

TUNED DIGITAL CLIPPER

At its core it is one juxtaposition, disintegration and kitsch forming one sound, the broken made to sing. A digital clipper feeding a tuned resonator. One half is **dirt**: an overdriven converter with fuzz, bit-crush, samplerate reduction and a buffered glitch. The other half takes that dirt and re-pitches it through a **resonator** and a reverb, locked to your project's key.

SIGNAL FLOW

IN → **tone pre** → **fuzz** → **tone post** → **crush** → **srate** → **glitch** → **snap** → **resonator** → **mix / output**
 → **verb** → OUT
env follows the input and drives the fuzz · **2× LFO** each sweep one control · the **glitch** transposition sets the resonator's pitch, snapped to the key

Read left to right. The **dirt** shapes and destroys the sound. The **resonator** re-pitches it into a tuned voice, struck like a string, in key. **verb** is a master reverb after everything. **mix** blends the whole thing against your dry input. Four things reach across the chain: the envelope follower (input to fuzz), the two LFOs (each with one assignable target), the pitch link (glitch to resonator), and the **reso pre** switch that decides whether the resonator hears the clean input or the dirtied one.

SUCIEDAD · THE DIRT

tone pre	bipolar + mode	A filter before the fuzz. It decides which frequencies get distorted, which changes the whole character of the dirt. In tilt mode it is a bipolar cut: left removes highs toward near-silence, centre is flat, right removes lows. In bandpass mode the knob sweeps one narrow resonant band, so the fuzz only sees that band (vocal, wah-like distortion).
mode	tilt / bandpass	Switches tone pre between the bipolar tilt cut and the resonant bandpass.
res	0...1	Resonance of the tone pre filter. Up gives a sharper, ringing peak. At the top it sits on the edge of self-oscillation.
fuzz	0...1	The digital clipper, the core of the device. Left is clean. Turning up first hard-clips, then in the top third it folds the overflow back on itself (integer wrap) for a raw, broken-converter fuzz.
fuzz model	wrap / fold / sine / digi / cheby / gate	The shape of the digital clipping, blended in as you turn the fuzz up. wrap : integer-overflow buzz (the default). fold : a wavefolder, metallic and ringing. sine : a sine fold, ring-modulator-like when pushed. digi : digital ring modulation against an internal carrier, hollow and inharmonic. cheby : a Chebyshev shaper that stacks odd harmonics, reedy and hard. gate : a spitting, gated, broken fuzz.

env	bipolar	Envelope follower into the fuzz. An amount taken from the input level is added to the fuzz. Centre is off. Right : louder playing pushes more fuzz (touch-sensitive dirt). Left : louder playing pulls it back.
tone	bipolar	A second tilt filter after the fuzz. tone pre and tone post together let you distort one band but voice another. For example, fuzz the mids, then roll off the harsh top the wrap just created.
crush	0...1	Bit-crush. Reduces bit depth from clean down to a few bits: quantisation grit, then gnarled steps.
srate	0...1	Samplerate reduction. Drops the effective sample rate. Up gives aliasing and a metallic ring, from telephone down to broken digital.
glitch	0...1	Buffer glitch, a stutter. Left is off. Low settings blend the repeats quietly under the dry signal, so it builds up gradually; past halfway the stutter fully takes over. Turning it higher adds random faster rolls (still on the grid, in time) that get shorter and denser, and the left and right channels scatter apart into a wide, stereo stutter. Its grid is set by sync , its pitch by pitch .
pitch	raw / diatonic / oct+5th / oct	How the glitch re-pitches its stutter. Each slice is transposed up by a random amount. raw : any number of semitones (chromatic). diatonic : that transposition is quantised to your project's scale intervals, so the slice moves by whole scale steps relative to the original (not an absolute pitch snap). oct+5th : only octaves and fifths. oct : whole octaves only, always consonant. The resonator's note is taken from the same transposition and snapped to the key's pentatonic, so the tuned voice lands in key.
sync	off ... 4 bars	Tempo grid for the glitch: off, or a note value from 1/64 up to 4 bars (triplets included). This same clock also drives the random melody and the freeze loop.
frz	off / on	Glitch pattern freeze (the small switch beside the glitch dial). The device quietly records the stutter's decisions: which slices fire, their lengths, pitches and stereo spread. Press frz and that pattern locks and loops over whatever audio is coming in now, the rhythm stands still while the material keeps flowing. mem sets how much pattern it remembers. Release it and the dice roll again.
snap	0...1	Transient shaper and gate. Emphasises attacks and gates the sustain. Up, it chops the tail toward a tight, percussive stab.
midi in	off / on	When on, the resonator is played by incoming MIDI notes instead of the glitch or pedal pitch. The dirt becomes the excitation for a MIDI-played string. It sits with the output controls for space, but it belongs to the resonator.

RESONADOR · THE VOICE

reso	0...1	Resonator amount. How much of the tuned voice you hear. Left is off (dirt only). Up : the dirtied signal excites a pitched resonator and rings.
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model	dolar / peso / euro	Three resonator characters. dolar : a single plucked string (focused, tonal). peso : a string with sympathetic partners tuned to it (fuller, shimmering). euro : a modal body of coupled resonances (bell, metallic, bar-like).
structure	0...1	The physical make-up of the model: string dispersion, the spread of the sympathetic strings, or the inharmonicity of the modal body. Low is pure and harmonic, high is detuned and bell-like.
brightness	0...1	Damping of the high partials. Low is dark and muted, high is open and ringing.
time	0...1	Ring time. How long each note sustains, pitch-compensated so every note rings the same length. The very top crosses into near-infinite sustain (a held drone).
note / oct	1...8 / -2...+2	The resonator's pedal pitch when it is not being played by MIDI or the random melody. note picks a scale degree. oct shifts the octave (range -2 to +2) and works the same everywhere: it sets the base octave of the glitch-tuned pitch, of the random melody, and of a frozen phrase, so you can move any of them up or down live.
pre	post / pre	What excites the resonator. post : the dirtied signal (it rings the fuzz and glitch). pre : the clean input (a tuned voice running parallel to the dirt).
arp	seed / arp	The rhythm of change, for the glitch pitch and the random melody alike. arp : a new pitch on every grid step, always spread at least an octave (an arpeggio out of the stutter), and the random melody walks on every tick. seed : each pitch is held for eight ticks before it re-rolls, and the melody moves just as slowly, a patient, slowly recolouring drone instead of constant motion.

Freeze and random melody The resonator keeps a small memory of what it has just played, with a few ways to work it. The freeze takes its cue from Marbles, but here it is tied to the glitch clock rather than free-running, an entirely different take: the loop stays welded to the dirt, it is not a separate generator.

frz	off / on	Freeze. Press it and the resonator stops taking new notes and loops the last musical idea it heard, locked to the sync clock. The live signal keeps ringing the frozen pitch, so it stays married to your input. You can still transpose the loop live with note and oct .
mem	short → long	How much it remembers. Fully left is a single note (classic freeze, one held ringing pitch). Turning up loops a longer phrase, up to roughly two bars. It switches to the new length once the knob settles, so scrubbing mem holds the current loop instead of glitching through every value.
rnd	off / on	Random melody. Press once to write a new in-key melody into the buffer. The melody re-tunes the resonator while the live signal rings it, so it stays married to your input. Its tempo follows the glitch sync . It spans about two octaves, and oct moves the whole melody up or down. Press again for a new one. Freeze can then lock whatever it played.
notes	scale / notes	The note pool the random melody draws from. scale : your project's key (always in tune). notes : opens a 12-key row so you pick the allowed pitches yourself.
pluck	off / on	How rnd and freeze are excited. off : they ring the live signal, so the resonator stays a tuned resonance of your input (married). on : they are struck with noise, playing like a separate plucked instrument.

LFO • TWO OF THEM

Two identical modulators. Each one sweeps a single control. They are independent and add together, so you can move two things at once, stack both on the same target for a deeper sweep, or point either one at the other's rate for cross-modulation. Each LFO also has a second target that can be mirrored, so one control rises while another falls. The controls below exist twice, once per LFO.

rate	Hz ↔ note	Speed. In free mode it is a Hz dial (about 0.03 to 24 Hz). Turn sync on and the same control becomes a tempo note-value menu, locked to transport (4 bars down to 1/32).
sync	off / on	Free-running or tempo-locked. Switches rate between the Hz dial and the note-value menu.
depth	bipolar	How far it sweeps and in which direction. Centre is no modulation, left and right invert the sweep.
wave	4 shapes	sine, triangle, square, or random (stepped sample-and-hold, a new value each cycle).

target	any one	What it moves: off, fuzz, tone pre, tone, crush, srate, glitch, reso mix, verb dec, structure, time, brightness, mem, lfo rate, or verb. lfo rate points at the other LFO's speed (in free and synced modes), so the two can modulate each other.
target 2 / inv	any one + inv	A second, independent target for the same LFO. inv mirrors it: with inv on, the second target moves opposite to the first (one rises while the other falls), a see-saw from a single LFO. inv off moves both the same way.

SALIDA · OUTPUT

mix	0...1	Global dry / wet. Blends the whole processed signal against your dry input. Starts full (100 percent wet). This is the master balance between untouched and destroyed.
output	0...1	Final level, to make up for gain the fuzz and reverb add or take.
decay	short → long	Tail length of the master reverb. Fully right is the longest, densest wash; turning left shortens the tail down toward a short, room-like decay.
limit	0...1	Final peak limiter, off at the left. Turn it up to catch the hard fuzz and wrap transients (instant attack, slow release). Below the ceiling it stays transparent, so the fuzz character is kept.
verb	0...1	The master reverb. A dense, forward plate placed after everything , after mix and output. It sits with the output controls. Left is off.

Playing it Quick start: fuzz up, reso up, pick a model, set glitch sync to a note value and bring glitch in. The stutter re-pitches into the resonator, in key. Add verb for space.

A locked idea: hit rnd for a melody (or play the glitch a while), then frz to loop it. Use mem for how long it remembers, and transpose live with note and oct.

Self-playing: with rnd and pluck both on and reso up, it generates and plays a random in-key melody by itself, no input needed. A small self-playing instrument, running on the transport.

Pre / post: reso pre set to pre rings the clean input (a tuned layer beside the dirt), post rings the dirt itself.

In tune: the resonator reads your project's scale live (Live's key and scale). Set it and the whole device stays in key.

Push: fully standalone and self-contained. Parameters are grouped into banks (Suciedad, Glitch, Resonador, Generador, Salida, LFO, LFO 2, Notas A/B) for the Push display, including the 12 note toggles.

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