

Tessera Manual

Audio Damage, Inc.

Release 1.0



14 July 2026

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System Requirements

The following table summarizes the operating system requirements and formats provided for Tessera. Tessera is a 64-bit plugin.

Operating System	Minimum Version	Formats
macOS	10.13	AAX, AudioUnit, CLAP, VST3; Intel and Apple Silicon
Windows	10.0 version 1607	AAX, CLAP, VST3
Ubuntu	20.0	CLAP, LV2, VST3
iOS (separate purchase)	iOS 16	AUv3

Demonstration Version

We encourage you to download and try the demonstration version of Tessera before purchasing it. The demo version of Tessera is the same as the regular version, but has the following limitations:

- Presets cannot be saved, nor can parameter values or other settings. This includes the information usually stored by your host DAW. If you save a DAW session with an instance of the demo version of Tessera, the plugin will revert to its default state when you reload the session.
- Tessera will cease to emit audio altogether 20 minutes after you add it to your DAW session. You can remove it and add it again, but it will revert to its default state.

If you purchase Tessera after using the demonstration version, simply run the installer provided to you after your purchase to replace the demo version with the full version.

Introduction

Tessera is a tuned-resonator effect. It takes whatever audio you feed it and uses that sound to excite a bank of up to twelve tuned voices, each one ringing at a pitch you choose. You can think of each voice as a string, a bar, a bell, or a tube that rings when you strike it, except that here the thing doing the striking is your audio signal rather than a mallet or a pick. The result is your audio takes on a pitched, resonant character: drums become melodic, noise becomes harmony, a spoken word grows a halo of tone. Depending on how you set it up, Tessera can add a subtle shimmer to a sound, drape it in a lush chord, or transform it into something unrecognizable and new.

If you’ve used the legendary Lexicon hardware resonators, or the Rings Eurorack module by Mutable Instruments, you’ll have some idea of what Tessera does. Tessera grew out of our desire to have something like them in our own collection of plugins. It is not a clone of either of them, but we started with the same basic idea: exciting tuned resonators with arbitrary audio. From that beginning we added a number of things that we haven’t seen elsewhere.

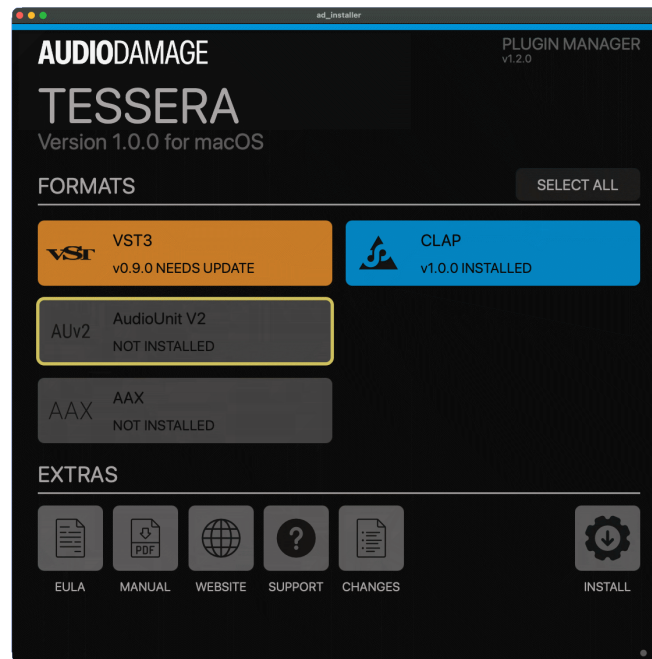
Tessera offers several different resonator models, ranging from the bright, plucked character of a Karplus-Strong string to a more elaborate string model with adjustable pick placement, to a family of physically-modeled bodies emulating singing wine glasses, Tibetan bowls, bells, and metal plates. Each model has its own timbre so the same input can be turned into anything from a guitar-like pluck to a choir of ethereal tones. You choose the pitches of the voices by picking a root note and a scale, and Tessera stacks the voices up across the scale to build a chord. You can also play the voices from a MIDI keyboard, if you’d rather choose the notes yourself in real time.

Each resonator is preceeded by a simple delay. Setting the delays to different times causes the resonators to ring at different times. Several different “engines” control the delay times, spreading their sounds out into an arpeggio, a strummed chord, a shifting mosaic, or a rhythmic sequence, all of which can lock to your host’s tempo.

This manual provides an overview of Tessera and detailed descriptions of all of its controls. You’re welcome to install it, start flipping through the presets, and twist knobs until something sounds good. That’s a perfectly fine way to get to know it. But Tessera has more going on under the hood than most effects, and you’ll get more out of it if you come back and read through this document once you’ve had a chance to play. We hope you enjoy using it as much as we enjoyed building it.

Installation

Tessera uses our custom plugin manager application for installation. Launch it as usual on your operating system of choice and you'll be presented with a window like this:



Near the top of the window, beneath the name of the plugin, you'll see the version number of the software carried by the installer. This is distinct from the version of the plugin manager itself, which is shown in the upper right and usually not of much interest. (Note that the version numbers in this screenshot are for demonstration purposes only and may not reflect the actual version numbers of the software at the time you read this manual.)

Under the heading FORMATS are large buttons corresponding to the plugin formats which can be installed: AAX, AU, CLAP, LV2 and/or VST3, depending on the operating system. If the plugin is already present on your system in one or more formats (i.e. if you're upgrading from a previous version), the corresponding button is drawn in blue. When possible, the version number of the existing plugin is also shown. If the installer contains a newer version of the plugin than the one(s) already installed, the button is drawn in orange to alert you to the fact that an update is available. If a format is not present on your system, its button is drawn in gray.

Click a button to select the format for installation. A yellow outline appears around the button to indicate that its format will be installed. In the above screenshot, VST3 and CLAP are installed, AAX and AudioUnit are not installed, VST3 is installed but older than the version contained in the installer, and the AudioUnit is selected for installation. Clicking a button a second time removes the yellow outline, and the corresponding format will not be installed. Clicking the SELECT ALL button selects all available formats for installation.

No changes to your system's storage device take place until you click the INSTALL button near the lower-right corner of the window. Click that button and you'll receive visual confirmation that the format(s) you've selected have been installed. (Yes, it happens quickly. Our products are not encumbered by any DRM or anti-piracy baggage and hence install more quickly than many others.) On Windows and Linux, if you hold down the Shift key on your keyboard, the INSTALL button's label switches to UNINSTALL, and clicking it will remove the selected formats from your system¹. Once you're installed and/or removed the formats you need, simply close the application in the usual manner for your operating system. You're done. There is no license code or other authorization necessary; we'd rather assume we can trust you than burden you with an onerous DRM system.

You'll find some handy buttons under the EXTRAS heading, all of which are pretty self-explanatory:

- EULA: presents the End-User License Agreement for our products. By clicking the INSTALL button you're implicitly agreeing to these terms, but we expect that you'll find them reasonable should you take the time to read them.
- MANUAL: opens the current version of this user manual, in PDF form, in your web browser.
- WEBSITE: opens the product's web page in your browser.
- SUPPORT: displays information for contacting us, either via our Discord presence or through email.
- SETTINGS: produces a panel in which you can choose the installation locations for each plugin format. Note that these locations are nominally stipulated by the publishers of the formats and changing them might cause problems for some hosts.
- CHANGES: displays a summary of what we've added, changed or improved since the last version of the product.

¹ Blame Apple, not us, for the lack of this feature on macOS. On macOS just manually delete the plugin(s) from your plugin folder(s).

Operation

Tessera is built around a bank of up to twelve tuned resonator voices. Your input signal is fed to all of the active voices at once. Each voice rings at its own pitch, determined by the root note, scale, and octave you choose, or by MIDI notes you play. Each resonator is preceded by its own delay line, so that the voices can be staggered in time rather than all speaking at once. The lengths of the delay lines are set dynamically by one of several engines, providing strumming, arpeggios, sequences, and other patterns. The outputs of the voices are mixed together, passed through a diffuser to smear and thicken the sound, and blended with your dry signal by the Mix control.

Most of Tessera's controls live in a single window. The engine controls and some of the resonator controls change depending on which resonator type and which engine you've selected, so don't be alarmed if a slider you saw a moment ago seems to have wandered off. Here is a picture of Tessera's window, followed by detailed descriptions of its controls.



Top Bar

The top bar follows the usual Audio Damage layout: the logo at the far left, the preset browser in the center, and the tempo-sync and settings controls at the right.

Clicking the Audio Damage logo in the upper left opens the About screen, which displays version information and credits. Click anywhere to dismiss it.

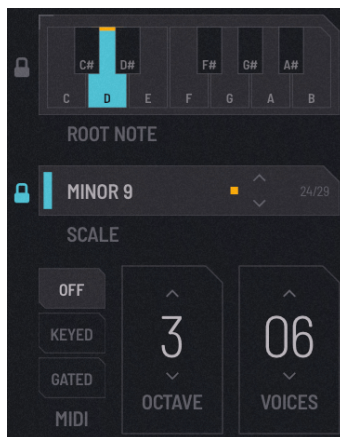
The preset button in the top center displays the name of the currently loaded preset. Clicking it opens the preset panel, where you can browse factory and user presets, save your own, and organize favorites. The chevrons to the right of the preset name step through the preset list one at a time. The star button marks the current preset as a favorite; click it again to remove the mark. There is more information about presets in the Presets section later in this manual.

The TEMPO SYNC button switches Tessera's delay engines between free-running and tempo-synced operation. When Tempo Sync is off, the engines' timing is set directly in seconds or milliseconds. When Sync is on, Tessera uses the tempo reported by your host application to calculate its timing in metrical units (i.e. fractions of a beat) so that the staggering of the voices locks to the groove of your song. Sync affects only the delay engines; it has no effect on the resonators, the vibrato, or anything else. The individual engines and the way they respond to sync are described later in the Delay Engines section.

Clicking SETTINGS opens the Settings panel, which contains global display and performance options. See the Settings section near the end of this manual.

Pitch and Voices

The controls on the left side of Tessera's window determine the pitches of the resonator voices: how many voices play, what notes they're tuned to, and whether those notes come from Tessera's own settings or from a MIDI keyboard.



The keyboard at the top left sets the root note. Click a key to choose the root; the selected key is highlighted. The root is the note that the chord or scale is built from. By itself the root doesn't pick a specific octave—that's the job of the Octave control below—it simply chooses which of the twelve pitches in the octave serves as the tonic.

The SCALE selector chooses the scale or chord that Tessera uses to tune its voices. When Tessera builds a chord from the root and scale it starts at the root and stacks the notes of the scale upward, moving up through the octaves as needed until all of the active voices have been assigned a pitch. Since there are up to

twelve active voices, a three-note scale like a triad will potentially be spread across several octaves, while the twelve-note Chromatic scale will fill all twelve voices within a single octave. The available scales are:

- Modes and scales: Major, Natural Minor, Dorian, Phrygian, Lydian, Mixolydian, Pentatonic Major, Pentatonic Minor, Blues, Whole Tone
- Triads: Major Triad, Minor Triad, Diminished Triad, Augmented Triad, Sus2, Sus4
- Seventh chords: Major 7, Minor 7, Dominant 7, Diminished 7, Half-Dim 7, Aug Maj 7
- Ninth chords: Major 9, Minor 9, Dominant 9
- Eleventh chords: Major 11, Minor 11, Dominant 11
- Chromatic

If you turn on the lock switches to the left of the Root Note control or Scale slider, the associated setting won't change when you load presets. The settings are always *stored* in presets but *retrieved* only when the corresponding lock switch is off. These locks may be useful while auditioning presets by keeping the root and/or scale in tune with your music while the other settings change.

The OCTAVE stepper sets the base octave—the octave of the lowest voice. Click the upper half of the stepper to move up an octave, the lower half to move down. Raising the octave shifts the entire bank of voices up, lowering it shifts them down.

The VOICES stepper sets how many of the twelve resonator voices are active, from one to twelve. With fewer voices, you hear a sparser, more transparent sound built from the lowest notes of the chord; with all twelve voices active, you hear the fullest, densest version of the chord. Naturally, more voices means higher CPU usage.

MIDI

The MIDI selector chooses how the voices get their pitches. It has three settings: OFF, KEYED, and GATED.

When MIDI is OFF, Tessler ignores incoming MIDI notes and tunes its voices itself, building a chord from the Root, Scale, and Octave settings as described above. This is the simplest way to use Tessler: pick a root and a scale, set the number of voices, and the chord is fixed until you change it.

When MIDI is set to KEYED, the notes you play on your MIDI keyboard set the pitches of the voices. Notes are assigned to the voices in round-robin fashion, so that each note you play takes the next available voice, up to the number of active voices set by the Voices control. The voices continue to ring after you release the keys, so you can build up a chord by playing notes one after another. Incoming notes are fitted to the selected Scale and shifted into range by the Octave setting, so the Root, Scale, Octave, and Voices controls all remain in effect. You can play freely or have your DAW fire random notes at Tessler and it will still stay in key.

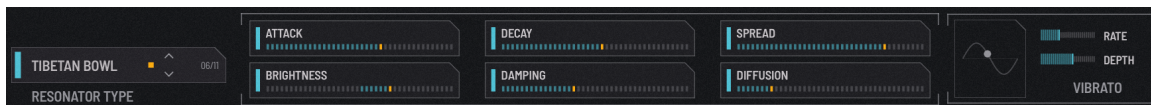
When MIDI is set to GATED, the voices sound only while you're holding keys down. The set of notes you're holding determines which voices ring and at what pitches; release the keys and the voices stop being excited. In this mode the notes play exactly as you press them. The Root, Scale, Octave, and Voices controls have no effect: the held notes are not fitted to a scale, and the number of voices sounding is simply however many keys you're holding. This mode is useful for playing Tessler more like an instrument, where the resonance follows your performance directly.

Microtuning with MTS-ESP

Tessler supports intonations other than the usual 12-tone equal temperament via the ODDSOUND MTS-ESP system. If there is a MTS-ESP Master present in your DAW, Tessler automatically connects as a MTS-ESP client and uses the tuning information presented by the Master.

Resonators

The resonators are the heart of Tessler. They are what actually rings in response to your audio, and the type of resonator you choose, more than any other setting, determines the basic character of Tessler's sound. The controls in this section choose the kind of resonator and shape the way it rings.



The RESONATOR TYPE selector chooses the model used by all of the voices. Tessler offers eleven types, which fall into three families:

- Karplus-Strong is a classic plucked-string model. It has a bright, simple, guitar-like character, and is the most economical of the three families in terms of CPU usage. It is a good starting point and an effective workhorse.
- String is a more elaborate waveguide string. It models the stiffness of a real string, which gives it a richer and more realistic tone than the Karplus-Strong model, and it adds a Stretch control of its own, described below.
- The remaining nine types are physically-modeled bodies built on a banded-waveguide technique: Uniform Bar, Tuned Bar, Glass Harmonica, Tibetan Bowl, Membrane, Bell, Plate, Clamped Bar, and Closed Tube. Each one rings with the characteristic overtones of the object it's named after, ranging from the metallic clang of a bell to the breathy shimmer of a glass harmonica. These types share an Attack control of their own.

Four controls are available for every resonator type:

The DECAY slider sets how long the voices ring after they're excited. At low settings the voices die away quickly, giving you a short, percussive response. As you turn Decay up, the voices ring longer and longer, sustaining into washes of tone. At its highest settings the resonators ring for a very long time, which if combined with a steady input signal can build up into a thick, sustained drone.

The DAMPING slider, shown as a percentage, controls how the high frequencies of the voices fade as they ring. At 0%, the voices are bright and ring for their full length. As you raise the Damping, the high frequencies are absorbed more quickly, so the sound grows darker and shorter as it decays, in the way that a real resonating object loses its high overtones first. At 100% the voices are dark and brief. Damping and Decay work together to shape the envelope and tone of the ringing: Decay sets the overall length, while Damping determines how the sound changes color over that length.

The SPREAD slider, also shown as a percentage, spreads the voices across the stereo field. At 0% the voices are all centered, stacking up into a mono chord. As you raise the Spread, the voices fan out to the left and right, the lowest and highest voices reaching the edges of the stereo image. A little Spread adds width and a sense of space; a lot of it places each note of the chord in its own distinct position.

The DIFFUSION slider, again a percentage, controls a diffuser that the summed voices pass through on their way to the output. The diffuser smears the sound in time, blurring the individual voices together and adding a sense of space and density, somewhat like a short reverb. At 0% the voices pass through cleanly. As you raise the Diffusion, the sound becomes progressively more washed-out and ambient, which can help knit a chord together into a single resonant texture.

String Position Control

When the String resonator type is selected, the POSITION slider sets the point along the string at which it is excited and heard, analogous to the position of a pickup on a guitar. Moving the slider changes which overtones are emphasized and which are suppressed, producing a range of timbres from round and mellow to thin and nasal. There is no single “correct” setting; it’s a tone control that you adjust by ear to suit the material.

Banded-Waveguide Attack Control

When any of the nine banded-waveguide body types is selected, the ATTACK slider controls the sharpness of each voice’s attack, that is, how percussively it speaks when it’s struck by your input signal. At low settings the voices respond softly, with a gentle onset. As you turn Attack up, the onset becomes harder and more immediate, emphasizing the initial transient of each strike. The musical effect is similar to the difference between striking a bar with a soft mallet and a hard one.

Vibrato

The vibrato section adds a gentle, periodic wavering to the pitch of the voices, in the manner of the chorusing built into the original hardware resonators. A low-frequency oscillator slowly raises and lowers the tuning of the voices, lending the otherwise static chord a sense of life and movement. The animated display shows the oscillator’s current speed and depth at a glance.

The RATE slider sets the speed of the vibrato, from a slow, barely-perceptible drift to a fast warble. The DEPTH slider sets how far the pitch moves: at its lowest setting there is no vibrato at all, and as you raise it the pitch swings more widely above and below the nominal tuning. A little depth adds warmth and shimmer; a lot of it produces an obvious, seasick wobble. The vibrato applies to all of the resonator types except String.

Delay Engines

Between your input and the resonators sits a bank of short delay lines, one for each voice. Rather than exciting all of the voices at the same instant, Tessera can arrange them in time, so that the notes of the chord arrive as an arpeggio, a strum, a rhythmic pattern, or a slowly shifting cloud. This arrangement is the work of an *engine*, and Tessera offers five of them: Contour, Seq, Strum, Arp, and Swarm. Only one engine is active at a time, and you switch between them with the ENGINE selector. The display to the right of the selector and the controls beneath it change when you choose an engine.

Four of the engines—Contour, Seq, Strum, and Swarm—work by staggering the voices’ delay lines, holding some voices back so that they speak later than others. The fifth, Arp, works differently: it plays the voices one at a time, like an arpeggiator. Each engine is described in turn below.

The ENGINE selector chooses which of the five engines is driving the voices. Its cells are stacked vertically, each carrying a small animated emblem above the engine’s name. Below the selector are that engine’s own controls, described below, along with the FEEDBACK slider, which is shared by all of them.

The FEEDBACK slider feeds each voice’s delayed signal back into its own delay line, so that the staggered pattern repeats. At zero, each voice is excited once and the pattern plays through a single time. As you raise the Feedback, the pattern echoes, each repeat quieter than the last, building the voices into a rolling, cascading texture. Because the Arp engine excites the voices directly rather than through the delay lines, the Feedback slider is hidden when the Arp engine is active.

Remember that the TEMPO SYNC button in the top bar governs the timing of all five engines. With sync off, the timing controls described below can be set freely to any time interval. With sync on, they snap to metrical values (note lengths and bars) locked to your host’s tempo.

Contour

The Contour engine lays the voices out along a shifting diagonal line, so that their delay times rise and fall gently across the bank. It is the most abstract of Tessera’s engines, and well suited to washes and clouds of sound rather than distinct rhythmic events. An animated display shows the resulting delay of each voice as a row of points, so you can see the shape of the contour as you adjust it.



In technical terms, the Contour engine uses a static triangle wave to set the delay times. Equally spaced points along the wave set the delay times. Varying the amplitude, frequency, and phase of the triangle wave creates shapes ranging from a straight line to simple ramps, on up to seemingly random scatterings of points. Animating the wave by slowly changing its phase cause the shapes to shift over time, dynamically changing the delay times.

The AMPLITUDE slider sets the maximum amount of delay. At zero, all of the voices are excited together, with no staggering at all. As you raise the Amplitude, the possible spread between the earliest and latest voices grows, stretching the contour out in time. With tempo sync on, full amplitude spans one bar; with it off, it’s eight seconds.

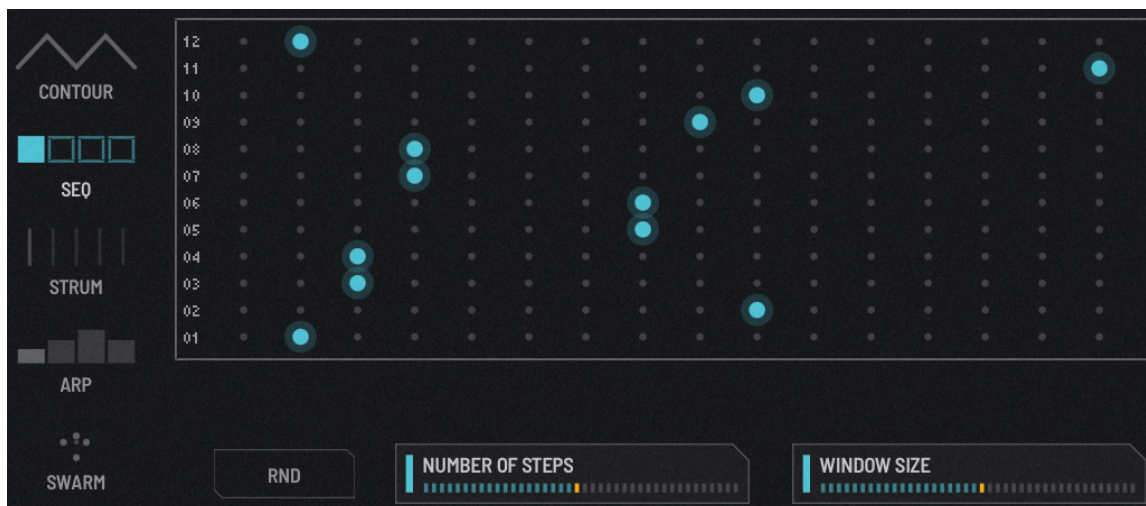
The FREQUENCY slider sets the shape of the contour across the twelve voices. At its lowest setting the delays have the same value. Increasing the frequency changes the contour from a straight line to a simple ramp, rising steadily from the first voice to the last or vice-versa depending on the setting of the Phase slider. As you raise the Frequency, peaks and valleys appear in the line, so that the delays rise and fall across the bank, and at higher settings still more of them are packed into the same twelve voices, so the delays zig-zag back and forth and the voices interleave in more intricate ways.

The PHASE slider slides the whole contour across the bank of voices, shifting which voices sit at the peaks and which at the valleys. On its own it lets you fine-tune the arrangement; combined with Animate, it becomes the thing that moves the contour.

The ANIMATE slider sets Phase into slow motion, scrolling the contour continuously across the voices so that the pattern of delays is never quite still. At zero the contour holds its position. As you raise the Animate rate, the pattern drifts faster and faster, the shifting delays lending the chord a restless, evolving quality.

SEQ

The Seq engine is a step sequencer for the voices. It divides a span of time into a number of equal steps and lets you place each voice on whichever step you like, so that you can compose an exact rhythm of entrances rather than relying on a curve to arrange them. It is the engine to reach for when you want the voices to arrive on a deliberate pattern—an arpeggio, a gallop, a syncopated figure.



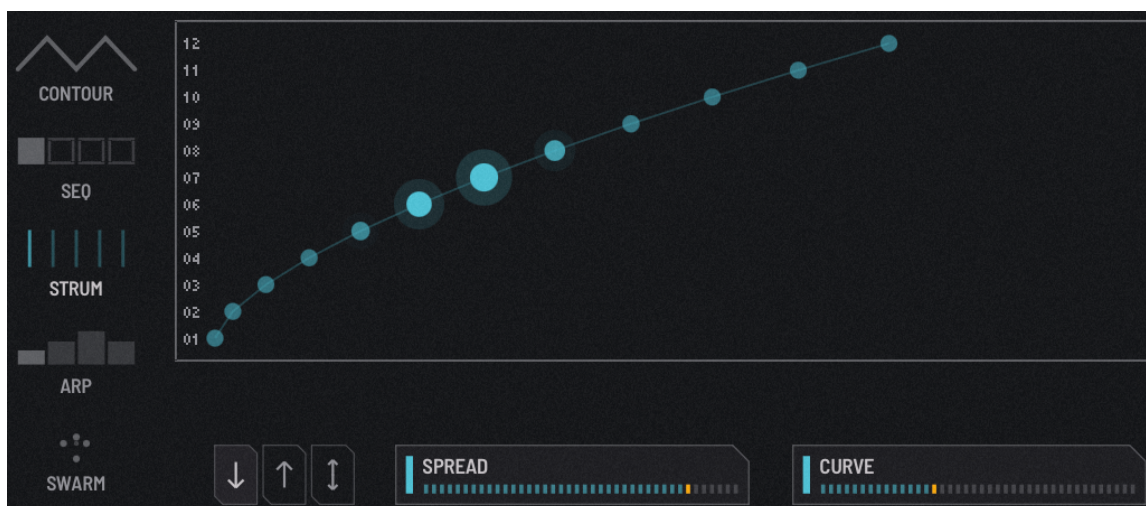
The step grid is the heart of the engine. It has one row for each of the twelve voices and one column for each step; click a cell to move that voice to that step. A voice placed on the first step is excited immediately, and a voice placed later is delayed in proportion to how far along it sits.

The STEPS control sets how many steps the span is divided into, from one to thirty-two. Fewer steps give you a coarse grid with each step lasting longer; more steps give you a finer grid for tighter, more detailed patterns.

The WINDOW control sets the total span of time covered by the length of all the steps together. With tempo sync off, the window runs from 100 milliseconds up to eight seconds. With sync on, it snaps to a note value: 1/16, 1/8, 1/4, 1/2, one bar, or two bars. The length of a single step is always the window divided by the number of steps, so Window and Steps together determine how much time each step represents.

Strum

The Strum engine staggers the voices in pitch order, much like a hand strumming across the strings of a guitar. Each voice is excited a little after the one before it, from the lowest note to the highest or the reverse, turning the chord into a quick, expressive sweep. It is one of the most immediately musical of Tessera's engines, and a natural fit for chordal material.



The SPREAD slider sets the total strum time, from the first voice to the last. At low settings the strum is quick and tight, the notes arriving almost on top of one another; at high settings it becomes a slow, deliberate rake. With tempo sync off, the spread ranges from about ten milliseconds up to two seconds; with sync on, it snaps to a note value from 1/16 up to two bars.

The DIRECTION selector chooses which way the strum runs. DOWN strums from the lowest voice up to the highest, UP strums from the highest voice down to the lowest, and ALTERNATE flips the direction on each pass, strumming down, then up, then down again, for a back-and-forth motion.

The CURVE slider shapes the timing, changing whether the imagined pick moves across the strings at a steady speed or speeds up and slows down. At its center position the voices are evenly spaced. Turning it one way clusters the voices toward the start of the strum, as though the pick accelerates across the strings; turning it the other way clusters them toward the end, as though it slows down. It is a subtle control, but it makes the difference between a mechanical strum and one with a human feel.

The RATE slider applies only when Direction is set to Alternate, where it sets how quickly the strum flips between down and up. With tempo sync off, it runs from a held position at zero up to several flips per second; with sync on, the flip rate snaps to a note division locked to your host's tempo. With Direction set to Down or Up, Rate has no effect.

Arp

The Arp engine is a true arpeggiator. Instead of staggering the voices' delays, it excites them one at a time, stepping from voice to voice while the others ring out undisturbed. Where the other engines sound the whole chord and merely spread it in time, Arp picks the chord apart into a running line of single notes, producing a classic arpeggio but driven by your input signal. An animated display traces the playhead as it steps through the voices.



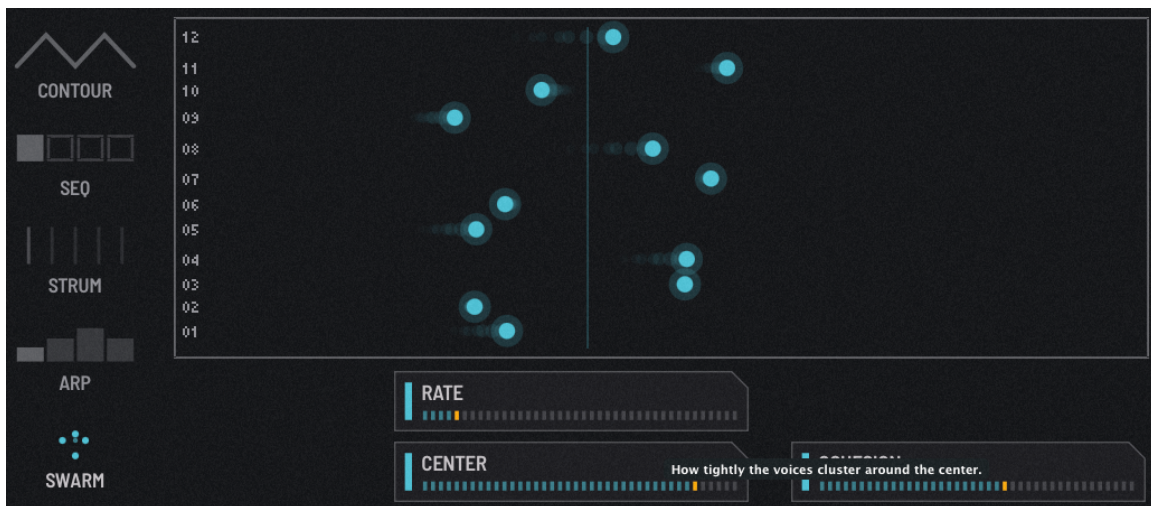
The RATE slider sets the speed of the arpeggio by setting how quickly the playhead steps from one voice to the next. With tempo sync off, it runs from a slow step up to twenty steps per second; with sync on, it snaps to a note division from one bar down to a thirty-second note, locking the arpeggio to your host's tempo.

The GATE slider sets how much of each step the active voice is excited for, effectively setting the note length. At low settings each voice is struck only briefly, giving a crisp, staccato arpeggio; as you raise it, the excitation lengthens and the notes run together into a smoother, more legato line. Because the voices ring out on their own once struck, Gate shapes the sharpness of the pattern rather than cutting the resonance short.

The ORDER selector chooses the path the playhead takes through the voices. UP steps from the lowest voice to the highest, DOWN from the highest to the lowest, UP/DOWN runs to the top and back in a ping-pong, and RANDOM picks a fresh voice at each step for an unpredictable, ever-changing pattern.

Swarm

The Swarm engine sets the voices adrift. Each one weaves its own slowly-evolving delay around a shared center that is itself wandering, like a flock of birds holding a loose formation while the whole group drifts across the sky. The voices never quite settle: their delays shift continuously and independently, so the resonators speak at ever-changing times, giving a living, organic motion that none of the other engines produce. An animated display shows the flock as a cluster of points, breathing and drifting around its center.



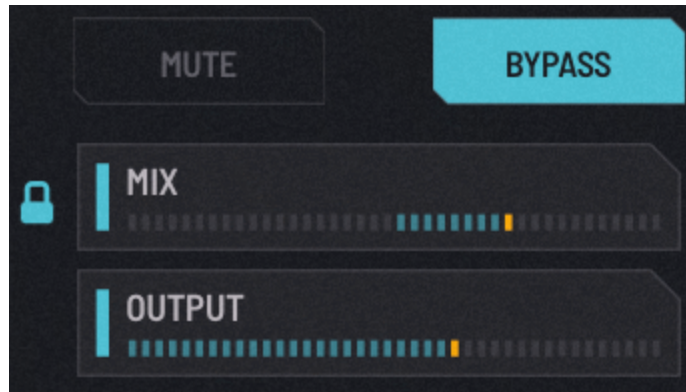
The CENTER slider sets the size of the region the swarm moves within, setting the average amount of delay. At low settings the voices cluster close to the input, their delays short and their motion tight; as you raise it, the whole flock spreads out over a longer span of time. With tempo sync off, the center reaches up to about six seconds; with sync on, it snaps to a note value.

The RATE slider sets how fast the swarm moves—both the drift of the center and the weaving of the individual voices. At low settings the motion is slow and gentle, the delays creeping almost imperceptibly; as you raise it, the flock grows more agitated and restless. With tempo sync on, the drift locks to a note division of your host's tempo.

The COHESION slider sets how tightly the voices hold together. At high settings they stay in a tight cluster around the center, moving almost as one; as you lower it, they spread out and roam more independently, each wandering further on its own path. High cohesion gives a focused, unified drift; low cohesion, a loose and diffuse cloud.

Global Controls

In addition to the sections above are a handful of master controls that govern Tessera's output as a whole, independent of the resonators and engines.



The MIX slider sets the balance between your dry input and Tessera's resonant output, shown as a percentage. At 0% you hear only the dry signal, with the effect entirely out of the way; at 100% you hear only the wet, resonated sound. Intermediate settings blend the two, which is the usual way to use Tessera as an effect, dialing in as much of the resonance as suits the track while keeping the original signal present underneath.

If you turn on the lock switch to the left of the Mix slider, the mix setting won't change when you load presets. The mix setting is always *stored* in presets but is *retrieved* only when the lock switch is off. This can be useful for auditioning presets when you're using Tessera on an effects channel and hence always using a mix setting of 100%.

The OUTPUT slider sets Tessera's final output level, shown in decibels. It tops out at 0 dB, unity gain, and attenuates from there, giving you a way to trim the level to match the rest of your project or to tame a patch that's ringing hot.

The BYPASS button takes Tessera out of the signal path, passing your input through unchanged.

The MUTE button silences Tessera's output altogether. It's useful for stopping a long, ringing decay in its tracks, or for dropping the effect out of a mix momentarily without disturbing any of your settings.

Settings

Clicking SETTINGS in the top bar opens the Settings panel, a small window of global preferences. These settings apply to Tessera as a whole rather than to any single preset, and they persist across sessions. Click anywhere outside the panel to dismiss it.

SHOW TOOLTIPS turns the hover tooltips on and off. With it enabled, resting the mouse over a control brings up a short description of what it does. Leave it on while you're learning your way around, and switch it off once the controls are familiar if the tips are annoying.

TAILS determines whether the resonators continue to ring after you engage the Bypass button, or whether they're cut off immediately when Bypass is turned on mid-signal.

HIGH CONTRAST boosts the contrast of Tessera's user interface which may be useful in some lighting conditions or to suit your preferences.

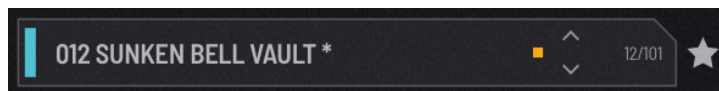
Click the SAVE button to store the current settings as your defaults, so that Tessera opens with the same preferences the next time you launch it. Changes you make in the panel take effect immediately, but they aren't remembered for next time until you click Save.

Automation

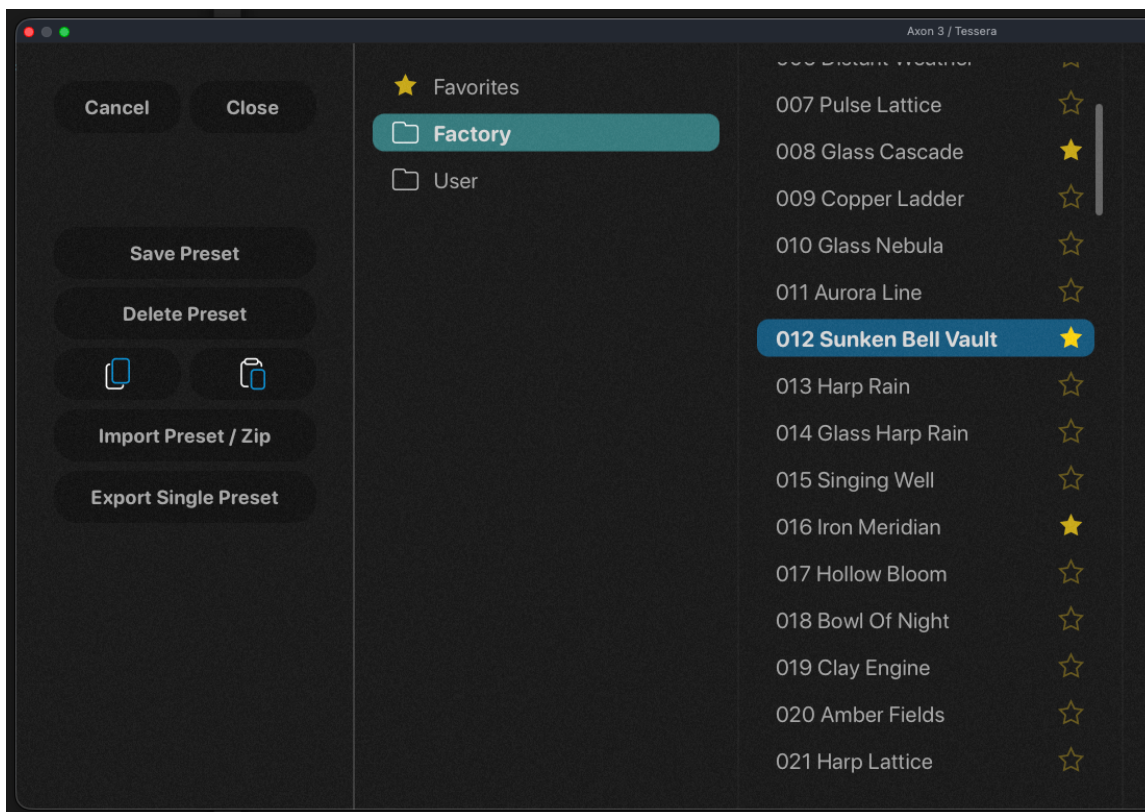
All of Tessera's sliders and switches can be automated using your host's automation features, with one exception: the SEQ engine's step pattern is stored as part of the preset rather than as an automatable parameter, so it can't be recorded or automated from your host. Consult your host's documentation for information on how to use its automation features.

Presets

Tessera includes a collection of presets to serve as a demonstration of its capabilities and inspirations for your own creations. There are a few controls at the top of the window associated with presets:



The name of the current preset appears in the center. (You probably figured that out yourself.) Clicking the little chevrons on the right loads presets in alphabetical order. Clicking the star outline marks the preset as a favorite to help you find it again in the future. To examine all of the presets, click the name of the current to open the preset browser.



The browser displays presets and folders in scrollable lists, arranged in columns. The leftmost list shows the folders within Tesseract's preset collection, grouped in two categories: Factory and User. Clicking any of these folders reveals its contents in the next list. Clicking on a preset name loads the settings into Tesseract. Click the CLOSE button in the preset browser to dismiss it. If you click the CANCEL button instead, the browser closes and Tesseract's settings revert to their previous state. Double-clicking a preset name loads the preset and dismisses the preset browser. Loading a preset irretrievably erases the current settings, so if you have created something that you want to use again, save it as a new preset before loading another preset.

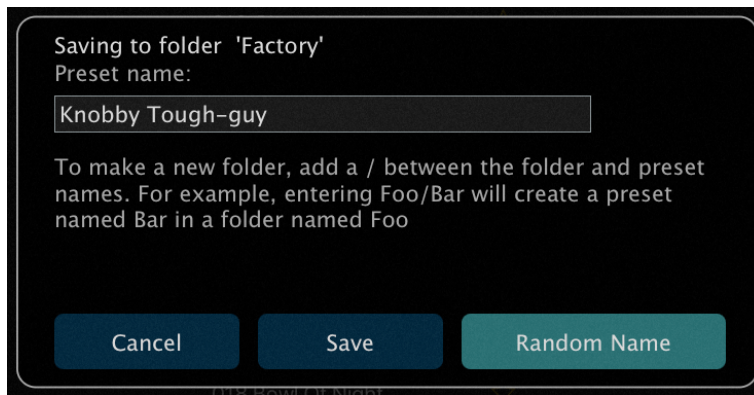
Once you have clicked on any item in the panel, you can navigate within the preset browser with the keys on your keyboard. The left and right arrow keys move the selection between columns, and the up and down arrow keys move it within the list. Tapping the ESC key has the same effect as clicking the Cancel button.

Just like the star at the top of the window which we mentioned previously, the stars to the right of preset names mark presets as favorites. Clicking a filled star removes the mark from a favorite. Once you've marked at least one favorite, a correspondingly named category appears in the leftmost column. Clicking it shows you all the presets you've marked, and clicking their names loads them as usual.

The folders and presets in the browser correspond to folders and files within Tesseract's own folder on your storage device (i.e. your computer's hard drive or SSD). This folder is located at `C:\ProgramData\Audio Damage\Tesseract\` on Windows, and `~/Music/Audio Damage/Tesseract/` on macOS and Linux. You can store your presets anywhere you like, but for them to show up in the User list they must be placed in the User folder within Tesseract's folder. Also, to avoid possible collisions during future updates, do not store your presets within the Factory folder.

Any folders you create within the User folder will show up as folders in the User list. You can create sub-folders within the User folder, and sub-folders within those folders. You can't nest folders deeper than that because the preset browser has only four lists.

To save your presets, click the SAVE PRESET button at the left edge of the window. This invokes a dialog box with a couple of helpful features. As the text therein describes, you can create a folder within the destination folder (whose name is given at the top of the dialog box) by adding the folder's name to the beginning of the preset's name, separated by a slash mark.



Clicking the RANDOM NAME button replaces the preset's name with a pair of words chosen at random from two lists. While the resulting names won't have any connection with what the plugin is doing, you may find this feature useful for coming up with alternatives to routine names like "My Preset 12".

Potential pitfall: once you've saved a preset, clicking its name in the list loads the preset, overwriting whatever changes you've made since you saved the preset. Hence if you want to save the preset again to preserve the changes you've made, do not click on its name before saving it.

You can delete presets and folders from the lists by clicking their name and then clicking the DELETE PRESET or DELETE FOLDER button. Tessera will give you a chance to confirm this action or cancel it. If you confirm, the preset/folder will be removed from your storage system and is gone for good.

Importing and Exporting Presets

Preset files are plain-text XML files so that you can exchange them online in forums, copy them between a Windows computer and a Macintosh (and even between an iPad and a regular computer), email them to your friends, etc.

The two buttons with icons representing copying and pasting (copy on the left, paste on the right) copy Tessera's current settings to the system clipboard and paste settings from the clipboard. You can use the copy and paste commands to transfer settings between two instances of Tessera or paste the settings into an email message or text editor. When copied to the clipboard, presets are presented in the same XML text as used in preset files.

The IMPORT PRESET/ZIP button provides a way to add presets to Tessera without manually moving them into the appropriate folders in your file system. Clicking this button produces a file-browser window wherein you can select either a single preset file or a .zip file containing one or more presets. After you select the file, Tessera copies the preset(s) into whichever folder you have selected in Tessera's preset list, unzipping the file first if necessary.

Depending on whether you've selected a preset or folder, the EXPORT SINGLE PRESET or EXPORT FOLDER AS ZIP button performs the complementary functions of the Import button. First select either a preset or a folder in Tessera's list, then click the export button. A file-save window appears; choose a location in your file system, give the file a name, and click SAVE. If you have chosen a folder in Tessera's preset list, the plugin places it and all of the presets it contains in a .zip file.

Default Preset

If you save a preset with the special name "Default" in the User folder, new instances of Tessera will load it automatically when you add it to your DAW session. You can use a default preset file to give yourself the same starting point with Tessera whenever you use it. The plugin installer creates a default preset file for you but feel free to replace it with your own.

And Finally...

Thanks for purchasing Tessera. We make every effort to ensure your satisfaction with our products and want you to be happy with your purchase. Please write to support@audiodamage.com if you have any questions or comments.

Document Revisions

- 2026-07-10: Initial draft for version 1.0
- 2026-07-14:
 - Added descriptions of lock controls
 - Updated screenshots