An Impact Soundworks Sample Library
Designed and **Produced** by Andrew Aversa | **Performed** by Tony Dickinson

OVERVIEW

At the foundation of any killer track is a killer bass groove. A bass doesn't just provide the meat and low-end of the track – it anchors and glues all other elements together, and even shine as a virtuosic solo instrument in the hands of an expert. **Shreddage Bass 2** captures the full potential of the electric bass using a masterwork custom 6-string instrument recorded through legendary analog gear.

Unlike the original Shreddage Bass library, **Shreddage Bass 2** uses a much more versatile fingered playing style performed by master bassist, composer, and session musician Tony Dickinson. Tony brought his massive experience and skill to recording the library from both the perspective of a performer and a producer; he also brought his custom-made, one-of-a-kind handmade Muckelroy bass!

Shreddage Bass 2 features over 11,000+ samples recorded through a Universal Audio Solo/610 analog tube preamp/DI box for maximum fatness, punch, and warmth. As with our virtual guitar instruments, each string was sampled in exhaustive detail across every fret, at multiple dynamics, and with up to 8x round robin variations per note. The instrument's massive 4.5 octave range starts at a sub-destroying low G up to a high C#, allowing you to play or sequence any bass part you can think of.

Everything we've learned from the Shreddage 2 series has been applied to **Shreddage Bass 2** – our most realistic performance engine, extensive tweaking options, beautiful legatos, and meticulous editing. This is not just a badass bass for rock & metal music, but the **premier** virtual electric bass for any musical style!

INSTALLATION

Step 1: Using your browser or our **downloader app**, download the library files. If you're using the downloader, skip to Step 3.

Step 2: Using a program like WinRAR (PC) or UnRarX (Mac), double-click to extract the library folder. This should create a folder labeled "Shreddage Bass 2".

Step 3: Open Kontakt, click the Libraries tab, and select "Add Library". Select the Shreddage Bass 2 folder. Note that the folder you select must be "Shreddage Bass 2", which contains subfolders like Instruments and Data.

Step 4: Open Native Instruments Service Center and input the Shreddage Bass 2 serial you received via email.

Step 5: The library is now activated; restart Kontakt for the changes to take effect.

INSTRUMENT OVERVIEW

Shreddage Bass 2 features the authentic sound of a custom-made, 6-string electric bass created by Muckelroy Basses. This is a one-of-a-kind instrument... literally! We recorded all key articulations on all strings and frets, along with many variation samples to add life and realism to your virtual performances.

All audio (over 11,000 samples) was captured at 44/24bit fidelity through a stunning UA610 DI/preamp and no additional processing, allowing you to add your own EQ, amp, and compression. The samples also sound beautiful clean and work great in most any context.

ARTICULATIONS

SINGLE NOTE SUSTAINS
The bread-and-butter articulation of **Shreddage Bass 2** is simply a single note on a single string being plucked with one finger. This technique is most common and used in every kind of bass riff. You can combine multiple single sustain notes to create chords. We made sure to capture the full, un-looped sustain of each note, as well as the authentic 'attack' of the finger plucking the strings, including the 'pop' at higher dynamics.

STACCATO
Single notes performed rapidly and then released – great for peppering emphasis and accents in a riff!

HARMONICS
By using a specific hand position, a bassist can pick a note and bring out mostly the harmonics (overtones) as opposed to the root pitch (fundamental).

HAMMER-ON AND PULL-OFF
When playing a series of notes, bassists do not often pluck each individually. Instead, when ascending in pitch on the same string, a "hammer-on" is used: once the string is struck, a finger on the left hand is used to hit the next fret, causing a slight attack and change in pitch. The opposite, a "pull-off", involves fingering several notes on the same string. By quickly releasing the finger on the highest fret, the lower pitch comes through. These techniques are used quickly and seamlessly in many riffs and phrases.

Triggering them in **Shreddage Bass 2** is a simple matter of overlapping two notes within the specified Hammer Range and Min/Max Threshold. These options can be changed on the Articulations page, and additional options are available on the Engine page.

PORTAMENTO SLIDES

A continuous slide (aka glissando, portamento) is performed by striking a note and then sliding the left hand along the frets of the string. This technique can be used to dramatically hit a low or high note, or at the end of a phrase (usually downward in pitch). Slides in **Shreddage Bass 2** are triggered the same way as hammers/pulls, by overlapping two notes; by default, the two legato techniques are in separate velocity ranges.

For example, holding E3 then playing and holding B3 will produce an authentic slide from E3 to B3. The destination note, B3, will then be sustained as long as you hold the note. However, a very useful technique is NOT holding the destination note long enough for it to be heard. The result will produce only the sound of the slide, and nothing else - a very handy effect!

RELEASE NOISES

When released, the thick strings of the bass produce a distinct release noise. We've captured that pitched noise for each and every note. Tweaking controls are available in the **Engine** page of the UI.

EXTRA POP NOISE

When playing with lots of force and enthusiasm, the strings produce a 'pop' before the tone is heard. We've isolated these pops so you can mix them in at whatever delay, volume, and dynamic threshold you would like. Extra pop settings can be adjusted on the **Engine** page.

UNISON BENDS

A common technique while playing two notes on two separate strings is to pitch bend the note on the lower string without bending the higher note. This technique, called a 'unison bend', is commonly done by 1 or 2 semitones. You can execute unison bends in **Shreddage Bass 2** by using the knob on the Perform page, which can also be MIDI learned. This will bend the *lowest currently played note* up to two semitones, without affecting any other currently played notes!

THE SCRIPT ENGINE

Shreddage Bass 2 uses a highly-advanced and refined script to realistically interpret MIDI notes and transform them into realistic performances.

Note: *Disabling the script, or attempting to edit any groups/mapping options, **is not recommended**! If you want to attempt this, save backups first.*

STRING & FRET SELECTION

As you play the instrument, notes are assigned to different strings based on a number of factors calculated by the engine in real-time. These include the minimum and maximum fret preference, virtual hand size, the position of existing notes, and the time between the current and previous note. All these variables can be adjusted on the **Perform** page. You can also use keyswitches or the "String Selector" knob to force the instrument to use specific strings as desired.

Because we recorded all notes on all strings, you can play the same exact MIDI sequence and – with different performance settings – get a very different tone. For example, playing on the upper frets of the lower strings has a darker and fuller sound, whereas the higher strings will sound more thin and bright. Feel free to experiment with hand size and fret preference to see what sounds best for any given track. You can even automate these parameters in real-time!

ROUND ROBINS & DYNAMICS

A 'round robin' refers to a unique recording of a given pitch and articulation, while dynamics (or velocity layers) are recordings at different intensity levels. **Shreddage Bass 2** contains up to 8 round robins (RRs) per articulation and pitch, and four dynamic layers. This means that playing the same note at the same velocity over and over will trigger different recordings each time! You can enhance this feature using the Anti Repetition option on the Engine page.

RRs are selected using a pre-determined 'seed' of random numbers. This ensures that rather than hearing the same short sequence (1-2-3-4, 1-2-3-4) over and over, you will hear a dynamic, non-repetitious order.
By selecting **Bass 2** instead of **Bass 1**, the same seed is used, but at a different starting point. Thus, with two patches on the same MIDI channel using separate guitars, a true double-tracked sound can be achieved.

The **Reset RR** button can be used to reset RR sequence position.

DOUBLE-TRACKING 101

One of the most powerful features in **Shreddage Bass 2**is the ability to simulate "double-tracked" bass guitar parts. We've made it extremely easy to achieve a double-tracked sound simply by enabling the **Stereo Double** option, which outputs a stereo signal with two unique samples panned hard left and right respectively.

If you use **Stereo Double**, keep in mind that any amps or FX you use must also take a stereo input.

You can of course do double-tracking with multiple instances of **Shreddage Bass 2**, as with other Shreddage instruments. To use this feature, you must have Kontakt configured for multiple outputs in your host. Make sure you're using **Kontakt 8out** or **Kontakt 16out** - these plugins provide multiple outs with no further tweaking.

To route Kontakt's outputs to your host's mixer, Native Instruments offers detailed walkthroughs - simply Google search for "Kontakt multiple outputs Logic" or "Kontakt multiple outputs Ableton" for more info.

Once you have Kontakt set up with multiple outputs, follow these steps.

> **1.** Create **two** instances of Shreddage Bass 2 within **one** instance of Kontakt.
>
> **2.** Set each instance to **the same MIDI channel**, but **different outputs** in Kontakt.
>
> **3.** On the **Perform** page in Shreddage Bass 2, click the **bass 1** icon under "Doubletracking" for the first instance, and the **bass 2** icon for the second instance.
>
> **4.** Click the "Reset RR" button for each instance to synchronize them.
>
> **5**. In your host mixer, pan each output being used **hard left** and **hard right**, then add the **amps + FX** of your choice. For best results, we recommend different amps/settings for each output.
>
> **6.** Play or sequence notes on the MIDI channel assigned to your **Shreddage Bass 2** instances, and enjoy a wide, double-tracked sound!

IMPORTANT! When double-tracking, **all instances must get the SAME MIDI DATA!** If you do not have all instances on the same MIDI track, you will not have a true double-tracked sound.

INTERFACE & ENGINE

The UI of **Shreddage Bass 2** is rich with features, but it's also streamlined for ease of use. Don't be intimidated! As you explore all the features, note that **any knob can be MIDI learned** by right-clicking and selecting "MIDI learn". You can then move a MIDI CC on your hardware to map that knob to your hardware control of choice.

The **Perform Page** controls and displays most functions related to performance. Starting with the top row of knobs:

Gain: Controls the output of the guitar before any effects are applied.
Transpose: Transposes MIDI input without actually tuning the guitar itself.
DI Line Noise: Controls the volume of 60hz line hum.
Vibrato: Controls the amount of vibrato – **right click this knob to MIDI learn it! (CC1 / mod wheel default)**
Unison Bend: Controls the amount of unison bend.

Mono Mode: Sets the instrument to strict **monophonic voice** mode – only one note can be played at once.
Tapping Mode: Toggles strict tapping mode, where all notes are played as hammer-ons (no pick attack).

Doubletrack 1/2: Selects which bass track to use. Each will trigger a different sequence of samples – see the **Double-Tracking 101** section for more details.

Stereo Double: Toggles stereo output with the left channel using one bass track, and the right channel another.

Advanced Button: Reveals the advanced fret/string performance controls…

>   **Hand Size**: Sets the virtual hand size, which is the maximum possible 'reach' of the virtual hand.
>   **Min/Max Fret Pref**: Sets the range of frets the engine will use if at all possible.
>   **Eye Icon**: Displays the selected fret preference range on the fretboard.

Fret Priority: When enabled, the instrument will strongly prioritize the fret preference range.
Chord Thresh: Sets the maximum threshold where chords are triggered, for the purposes of pick direction. For example, a chord thresh of 150ms means that when alternate pick mode is enabled, notes played with less than 150ms between them will trigger with the same stroke direction.
Reset Time: Sets the delay after all notes are released that the last-played string/fret resets to default.

Round Robin Reset: Resets the RR sequence. Click on all basses before rendering for a consistent result.
Thrash Note: Selects the desired 'thrash note' key. Pressing this key will trigger the last-played note. Great if you are performing a fast riff and you want to play on one note very rapidly.

Fretboard Display: Shows the location of all currently played notes.

Show Hand: Toggles a view of the virtual hand position (highlighted in gray on the fretboard.)

Preset Menu: Selects a preset to use. All factory presets only load FX and will not change your mapping or engine settings. You can also save and load your own custom presets, or load custom presets as FX-only.

String Preference: When enabled, the string preference knob will select a particular string to favor over other strings.

The **Articulations Page** allows for total customization of all playing techniques. Here you can set any articulation to use any kind of trigger – velocity, keyswitch, or MIDI CC – or disable them altogether.

Keysw Latch: When enabled, pressing a keyswitch will cause that keyswitch to 'stick' – the key does not need to be held down for the keyswitch to work. You can hit another keyswitch, or an empty keyswitch note, to change it. When latch is **disabled**, keyswitches must be held to work.

Articulation Buttons: The circles next to each articulation name will enable or disable that articulation. Disabled articulations can't be mapped, and if "Auto RAM Unload" is enabled on the Engine page, they will be purged from memory as well.

*** **IMPORTANT** – Articulations are prioritized **in the order they are displayed**. For example, if you map sustains from velocity 1-127, and mutes from velocity 1-127, sustains will always trigger instead of mutes. Therefore, you should always use unique mapping for each articulation to avoid any overlaps or conflicts. ***

FX Articulation: When this articulation is mapped and toggled, it 'takes over' the playable range of the keyboard. Each key triggers a different, unique FX sample.

VEL/KEY/CC Dropdown: Sets the mapping mode for the articulation.
> **VEL = Velocity**. Set the minimum and maximum velocity range – when playing in that range, the articulation will trigger.

> **KEY = Keyswitch**. Select the desired keyswitch, and then press that keyswitch to switch to that articulation. When a keyswitch is enabled, other articulations **will NOT trigger**.

> **CC = MIDI CC**. Set the desired MIDI CC, and the RANGE to use for that CC. For example, if you wanted modwheel to switch between sustains, mutes, and staccato, you would set all three to "CC" mode, select CC num = 1, and then set a unique range for each. As with keyswitches, when an articulation has been selected via MIDI CC, no other articulation will trigger.

(Sustain) Release Time: Sets the release time for the sustain articulation.

Hammer/Pull Max Range: Sets the maximum range, in semitones, where overlapping notes can possibly trigger hammer-on/pull-off playing. For example, realistically, it would be difficult for a player to reach beyond 2-3 frets (semitones), but if you want to be able to play C2 and then hammer to C3, turn this up to 12!

Hammer/Pull Min/Max Thr: Sets the minimum time threshold, in milliseconds, where hammer/pull playing will trigger. For example, with a range of 50-500ms, if you hold a note and then play another note <50ms or >500ms later, hammer/pull will not trigger.

(Portamento) Trans Vol: Sets the volume of the portamento slide (transition) samples.

Portamento Sus Vol: Sets the volume of the sustained notes played after portamento slides.

Portamento Speed: Uses time machine pro to stretch or compress the slide samples. If this is set to the lowest possible value, the speed of the portamento slide will scale based on velocity. Lower velocities = slower portamento.

Vib Speed: Sets the speed of the vibrato LFO.
Vib Depth: Sets the max depth of smooth vibrato LFO.

Velocity to Volume: Controls the volume scaling of the instrument. High values will make your playing particularly dynamic; high velocities will result in louder notes, and low velocities in softer notes. Lowering this knob will reduce the effect of velocity on volume. If this knob is set to 0, all notes will be played at a consistent volume regardless of velocity.

> **Scaled**: When enabled, velocity scaling is based on the mapped velocity range of each articulation. For example, if Sustains are mapped from 0-64, playing at velocity=64 will trigger max-volume sustained (instead of half-volume, if Scaled is DISABLED).

Vel Curve: Controls the instrument's sensitivity to your MIDI input. Lower values make the script less sensitive; all of your playing will be scaled down in velocity. Higher values make the script more sensitive, scaling UP your input.

Pitch Bend Range: Sets the range of the pitch bend wheel (or control) in semitones. A range of 2.0 means that if the pitch wheel controller is pushed to its maximum or minimum, it will bend up (or down) 2 semitones.

Auto RAM Unload: When enabled, any articulations that are NOT enabled will be purged from RAM.

Sus Pedal to Legato: When enabled, the Sustain Pedal (MIDI CC64) must be PRESSED for any legato transition to happen. This can be useful if you want to use legato articulations in some, but not all, of your performance.

Split MIDI Channels: When enabled and the patch is set to receive OMNI MIDI input, each MIDI channel corresponds with a string of the bass (MIDI channel 1 = string 1, channel 2 = string 2, etc.)

Anti Repetition: When enabled, zone transposition is used in Kontakt to add extra variation to each note. This **cannot be used** if you are quad-tracking!

Random Resonance: When enabled, the script will sometimes resonate an open string adjacent to the current played string. This simulates the effect of a guitarist accidentally striking or resonating strings. Quite useful for realism!

Resonance Volume: Sets the volume of the random resonance effect, if enabled.

Release Noise: Clicking this light enables or disables pitched release noises.

Noise Vol: Sets the volume of pitched release noises (manual palm stops).

(Release) Min/Max Thresh: Sets the threshold (in milliseconds) where release noises will play. This is useful as you may not want release noises to trigger on very short or very long notes.

Extra Pop On/Off: Enables or disables the Extra Pop articulation.

Extra Pop Time: Sets the delay allocated for the extra pop articulation, in milliseconds.

Extra Pop Volume: Sets the volume of the extra pick sample.

Extra Pop Min/Max Vel: As with other articulations, you can specify the range where the extra pop articulation is triggered.

Legato Hammer Realism: When enabled, only a handful of hammer-on/pull-off articulations can be played consecutively before a new pick is triggered.

Legato Volume Realism: When enabled, legato articulations will scale down in volume the longer you wait to trigger them.

Legato Realism: When enabled, legato articulations will only trigger on the same string. If disabled, you can – for example – slide from one string to another. Not realistic but it sounds cool!

Attack Offset: This controls the attack offset of all recordings. A value of 30ms for example means that all samples will be played from 30ms into the sample - thus eliminating some of the lead-in / finger attack time naturally recorded with each note. Adjusting this control is a matter of taste. Generally, we recommend using minimal attack offset so that the natural pick sound of each note is heard, however for certain playing styles you may want to tweak it.

Our custom **Effects Rack** features a four-band **Parametric EQ**, an analog-modeled **Compressor**, **Tube Screamer** (distortion) pedal, **amp/cab** stack with three **parametric equalizers** and a **stereo doubler**, a **chorus**, and a **delay** unit.

All FX can be MIDI-learned and automated. Mouse over any control in the interface to learn more about it (appears at the bottom of the Kontakt window).

For the cabinet, we've created a number of custom **impulse responses** from various popular bass cabinets. Each cab has a drastically different tone so be sure to cycle through each one as you're designing or tweaking presets.
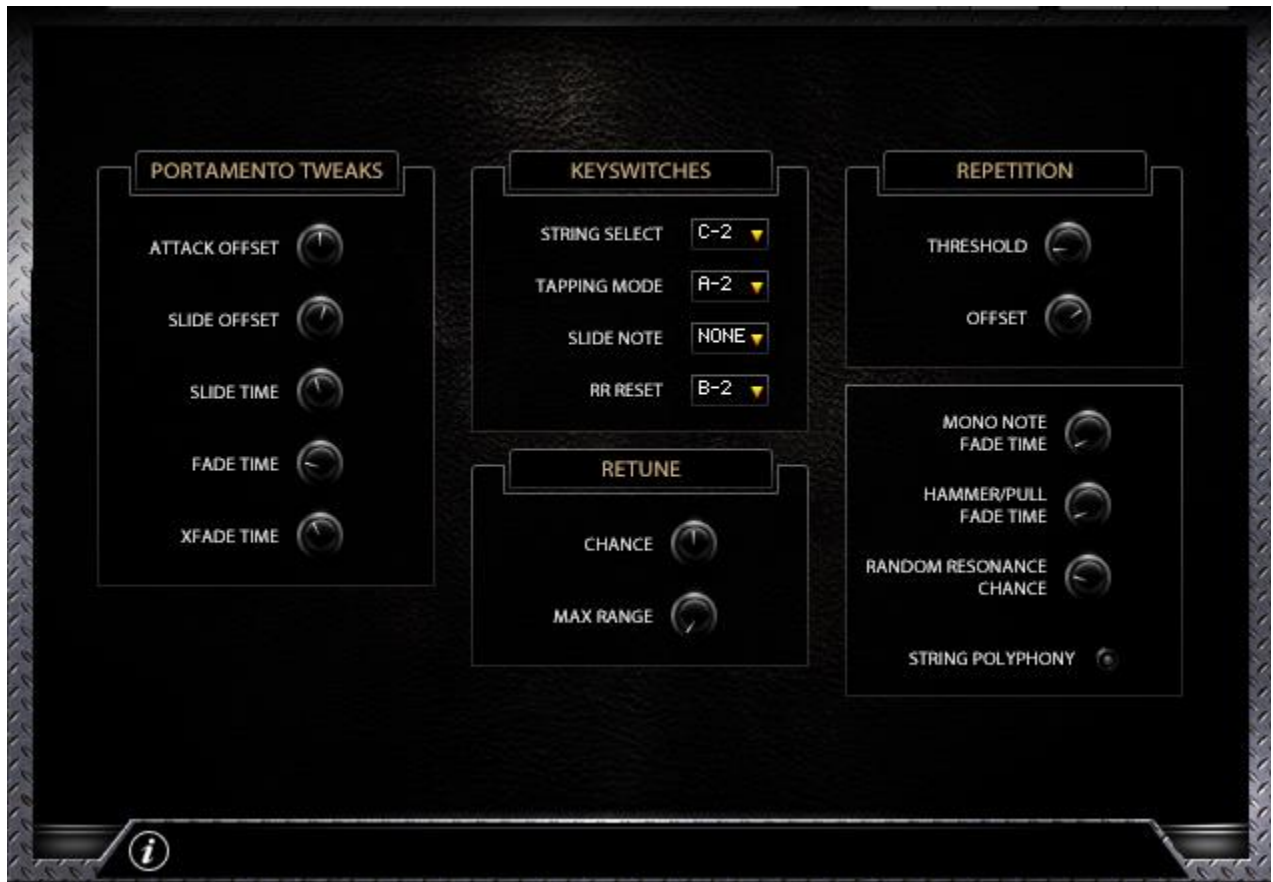
The **Advanced** page offers powerful tweaking options and settings for users that want to dive further under-the-hood of the **Shreddage Bass 2** engine.

Portamento Attack Offset: Changes the playback position of the sustain sample played after the slide sample.

Portamento Slide Offset: Changes the playback position within the porta slide sample.

Portamento Slide Time: Sets the base time of the portamento 'wait' statement. This is further modified by the portamento speed % control on the Articulations page, and the total distance you're sliding.

Portamento Fade Time: Sets the fade-out time of the 'origin' note. For example, if you play C2 to G2, this controls the fade-out time of the C2.

Portamento Xfade Time: Sets the crossfade time between the slide sample and the final destination note.

KEYSWITCHES: Each dropdown defines the root keyswitch for various functions. As with articulations, any given key can only be mapped to ONE function. Don't assign multiple functions to the same keyswitch – it gets confusing.

String Select: Sets the ROOT keyswitch for the string select keyswitch range, which takes up 8 keys total. The first 6 keys correspond to the 6 strings of the bass (1 = high, 6 = low), while the 7th key resets your string preference.

Tapping Mode: Sets the keyswitch for tapping mode toggle on/off.

Slide Note: Sets the keyswitch for the 'slide note'. When Portamento is enabled, you can play a note and press this key, which will trigger a portamento down slide (without any destination note).

RR Reset: Sets the keyswitch for the RR reset 'hotkey'. When pressed, this key will reset the RR sequence.

Retune Chance: Sets the probability that notes will be retuned using neighboring zones when 'anti-repetition' is enabled.

Max RT Range: Sets the maximum range in semitones of notes that will be retuned for the purposes of anti-repetition. Larger values may sound a little wonky.

Repetition Threshold: If a note is played on the same pitch as the previous note within this many milliseconds, the repetition offset will be applied. This can help with the realism of riffs on a single note.

Repetition Offset: Amount of attack (sample) offset to use if notes are triggered within the repetition threshold.

Mono Note Fade Time: Sets the default fade-out time when a note is faded via monophonic mode.

Hammer/Pull Fade Time: Sets the fade-out time for the origin note when using hammer/pull playing.

Random Resonance Chance: Sets the chance that random resonance will occur when the 'Random Resonance' engine setting is enabled. Random resonance will always occur more at higher velocities.

String Polyphony: When enabled, multiple notes can be unrealistically played on a single string.

CREDITS

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Artwork: Constructive Stumblings

TROUBLESHOOTING & FEEDBACK

Have you used **Shreddage Bass 2** in a project recently? Got an awesome track you'd like to share? Drop us a line (admin@impactsoundworks.com) and we might post it on our website! Or, tell the world at our Facebook page here: http://www.facebook.com/ImpactSoundworks

We encourage all our users to share and promote their work. Word of mouth is the #1 way people find our samples, so it also helps us to produce more great libraries for you!

For any technical support issues regarding the library, don't hesitate to email support@impactsoundworks.com.

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