RESONA — Quick Guide

Sequoia Synthesizers Co · MODAL RESONATOR SYNTHESIZER

Something **excites** a virtual object (a strike, a bow, a breath, an oscillator, a wavetable or grains of sound) and the **resonator** rings like a bar, a string, a plate or a bell. Turn on **HELP** (top right) and rest the mouse on any control: a short tip says what it does.

Quick start

1. **Load RESONA** on an instrument track and play. **Init** is a clean struck bar with a little reverb.
2. **Pick a model** along the top: MODAL, SYMPATHETIC, INHARMONIC, FM or CHORDS.
3. **Turn the four RESONATOR knobs**: STRUCTURE (the material), BRIGHTNESS (the top end), DAMPING (how long it rings), POSITION (where it's hit).
4. **Change how it's played**: raise BOW/BLOW to keep the object singing while you hold a key, or turn STRIKE down for a soft, bowed-only sound.
5. **Press RANDOMIZE** for a brand-new sound. **<** takes you back.

The window

Area	What it does
Pages	**SYNTH** (the instrument), **TEXTURE** (wavetable, granular, ring mod, envelope follower) and **ARP** (arpeggiator).
Preset bar	< > step through presets, click the name for the list, **SAVE** stores your own.
RANDOMIZE	A new sound in one click. < goes back (20 rolls kept), > goes forward.
MIDI	Opens the MIDI MAP so your controller can move any control (see below).
MASTER	Output volume. The LED meter beside it shows the level; **CLIP** lights if it's too loud.

The sound

Panel	Controls
MODEL	**MODAL**: tuned bars, tubes, plates and bells. **SYMPATHETIC**: a string with sympathetic strings (the drone follows KEY). **INHARMONIC**: one stiff string, from harmonic to piano wire to metal. **FM**: 2-operator FM (STRUCTURE = ratio, POSITION = feedback). **CHORDS**: strings tuned to CHORD around every note.
EXCITER	**STRIKE** is a mallet hit on every note. **BOW/BLOW** keeps the object singing while you hold a key; **COLOR** runs from soft breath to gritty bow. **OSC** drives it with a tuned oscillator, **SHAPE** sets its wave. The AMP ENV / EXCITER ENV switch flips the A D S R knobs between the note's loudness and the sustained exciters.
RESONATOR	**STRUCTURE**, **BRIGHTNESS**, **DAMPING**, **POSITION**. **KEY-UP DAMP**: what happens when you let go (full right lets it ring). **CHORD** makes every key play a chord; **KEY** and **SCALE** snap notes into a scale (USER: click your own notes). The display switches between SPECTRUM, SCOPE, RIPPLES, GRAINS and WAVE.
SPACE	CHORUS, ENSEMBLE or PING PONG delay (SYNC locks it to the song's tempo), then the SPACE hall or PLATE reverb (MIX, TIME, TONE) and WIDTH for the whole sound.
MOTION	A quick panel LFO (switch it on in the header) to STRUCT, BRIGHT, POSITION, VIBRATO and the wavetable (WT).
PLAY	Up to 8 VOICES. POLY, MONO or LEGATO (retunes the ringing object without striking it again), GLIDE, OCTAVE, TUNE.
TOUCH	Velocity to brightness and strike, mod wheel to Motion and brightness, aftertouch bows harder, BEND range. The sustain pedal holds notes.

TEXTURE page

Each engine has an on switch in its header; grabbing any of its knobs switches it on.

Engine	What it does
WAVETABLE	30 tables, or IMPORT your own (a wavetable, a single cycle or any sound). POSITION scans it, WARP bends it (Bend, PD, Sync, Squeeze, FM, Fold, Crush, Flip). EXCITE drives the resonator, DIRECT plays it straight out.
GRANULAR	**LIVE** turns RESONA's own last 4 seconds into a grain cloud (FEEDBACK, FREEZE). **SAMPLE** plays grains from a sound you load, per note, to EXCITE the resonator or play directly. SIZE, DENSITY, SPRAY, PITCH, RANDOM, REVERSE, WIDTH.

RING MOD	TRACK follows the note (RATIO) or uses a fixed FREQ. Sine, Triangle, Square or Noise; MIX and SPREAD.
FOLLOWER	RESONA's own loudness moves a TARGET (brightness, structure, grains, ring mod, chorus and more) by AMOUNT, with ATTACK, RELEASE and GAIN.

ARP page

Switch on **ARP** and hold a chord; **LATCH** keeps it playing. MODE (Up, Down, Up/Down, Down/Up, As Played, Random, Chord), RATE, OCTAVES 1–4, GATE, SWING and STEPS 1–16. Draw on the 16-step grid's lanes: VELOCITY, GATE, PITCH (±24 st), GLIDE and PAN. **DRIFT** lets the steps wander and always come home. In your DAW it follows the song's tempo.

Modulation

The chips above the keyboard are the sources: **ENV 1–3**, **LFO 1–3**, **MACRO 1–4**, **VELO**, **WHEEL**, **PRESS**, **KEY** and **RANDOM**. Drag a chip onto any knob to modulate it, then drag the coloured dot on the knob's arc to set how far. Click an ENV or LFO chip to open its card: envelopes are AHDSR with VELO and TRIG (every NOTE, or 1 BEAT to 4 BARS); LFOs have 7 shapes, SYNC, MORPH, SMOOTH, RISE and RETRIG. The MACROS card holds four macro knobs and the MATRIX, with every routing in one list (32 slots). Right-click any knob for *Modulate with*.

RANDOMIZE, UNDO and HELP

Right-click RANDOMIZE for **MILD**, **MEDIUM** or **WILD**; right-click a panel's title to lock it. RANDOMIZE never touches MASTER, tuning, voices, the arpeggiator, the macros or your MIDI MAP. **Cmd+Z** undoes (Ctrl+Z on Windows), **Shift+Cmd+Z** redoes (Ctrl+Shift+Z or Ctrl+Y), 100 steps back; both are also at the top of every right-click menu. Close a HELP tip with its × once you know it; right-click HELP to bring them all back.

MIDI MAP: play the controls from your keyboard

1. Click **MIDI** in the header. SOURCE starts on MOD WHEEL; pick another, or **LEARN** and move a knob on your controller.
2. **+ ADD** a control from the list, or choose **CUSTOM** and just touch the knob, slider or button you want (on any page).
3. Set its range with **FROM** and **TO**. Put TO below FROM to make it go the other way.

Shortcut: right-click any knob and choose *Map to MIDI*. Mapped controls show a small tag (MW, AT, CC74). Mappings are saved with your song, not with presets.

Presets and files

69 factory presets in 10 categories: Init, Mallets & Bells, Plucked, Bowed & Blown, Keys & FM, Chords, Pads & Drones, Leads & Bass, Textures and Texture Lab. Your own presets are saved as `.resona` files in `Music/Sequoia Synthesizers/RESONA/Presets`. In the sample browser, ↑ ↓ audition files, → opens a folder, ← goes up, Enter loads; press **ADD TO LIBRARY** once in your sample folder and the browser opens there every time.
