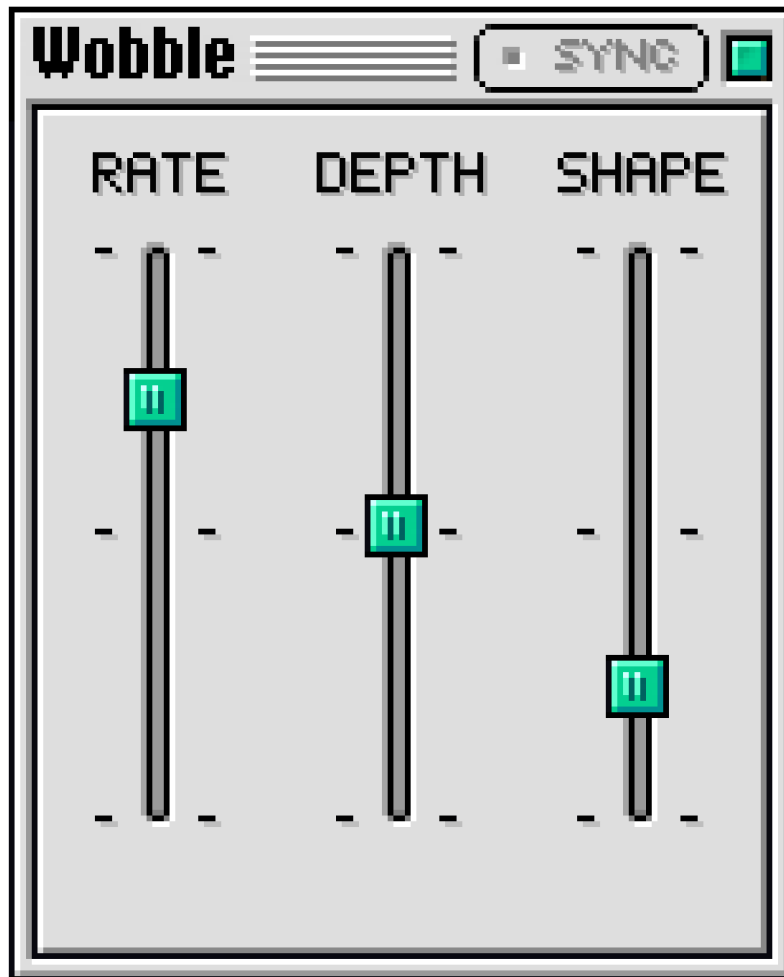
| CONTROL                                                                                                                                                   | WHAT IT DOES                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TIME                                                                                                                                                      | 10 ms to 2 seconds. With SYNC on, snaps to musical divisions of your host tempo - straight, dotted and triplet values from 1/32 to 1/1.                                         |
| FEEDBACK                                                                                                                                                  | Repeat amount. Each repeat passes through a dark tape-style voicing: highs roll off above 8 kHz and lows drain below 100 Hz, so trails thin out naturally instead of piling up. |
| MIX                                                                                                                                                       | Dry/wet balance.                                                                                                                                                                |
| <b>TIP</b> Short times with high feedback make metallic comb resonators - safe by design, since the repeats shed the low end that would otherwise rumble. |                                                                                                                                                                                 |

## 7. Reverb



| CONTROL | WHAT IT DOES                                                        |
|---------|---------------------------------------------------------------------|
| SIZE    | Room dimensions, from a cupboard to a cathedral.                    |
| DAMP    | High-frequency absorption - higher settings darken the tail faster. |
| MIX     | Dry/wet balance, tuned so the dry signal keeps its punch.           |

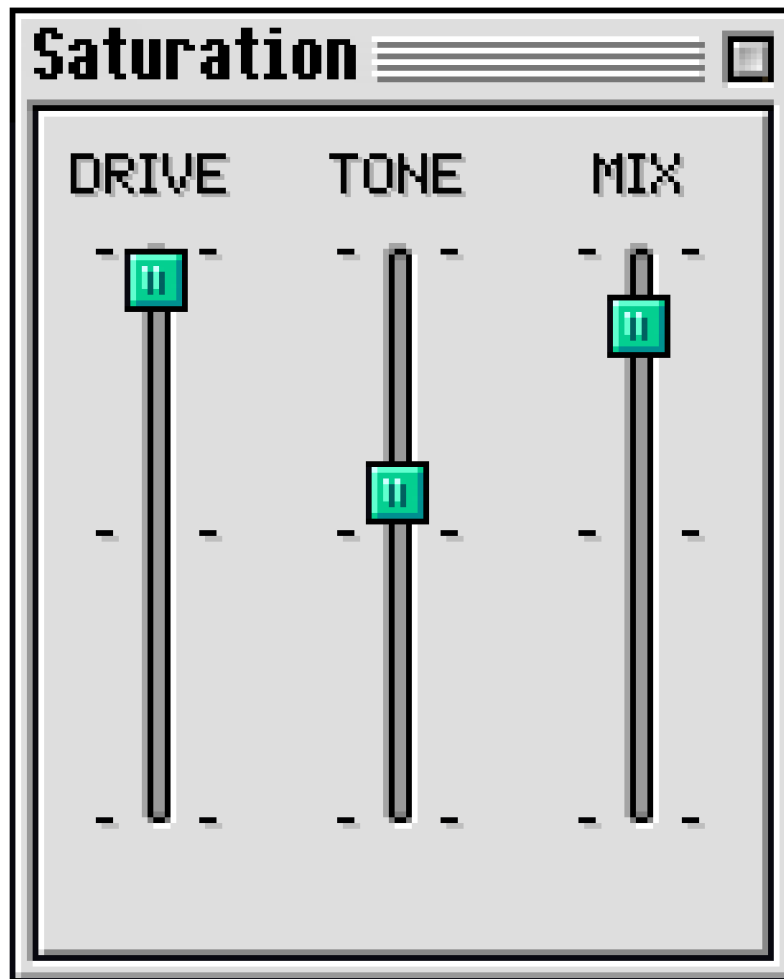
## 8. Wobble



True tape wow, measured from real reference renders: a pure sine pitch modulation with a constant tape-transport excursion, so DEPTH behaves identically at every rate - exactly like the machine it was modelled on.

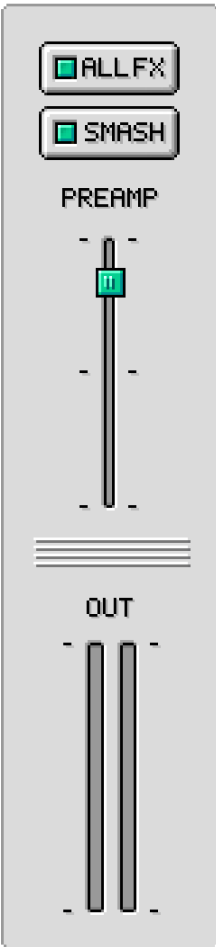
| CONTROL | WHAT IT DOES                                                                                                                                       |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| RATE    | Wow speed, 0.05 to 20 Hz. SYNC locks it to tempo divisions.                                                                                        |
| DEPTH   | Pitch swing - gentle drift at low settings, full seasick lurch (about six semitones each way at maximum with fast rates).                          |
| DELAY   | A Juno-style LFO delay: every note starts clean, then the wobble fades in smoothly after the set time (up to 3 seconds). Retriggeres on every key. |
| TIP     | DELAY around 400-800 ms on plucks gives that classic straight-attack-then-seasick vintage synth vibrato feel.                                      |

## 9. Saturation



| CONTROL | WHAT IT DOES                                                                                                                                                                                    |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DRIVE   | Input push into an asymmetric transistor curve (matched to a well-loved studio saturator), from gentle thickening to full grind. Output level is automatically compensated as you drive harder. |
| TONE    | Post-distortion tilt - darker left, brighter right.                                                                                                                                             |
| MIX     | Parallel blend for New-York-style grit under a clean core.                                                                                                                                      |

# 10. The Output Column



| CONTROL | WHAT IT DOES                                                                                                                                                                                                                                            |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALL FX  | Master effects switch: bypasses all six modules at once with a click-free crossfade and dims the panels. Each module remembers its own state.                                                                                                           |
| SMASH   | A three-band upward compressor matched to a famous multiband preset: crossovers at 98 Hz and 1.7 kHz, gentle 1.75:1 ratios, six decibels of lift per band. Instant glue and loudness.                                                                   |
| CUT OFF | A genuine transistor-ladder low-pass sweep (24 dB/oct). Fully open at the top; as you pull it down, resonance and ladder drive grow so the sweep gets angrier on the way to silence. Placed after the effects, so it sweeps delay and reverb tails too. |
| PRE AMP | A transformer preamp output stage measured from classic British console hardware. Level-matched through the middle, up to +2 dB of dense colour at the top - and the bottom half fades smoothly to silence, so it doubles as a performance fade.        |
| OUT     | Stereo output meters.                                                                                                                                                                                                                                   |

# 11. Presets + Saving

The PRESETS menu lists the read-only **Factory** bank first, then your own presets from Documents/Squimpler Presets. Folders become fold-out submenus, so organise your library however you like. The arrow buttons cycle through everything in menu order.

Touch any control and the preset name grows a \* with a green floppy icon beside it. Click the floppy: an existing preset is silently overwritten (the dot and icon simply vanish); an unsaved patch opens the save dialog. Factory presets are protected - saving one always saves a copy into your own folder.

# 12. Samples + Portability

Every sample that enters Squimpler is levelled to a consistent loudness with polyphony headroom, so presets sit at similar volumes and chords never clip. When you save a preset, the audio itself is compressed losslessly, encrypted, and embedded inside the .sqmp file - one file carries the whole sound to any machine. Samples longer than 30 seconds are copied into a Samples folder beside the preset instead. DAW sessions embed the audio too, so projects survive moved or deleted files.

# 13. Skins

Presets can carry a skin - a full background artwork that transforms Squimpler's look while the controls stay exactly where your hands expect them. Choose one under PRESETS > Skin and save; the preset applies it automatically on load, on any machine with that skin installed. Skins live in Documents/Squimpler Presets/Skins (yours) and the shared Born Second/Squimpler/Skins folder (installed by expansion packs). A missing skin quietly falls back to the classic marble.

# 14. Shortcuts + Specs

| CONTROL                 | WHAT IT DOES                                                    |
|-------------------------|-----------------------------------------------------------------|
| <b>Drag + drop</b>      | Drop audio files anywhere on the interface to load them.        |
| <b>SHIFT + TUNE</b>     | Fine tune in one-cent steps.                                    |
| <b>Right-click</b>      | Interface zoom: 0.5x / 1x / 2x / 3x.                            |
| <b>Envelope handles</b> | Drag directly on the screen; faders and readouts follow.        |
| <b>Save icon</b>        | Silent overwrite of the loaded preset; Save As for new patches. |

| CONTROL              | WHAT IT DOES                                             |
|----------------------|----------------------------------------------------------|
| <b>Formats</b>       | Audio Unit, VST3, Standalone (macOS + Windows)           |
| <b>Voices</b>        | 16, with automatic polyphonic level compensation         |
| <b>Sample import</b> | WAV, AIF/AIFF, FLAC, OGG, MP3, M4A - any sample rate     |
| <b>Preset format</b> | .sqmp - settings plus embedded, encrypted lossless audio |
| <b>Automation</b>    | Every fader and toggle is a host-automatable parameter   |



SQUIMLER IS A BORN SECOND INSTRUMENT

MADE WITH LOVE, PIXELS AND A DOG