

**Shreddage 3 Fretless Product Manual** 

An Impact Soundworks Instrument for Kontakt Player 6.7+

## Introduction

**Shreddage 3 Fretless** captures the iconic sound of an Ibanez SRF705 fretless bass guitar and transforms it into an eminently playable virtual instrument. Recorded with DI and two amp channels, S3 Fretless delivers the smooth, mellow tone that fretless basses are legendary for.

This library also features the debut of our Shreddage 3.5 engine, rebuilt for improved clarity and usability. It's now easier than ever to switch styles, tweak articulations, and customize the instrument however you'd like. Read on below to learn more about both the new and returning functionality!

Shreddage 3 Fretless can go far beyond the role of a traditional bass and truly "sing" in the upper register, also known as the highly sought-after "mwah" tone. Whether you're writing jazz, blues, new age, fusion, or heavy genres, this instrument can elevate any track and fit in any mix.

We hope you enjoy it as much as we do!

## Installation

1. Install the **Pulse** application if you don't already have it. **Pulse** is a cross-platform desktop app that lets you download and install your libraries with blazing speed! You'll need to create an account here, but once you do, you can access your purchases from **any** developers using **Pulse**, anytime, from any computer.

#### https://pulsedownloader.com/

- 2. Once **Pulse** is installed, open it and enter your **Shreddage 3 Fretless** product code. Follow the instructions to download and install the library.
- 3. Open Native Access, click "Add a Serial", and input the same product code to activate the library.
- 4. Once activated, click "View Products Not Installed". Find **Shreddage 3 Fretless** in this list. Click the "Add Library" button to the right, and select the folder where Pulse downloaded the library. This completes the installation process.

# **Shreddage 3 Performance Engine**

As with all Shreddage 3 instruments, S3 Fretless features recordings of every string, from the "open" position all the way up the neck. This means many pitches are sampled multiple times on different strings, which yields a different tone depending on which string is played.

For example, the note G3 is playable on *every* string of the instrument!

The Shreddage 3 engine features an advanced algorithm that emulates how a real bassist would perform notes across different strings and fret positions. When a MIDI note is received, Shreddage 3 will evaluate a number of factors to determine the best string & fret to place that note. These factors, which are weighted differently depending on your performance settings, include things like:

- What other strings are being held at the same time
- Whether the new note is played legato or not (and if so, the legato settings)
- The **virtual hand** position
- Any "force string" settings
- Fretting Mode selection

Shreddage 3 uses a virtual 'hand' to guide fret & string selection. This generally means if you are playing on the lower frets, new notes will *also* be placed on lower frets. If you are playing high up on the neck, new notes will *also* end up in that range.

However, for most users, you **don't have to worry** too much about any of this, outside of selecting the Performance Style you want and possibly moving the Hand Position as desired.

# **Snapshots and Script Tabs**

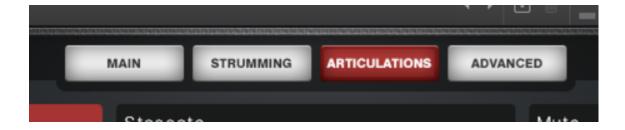
Shreddage 3 uses Kontakt's native "**snapshots**" feature to handle various types of presets. We've extended this feature allowing you to save and load **specific types of snapshots** without overwriting your entire patch.

Data is loaded and saved in three areas.

1. The main engine performance settings ("Shreddage Engine" bottom tab), which includes the "Main", "Strumming" and "Advanced" top tabs



2. The Articulations top tab, which contains all articulation mapping info



3. The Console bottom tab, which has all FX and mixer settings



Each of these tabs can save or load its data **independently!** For example, you can load a bass tone from **Console** without affecting your mapping, or load a specific performance preset without affecting your tone.

At the bottom of each tab's UI, you'll see two icons in the lower left and lower right: a Lock, and a Camera.

When the **Lock** icon is **enabled** (white), the contents of that tab **will not be overwritten** when you *load* a new Snapshot.

When the **Camera** icon is **enabled** (white), the contents of that tab will be **saved** when you save a snapshot.

Snapshots in the factory library are split into three categories: Performance (Shreddage Engine), Tone (Console), and Mapping (TACT). Each snapshot has been saved with data from one specific tab. However, you can save *your own* snapshots using whatever combination of tabs you'd like. Make sure to check your Lock/Camera settings when saving and loading.

# **Shreddage 3 Fretless Interface**

**IMPORTANT:** Virtually every knob on the interface can be MIDI learned! Simply right click and then move the desired MIDI CC to create a link. Also, you can **hover** over any control to see help text at the bottom of the Kontakt UI. Try it!



# **Tone & Signal Controls**



**Volume:** Affects the overall gain of the instrument, pre-FX.

**Tone:** Controls a gentle pre-FX lowpass filter on the entire instrument. Lower values result in a darker tone.

**Signal Switch**: Switches the signal between DI, amp w/ e902 mic, and amp w/ SM57 mic.

**Eco (Leaf Icon)**: When enabled (white coloring), Voices will only be played for the currently selected pickup, saving CPU resources. This will be ignored if the volume blend is adjusted in Console.

# **Main Page Controls**



**Performance Style**: Selects from various preset styles that change how the virtual bassist picks what strings and fret positions to play.

- Standard: Plays lower on the neck and prefers open strings. This is good for solid bass parts.
- Solo Melody: Plays high on the neck in 'mono' mode, perfect for singing leads.
- **Solo Virtuoso**: Also plays high on the neck, but has Poly Input enabled and mono OFF, making it easier to play realistic chords and strums in between riffs.

- **Custom**: Allows you to set your own preferences.
- **Keyboard Mode**: When enabled, the regular string/fret selection algorithm is disabled. You can play *unlimited* notes "per string", and every MIDI note is pre-assigned a specific string/fret. In other words, the instrument will behave like a traditional workstation keyboard patch, which may be more useful in some situations.

**Mono**: When enabled, only one note can be played at a time. Overlapping notes will always trigger legato.

**Bite**: Applies an EQ to all signals pre-FX, adding more brightness and removing some low-mid 'body' from the sound. The resulting tone becomes more and more aggressive as the knob is increased.

**Extra Attack:** Adds an emphasized pre-transient pluck noise to notes. This scales with velocity, so playing softly will result in quieter attacks. This is useful for emphasizing some notes and not others.

**Pitch Bend Range**: Changes the maximum range for the MIDI pitch bend message, defaulting to +/- 2 semitones. This means that when your pitch controller (hardware, or in automation) is at maximum or minimum values, the instrument will be shifted down or up 2 semitones.

**Unison Bend**: When moving this knob above minimum value, the LOWEST held note will be pitch bent, as long as the lowest note is no more than a perfect fourth away from the higher note.

**Vibrato Amount**: Introduces pitch modulation (vibrato) into the sample. The specific vibrato settings can be adjusted by clicking the gear icon.



(Vibrato) Controller: Selects from either modwheel (CC1) or aftertouch to trigger vibrato.

(Vibrato) Mode: Only Emulated vibrato is available in Shreddage 3 Fretless.

(Vibrato) Speed: The speed of the vibrato oscillation.

(Vibrato) Depth: The maximum intensity of the vibrato.

**Poly Input Latency:** When this knob is above 0 ms, a small amount of latency (controlled by the knob) is introduced before sample playback. The S3 Engine will capture any notes played within that latency window and create more realistic voicing for playback. Think of this as a "**Lookahead**" that results in better performances when playing chords or other polyphonic parts.

The latency applies to the following: playable range bass notes when strum mode is OFF, thrash notes, slide notes, full strums, partial strums, and individual string picks. In other words, any triggers that play actual sounds.

The latency does not apply to the following: playable range bass notes when strum mode is ON (to set the voicing), midi CC changes, midi pitch bends, TACT keyswitches, Shreddage 3 custom keyswitches, strum mode keyswitches.

**NOTE I**: For very fast bass parts, we recommend setting the latency **very low or at 0ms!** The polyphonic fretting placement will **interfere** with the natural fretting of the algorithms and fast passages will quickly devolve into fretting placements that jump around the fretboard, which is anatomically impossible and creates an unnatural tone.

For reference, 16th notes at 120BPM are **125 ms** apart. Playing passages at, or faster than, 120 BPM 16th notes at 125 ms latency will result in malfunctioning fretting selection.

**NOTE II**: Even when latency is set to 0 ms, S3 is programmed to always process a tiny default latency of 50 microseconds (or 0.05 ms) so that chords blocked in plainly in your MIDI editor will still work perfectly! Try with Strum On Poly for very quick and easy realistic chord parts with **effectively no latency**.

Additionally, this default latency enables processing of features listed above (such as keyswitches) before latency features (like note playback and strums). This means you can **always** place a keyswitch at the same grid position as a note, or in strum mode, you can place a chord voicing at the same grid position as a strum trigger. This is intended as a quality of life improvement for MIDI editing so that the user isn't required to nudge keyswitches or chord voicings behind the grid.

Finally, it is recommended to program the DAW track's offset to negate the **Poly Input Latency**. In other words, if the latency is set to 50 ms, programming the DAW track offset to -50 ms allows the user to compose on the DAW grid with confidence.

**Responsiveness**: Controls the sample playback offset for all groups. Note that all samples were edited to preserve a certain amount of pick and pre-pick sound, so while increasing this makes the instrument more responsive, it does decrease the amount of realistic noise in each sample. This offset value is mixed with other offsets for specific articulations and strokes.

## The Fretboard



Shows what notes are being played on which strings and frets. Note that you can drag horizontally across the fretboard to set a virtual **capo** position, which changes how the fretting and playback engine will select notes realistically.

**Capo Position**: Guitar-style transposing by placing a "virtual clamp" in shape of a wooden or metal bar on a particular fret. This can be automated by right-clicking. If Capo Position parameter has a larger value than Hand Position, Hand Position is disregarded. The Capo is used to allow a transposed set of open strings.

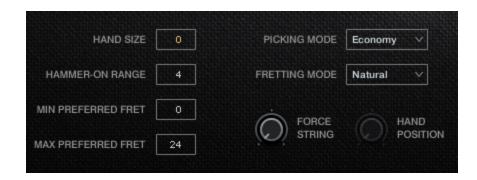
**Fretting Mode**: Selects which performance algorithm should be used. The factors described above will be evaluated differently depending on which mode you select.

- Natural: This mode is the most common usage for leads and leads mixed with chords created by
  polyphonic input. The fretting follows the hand size, where a bassist will ascend up and down strings to
  play notes at a static hand position.
- **Sweep**: This mode is very similar to Natural fretting, with the sole exception that it will slightly prioritize playing notes on adjacent strings a little more to simulate the sweep picking technique used in fast bass playing.
- **Moving Lead**: This mode is similar to Natural fretting but ascends the hand slightly when moving to strings upward in pitch. This allows a three-octave range for scales at a static hand position from bottom string to top string instead of two (assuming a 6-string guitar). The same range played in Natural mode would play the last octave all on the last string, which is not ideal.
- Polyphonic: Prioritizes using as many strings as possible simultaneously. This is ideal for any kind of chordal playing, ensuring that each note of your chord is played (as opposed to triggering legato, fret changes, etc.)

**Force String**: Selects a single string that will be used for **ALL** played notes, if possible. The 'forced' string will be highlighted on the fretboard.

**Hand Position**: Sets the fret at which the hand starts its reach to other frets (taking Hand Size into account). Notes that don't fit into this hand position and size will play outside of the range, but will not move the virtual hand from this position.

# **Playback Engine Controls**

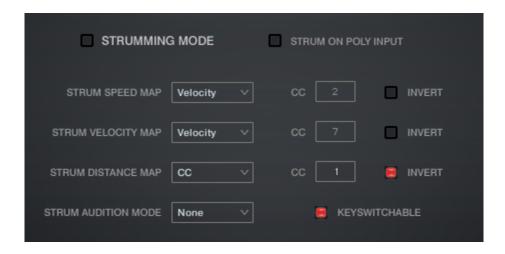


**Min/Max Preferred Fret**: The values set a range that the guitarist will *generally* prefer to play in. This is most meaningful for the **first** note played, as once other notes are being played, the other factors described above will be evaluated as well.

**Picking Mode**: Selects the type of picking behavior to use. Options are:

- **Up**: Only UP strokes will be used.
- **Down:** Only DOWN strokes will be used.
- Alternate: Up and down strokes will be alternated with each note.
- **Economy**: When changing a string, stroke direction that was used on the last note played on the previous string is preserved for the first note played on the new string, then alternates from there.

# **Strumming Page Controls**



This feature allows you to easily play realistic-sounding strummed chords without finicky MIDI input or careful sequencing. There is now a dedicated "**Strumming Mode**", but all strumming features (with the exception of Strum Audition) can be used even in regular performance mode!

Before going over the controls, you can look at the dedicated strumming keyswitches located above the instrument's normal playable range:



**Strumming Keyswitches (Pink Notes)** 

**F#5**: Toggles **Strumming Mode** on or off. (Only available if Strumming Mode is set to "Keyswitchable")

**G5**: Toggles **Strumming Mode** to the opposite of what is currently set in the GUI when pressed down, and returns to the previous setting when released. This is used in either mode to quickly and temporarily switch modes. (Only available if Strumming Mode is set to "Keyswitchable")

**G#5**: Plays a **downstrum** (all downstrokes). The strummed notes are whatever is being held in the normal playable range. The **speed** and **dynamic** of the stroke is based on the control settings on the Strumming Page (see below).

**A5**: Plays an **upstrum** (all upstrokes), again based on what is being held in the normal range.

**A#5**: Plays a **partial downstrum**. This plays an downstrum starting from the bottom string, with the engine selecting the number of strings travelled based on the **Strum Distance** setting (see below).

**B5**: Plays a **partial upstrum**. This plays an upstrum starting from the top string, with the engine selecting the number of strings travelled based on the **Strum Distance** setting (see below).

### **Picking Keyswitches (Light Blue Notes)**

Starting with **F#6**, each note here corresponds to a string, starting with the lowest string. Playing one of these notes will pick the note that is being voiced on that string. If no note is voiced on the selected string, the algorithm chooses another valid string to play, so that all string pick keys will ensure a played note.

This allows you to retain the same picking patterns in MIDI data while changing the chords that are voiced on the strings, which is a common way of playing bass in many pop and rock songs.

This is a very useful and musical way of triggering notes from a chord: give it a try!

### **Strumming Controls**

**Strumming Mode**: When strumming mode is turned ON, playable range notes no longer result in sound playback. Instead, the fretboard algorithm will visually display the most recent notes held together (up to the number of available strings), re-calculating the shown voicing on every new note to select the best and most natural way to play the chord. This voicing is stored in perpetuity, so all string picks and strum triggers with act on this voicing.

**Strum on Poly Input:** When Strum Mode is disabled, notes played within the Poly Input Latency window will activate a full downstrum following the strum mappings for timings and velocities. Using this option, you can seamlessly mix strummed chords and lead/melody parts without doing any keyswitching at all!

**Strum Speed Map**: Selects how the speed of strums is modified, either by using velocity or by using a MIDI CC.

**Strum Speed CC**: This CC is used for calculating strum speed when CC is selected in Strum Speed Map menu.

**Strum Speed Invert**: Invert the input values when calculating strum speed.

**Strum Volume Map**: Selects how is the volume of strums modified, either by using velocity or by using a MIDI CC.

**Strum Volume CC**: This CC is used for calculating strum volume when CC is selected in Strum Volume Map menu.

**Strum Volume Invert**: Invert the input values when calculating strum volume.

**Strum Distance Map**: Selects how is the distance of partial strums modified, either by using velocity or by using a MIDI CC.

**Strum Distance CC**: This CC is used for calculating partial strum distance when CC is selected in Strum Distance Map menu.

**Strum Distance Invert**: Invert the input values when calculating partial strum distance.

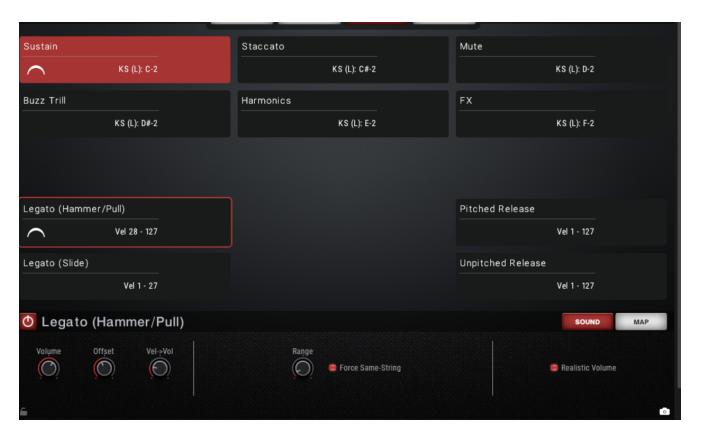
**Strum Audition Mode**: Setting this to New Note will play new individual notes in the playable range. Setting this to All Notes will play all current stored notes in the set voicing on every new note.

Hint: Set to "New Note", you can essentially play notes in the playable range with full confidence that they will be voiced polyphonically and as close to the actual voicing as possible. This can be just as, if not more effective than the **Polyphonic** fretting mode.

**Keyswitchable**: This control will activate the keyswitches that can toggle strumming mode on or off. Deactivated by default to prevent accidentally swapping modes.

## **Articulations Tab Controls**

Our "Total Control Articulation Control" technology has been upgraded to v3 in this product, offering more convenience and power in a single UI!



### **Enable / Disable Articulations**

An articulation can be disabled or enabled by **alt+clicking**, or pressing the **Power** button in the **Sound** tab. Disabled articulations will not trigger, and will be purged from memory (freeing up RAM).

### **Selecting an Articulation**

To select an articulation, click on it. The selected articulation is highlighted in red. If you are using keyswitches for articulation selection (this is the default setting), clicking on an articulation will **also** switch your active keyswitch. This is handy for auditioning things quickly.

### **Multi Selection**

To select more than one articulation, hold **Control** OR **Shift** and click the articulations you want to select. When multiple articulations are selected, adjustments made to the **Sound** tab at the bottom will be applied to all of them. Mappings cannot be applied to multiple articulations simultaneously.

### **Mapping Info**

The text in each articulation box (such as "Vel 1 - 27", or "KS (L) C-2") shows the current mapping for that articulation.

The **current mapping** section shows how the articulation is currently triggered. Here are the relevant abbreviations:

**KS** = **Keyswitch**. Press the listed key (in this example, C-2) to trigger the articulation.

(L) = Latching. A latching keyswitch does not need to be held down for it to work.

**C-2** = The MIDI note that will trigger the articulation. C-2 is the lowest MIDI note.

Here are **examples** of other mapping abbreviations you may see.

**Vel 1 - 19**: Articulation must be played at MIDI velocities 1-19 to trigger.

**CC1 12-127**: MIDI controller 1 (CC1) must be between values 12 - 127 for the articulation to trigger.

**PW 1024 - 8192**: The pitch wheel controller must be between values 1024 - 8192 to trigger. (Note: The minimum pitch wheel value is negative 8192.)

**Key C4 - C5**: The articulation will only trigger on MIDI notes between C4 and C5. This is NOT a keyswitch. This refers to actual playable notes that make sound.

Ped Down / Up: The sustain pedal (CC64) must be down or up for the articulation to trigger.

The **legato enabled** button can be clicked for certain articulations. When disabled, a . . . symbol will appear, and that articulation will not trigger legato or portamento transitions.



### **SOUND Tab Options**

Each articulation has slightly different controls in the Sound tab.

#### Volume

Controls the overall volume of the articulation.

#### Offset

Controls the sample start offset. When at 0, the sample is played back from its natural beginning. For values above 0, the early part of the recording will be cut off.

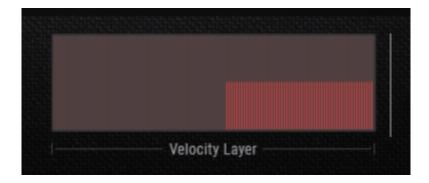
#### Vel -> Vol

Controls the degree to which velocity affects the volume of this articulation. At 0, velocity has no impact on volume (but will still be used to switch which sample layer is selected.)

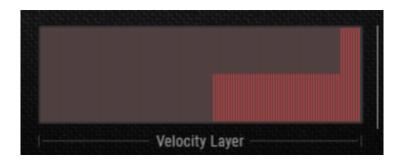
### **Velocity Layer**

For short articulations with multiple dynamics (such as sustain, above) this table can be used to assign the dynamic levels to MIDI velocities. The X axis of the table is the MIDI velocity, so the leftmost side is velocity 1, and the rightmost side is 127. The Y axis is the dynamic level, which will automatically 'snap' into place.

For example, if you're writing a very quiet piece and don't want to use recordings of the top sustain dynamic, you can use the mouse to draw the table so that the 2nd 'step' extends all the way to the right.



Or, if you want the highest dynamic to require a very hard key press, you can draw the table like this:



## ADSR (Volume) Envelope

Controls the volume envelope triggered each time the articulation is played.



**Tightness**: Adjusts how quickly palm mutes decay. This is basically a combination of adjusting decay & sustain controls on the ADSR envelope.

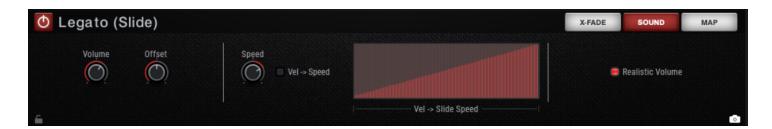
**Vel -> Tightness**: When enabled, lower velocities will decay even faster than normal.



(Hammer/Pull) Range: Sets the max distance in semitones that hammer/pulls can trigger. Defaults to 2st.

**Force Same-String**: If **disabled**, the engine will allow triggering hammer/pulls from one string to another, which isn't technically realistic but may 'feel' better in certain situations.

**Realistic Volume**: When enabled, the volume of hammer/pulls will scale down over time until you strike a new non-legato note.



**(Slide) Speed**: Time stretches or compresses the slide transition samples to make slide transitions faster or slower overall. Not available in the "Lite" patch.

**Vel -> Speed**: When enabled, higher velocities will trigger faster slides.

**Realistic Volume**: When enabled, the volume of slides will scale down over time until you strike a new non-legato note.



## X-FADE Tab Options

This is available only for the Slide articulation and should generally only be used by advanced users! From left to right:

For the purposes of describing these controls, we'll use an example interval of C3 transitioning to G3. The controls are described from left to right, starting with the Source knob.

### **Source Fade Out Time**

When a legato transition is detected, the source note (C3) will be faded out over this much time.

#### **Transition Fade In Time**

The transition recording (C3 to G3) will be faded in over this much time.

### **Transition Length**

The amount of time the transition recording will be played for before fading out.

#### **Transition Fade Out Time**

After the transition length, the amount of time before the transition fades out completely.

### **Destination Fade In Time**

The destination note (G3) will be faded in over this much time.



### **MAP Tab Controls**

Each articulation can have up to three "rules", or conditions when that articulation can trigger. In the above example, Sustains will trigger if the keyswitch C-2 is pressed. The "Latch" button is enabled, meaning the keyswitch will stay down even if you release the key.

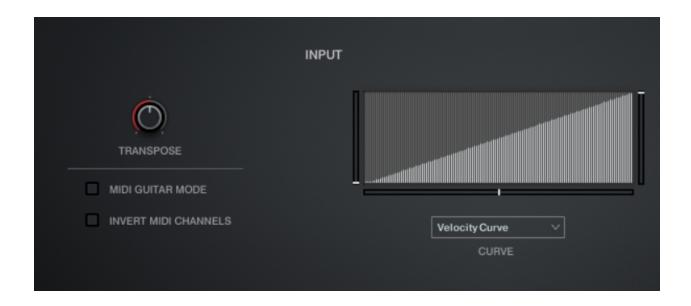
Multiple articulations can share the same keyswitch or velocity range. However, if you do this, the UI will show a *conflict*:



If you see this, you must add a second rule to each of these articulations to tell the engine how to play them.

In this example, you could assign a rule to Sustain for velocity: 65-127, and a rule to Staccato for velocity: 1-64. This way, though they share the same keyswitch, they are also split by velocity.

# **Advanced Page Controls**



**Transpose**: Shifts all MIDI input up to +/- 12 semitones.

**MIDI Guitar Mode**: When enabled, the patch is enabled for use with MIDI basses or pickups that send MIDI messages on different channels for each string of the guitar. You MUST set the patch to OMNI MIDI input in Kontakt for this to work! The lowest string corresponds to MIDI channel 6, while the highest string corresponds to MIDI channel 1.

**Invert MIDI Channels**: When MIDI Guitar Mode is enabled, this simply flips the expected channel input: the lowest string corresponds to MIDI channel 1, while the highest matches with MIDI channel 6. You may need to do this depending on the configuration of your MIDI bass / pickups.

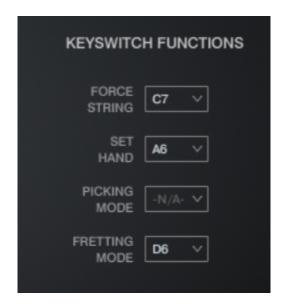
**Velocity Curve:** This curve maps input velocity for the Velocity > Volume processing. Lower values result in quieter samples at the chosen velocity, while higher values are louder. The degree of the effect is controlled personally by each articulation in the TACT tab on the second parameter page. (See TACT manual)

**Strum Speed Curve (select from dropdown):** This curve maps input velocity to select different dynamic layers. Due to different articulations having a different number of layers, it is a general curve from 1 to 127.

**Curve Minimum Value** (left vertical slider): Adjusts the value at which the velocity curve starts. Holding Alt/Opt will also move the maximum value at the same time, making it a fixed value across the whole velocity range.

**Curve Maximum Value**: (right vertical slider): Adjusts the value at which the velocity curve ends. Holding Alt/Opt will also move the minimum value at the same time, making it a fixed value across the whole velocity range.

**Curve Curvature**: (bottom horizontal slider): Adjusts the curvature of the velocity curve, from concave, to linear, to convex.



**Keyswitch Functions**: These dropdown menus let you specify keyswitches for specific engine functions. You must ensure these don't conflict, as they exist outside of TACT and have no built-in conflict detection. The keyswitch notes created by these menus are all **latching**.

**Force String**: Sets up a keyswitch note for each string, plus a note to disable 'Force String'. When enabled, all notes will be played on the desired string if at all possible.

**Picking Mode**: n/a for fretless, as this is not a picked instrument.

**Set Hand**: Sets up a keyswitch note that, when pressed, sets the current **hand position**. The hand position selected equals the velocity of the keyswitch note (velocity 1 = fret position 1, velocity 2 = position 2, etc.)

**Fretting Mode**: Sets up a keyswitch note for each possible fretting mode.



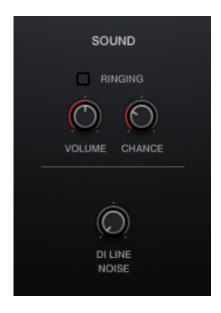
**Shred Window**: The maximum amount of ms between subsequent played notes to trigger *Shred* processing. *Shred* processing uses a combination of sample offset and low-pass filtering to reduce pick energy during fast passages and create much smoother lines. This is the latest development towards the namesake of the series.

**Shred Offset**: The amount of sample offset to use during *Shred* processing.

**Stroke Offsets**: n/a as this is not a picked instrument.

**Anti-Repetition On/Off**: When enabled, the instrument will randomly use neighboring samples during playback to create more variation.

**(Anti-Repetition) Chance**: Sets the probability that neighboring samples will be used during playback, when Anti-Repetition is enabled.



**Ringing**: When enabled, the virtual bassist will occasionally 'flub' a note, touching an adjacent open string or two. You can set the **Chance** of this occurring per note, and the **Volume** of the resonance. Useful for adding extra dirtyness and overtones to your parts, but it does **cost extra CPU**, **so be careful!** 

**DI Line Noise**: Increases the volume of constant line noise. The noise will start when you start playing, and will fade out when you finish.



**Hand Reset Time**: Once all notes are released, the engine will reset the virtual hand position after this much time has passed. If you are using a forced hand position, this does nothing.

Hand Reset - On Daw Start: When enabled, the hand position will reset on DAW transport start.

**Release On Hand Move**: When enabled, if the virtual hand moves to a new position, all held notes will be released.

**Release On Chord Change**: When enabled and strum mode is activated, all held notes will be released when new notes are entered into the playable (blue range), changing the chord voicing.

**Poly Release Retrigger**: When enabled, released notes will retrigger legato-style just as in Mono Lead Mode. Unlike Mono Lead Mode, this behavior is constrained to each string.

# **Articulations List**

Sustain: Standard picked single notes that ring out fully. Simple!

**Staccato**: Short, unmuted notes.

**Mute**: Palm muted single notes recorded with multiple degrees of palm muting, from very muted to half-muted. The amount of palm muting is controlled by velocity.

**Buzz Trill:** A quick double grace note before ending on a sustained note.

Harmonics: Natural harmonics triggered via pick and ringing out fully.

**FX**: Various decorative performances to sprinkle in for added realism.

## **About Legato Articulations**

Legato articulations are generally triggered when one note is held and another note within 12 semitones is played at the same time (overlapping). To ensure that you trigger legato only when intended, and not in the place of chord strums, remember to use the **Poly Input** feature, OR mono mode.

**Hammer/Pull**: Brief transitions that end on a sustained note. Hammer-ons are triggered when playing within the Hammer-On Range on the same string while ascending in pitch; one finger is used to 'hammer' a higher fret. Pull-offs are triggered the same way, but while **descending** in pitch, and have a softer attack. With the **Force Hammer-on** button off, this articulation will not play on strings that have not yet been picked.

**Slide**: Also known as portamento, this is a slide from one fret to another. It is longer and more emphasized legato transition. The virtual hand will move to the new note as if the exact same finger was on both the source and destination note.

If triggered on polyphonic input, then if the new notes exist on the same strings as other ringing notes, the polyphonic slide for each note is guaranteed to trigger. Fun!

### About Release Articulations

As the name suggests, Release articulations trigger when a MIDI note is released (note-off message). These are incredibly useful for making your virtual bass parts sound more realistic by automatically adding scrapes, squeaks, and other little noises throughout the performance.

**Pitched Release**: The sound of a string being released on a given pitch.

**Unpitched Release**: All sorts of non-tonal scrapes, squeaks, and pick movement that is inherent to natural and realistic playing

# Tips & Tricks

- Every Shreddage 3 bass sounds different! If you are switching basses for the same part, remember to
  experiment with different performance, amp, cab, and EQ settings, as well as different performance
  setups.
- For solo parts, we strongly recommend using plenty of pitch bends. Real bass players do quite a bit of
  pitch bending. You can do rapid pitch bends to simulate vibrato, or use bends to slide up/down to a
  certain note without using the Slide articulation. Mastering pitch bend is key to making realistic bass
  mockups.
- Experiment with using different velocities. The three dynamic layers of the Sustain articulation sound quite different. By just adjusting the velocities of a part, you can change the sound quite a bit. Using only one velocity level will rarely sound realistic.
- Experiment with changing the performance style or hand position. The position of the virtual hand greatly affects tone.

# **Credits**

Lead Producer: Andrew Aversa

Programming: Nabeel Ansari, Sarah Mancuso, Mario Kruseli

Ul Design: Dickie Chapin, Paulo Nunes

Recording & Performance: George "norg" Nowik

Editing: Kent Kercher

# **Troubleshooting**

Having trouble with Shreddage 3 Fretless? Use it in a project you want to tell us about? Drop us a line via our **Contact page** (but be sure to **read the FAQ** first!)