

BOLDER *Sounds*

Presents

Bluegrass Banjo V3

for NI Kontakt 4+



Index

Index	2
About the Banjo	3
Features	4
General Stuff	5
About the Presets	6
The Instrument Panel	7
The Articulation Page	7
About the String Selection	10
About the String Algorithm	10
About the Auto Fret Algorithm	11
About the Reverse Concept	11
The Settings Page	12
The P.B./Vibrato Page	14
About the Intelligent Pitch Bend	16
The Key Switch Page	17
The Effects Panel	19
The EQ Page	20
The Modulation Page	20
The Delay Page	23
The Space/Reverb Page	24
License Agreement	26

Welcome to the Bluegrass Banjo version 3 sample library for the NI Kontakt 4+ software sampler from Bolder Sounds!

In this library you will find a 5 string banjo which has the classic warm tone associated with pre-war banjos as well as an instrument with plenty of punch to cut through a mix. Even though this library is called a *Bluegrass* sample library, you will find it to be quite flexible across many different musical genres.

This library is extremely popular among Bolder Sounds users. We felt by adding new sampled articulations we could make it an even more effective library.

The new samples include for new pluck positions along the string length of the banjo as well as Scruggs-Keith tuner mechanism samples. A complete list of new features in version 3 is outlined below in this manual.

If you already own the Bluegrass Banjo library maybe you are wondering -"did I ever get version 2 of the Bluegrass Banjo?" Yes- you did. It was updated to version 2 very shortly after its initial release.

We hope you very much enjoy it!

Bo Clausen and Dennis Burns



Features of the Bluegrass Banjo V3 Sample Library

- Up to 5 x independent round-robin per key, for each of the 5 strings of the banjo. Each string was sampled chromatically up to the 17th fret. The first string was sampled beyond the 17th fret.
- All the strings are sampled on 5 different pluck positions of the banjo.
- The Pluck Positions can either be selected via Key Switches or via a very advanced Pluck Position velocity selection system. You can freely adjust at what velocity level the different positions will be selected and make any kind of position combinations. All the settings can be saved as Presets.
- Various articulations: Hammer-On and Pull-Off, Half step and Whole step Slide, Harmonic and Scrugg bends. All with 2 x independent round-robin per key.
- A very advanced and intelligent scripted Pitch Bend and Vibrato control.
- Detailed KSP scripted control of Fretting Position on the neck of the banjo, including an Auto Fret Selection feature.
- A Key Switch Page where you can freely assign which key will trigger the various Key Switches and save the settings as Presets.
- 8 different effects - each with its own Preset menus, so you can save and recall all the various parameters.
- And much more!

The full uncompressed size of this library is 3.15 GB. It has been Kontakt compressed (.ncw) down to 1.52 GB for convenience of downloading and rapid loading into Kontakt.

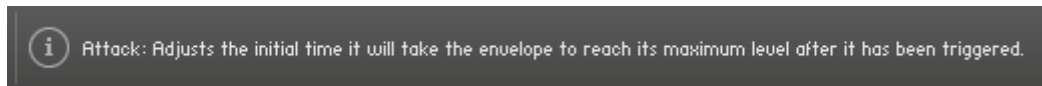
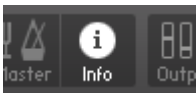
General Stuff

KONTAKT Compatibility:

This library requires NI KONTAKT version 4.2.4 or higher, and has been tested for compatibility in KONTAKT 5. This library is NOT compatible with the KONTAKT 4 or 5 sample PLAYER, only the full retail KONTAKT SAMPLER. It will only run in demo mode for 15 minutes on the KONTAKT PLAYER.

Hover Over Mouse Help:

If you turn on the **Show Info Pane**, you can simply 'hover' your mouse over a particular control and the information on that control will be displayed in the Info Pane at the bottom of the KONTAKT window.



Reset Knobs:

All knobs can be reset to their default value, if you CTRL + Click (PC) or Command + Click (Mac) on the knob.

MIDI Learn CC#:

All the buttons and knobs can be automated by a MIDI control. Just Right + Click (PC) or Control + Click (Mac) the button or knob and select **Learn MIDI CC# Automation**, and then move your hardware MIDI controller.

Learn MIDI CC# Automation

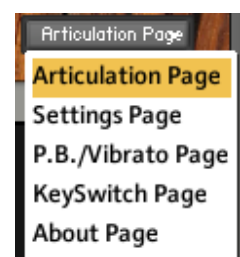
Panels:

The User Interface has two Panels. Click on the Panel Tab Name to open the Panel.



The About Page:

Each Panel has an **About Page** that gives you a quick overview of the Panel.



About the Presets

There are a total of 11 Preset drop-down Menus.

On the Instrument Panel:

Art. Presets and **Velocity Layer** Presets and **Key Switch** Presets.

On the Effect Panel:

EQ Presets, **Chorus** Presets, **Flanger** Presets, **Phaser** Presets, **Rotator** Presets, **Delay** Presets, **Reverb** Presets and **Space** Presets.

The Preset Menu:

You can Save and Recall up to six Presets per Preset drop-down Menu.

To Save a Preset, first edit the settings as you like, and then select **as Preset #** in the Preset Menu.

To Recall/Select a Preset, open the Preset Menu and select the **Preset #**.

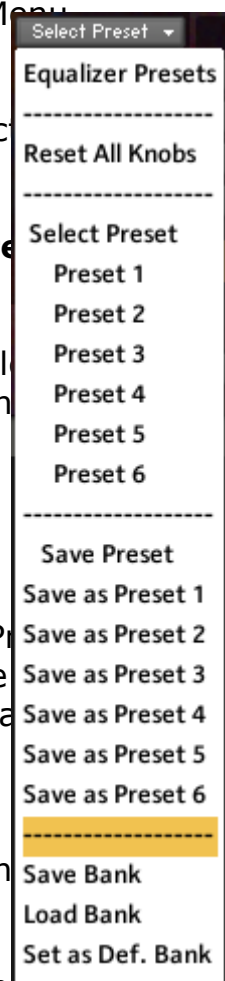
When you Save a Preset, the changes are written into the data folder. The next time you load the instrument in Kontakt, the Preset is automatically loaded the next time you load the instrument in Kontakt. If you have not saved the instrument, there is no need to save the instrument.

The six Presets can also be Saved and Loaded as a **Bank**.

To Save the six Presets as a **Bank**, select the **Save Bank** in the Preset Menu. A save dialog box opens, pointing to the default Data folder inside the Instrument folder. For better organization, give the file a name that identifies the Effect – ex. "EQ - my presets".

To Load a Bank, select the **Load Bank** in the Preset Menu. A open dialog box opens, pointing to the default Data folder.

If you have loaded a Bank and you want this Bank to be loaded the next time you load the instrument in Kontakt, then select the **Set as Def. Bank**.



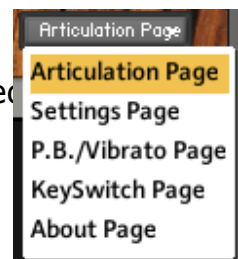
The Reset All Knobs sets all the knobs to their default setting.

PS: All the default Banks are stored in the sub-folder "Default Banks" inside the Data folder.

The Instrument Panel



The Instrument Panel has five different Pages that can be selected via the Page drop-down Menu.



The Articulation Page:

On the Articulation Page you find a Position Display, that shows the Fret Position and the currently Playing String.

You also get a visual indication of the selected Slides, Articulations, Scruggs or Imposed String buttons.

The Fret Position can be selected via a Key Switch (yellow color code).

When Auto Fret Position is turned on, the Fret Position is automatically selected according to the lowest/highest played note.

Each string can be Imposed via a Key Switch (red color code), and hereby override the Auto String Selection.

The Pluck Position can be selected with the Pluck knob or via Key Switches (cyan color code) or via Velocity. The Velocity selection can be adjusted on the Settings Page.

You can select between two different Slides via Key Switches (green color code), and adjust the speed/tempo of the Slides.

Here you also find two Articulation buttons: Hammer On and Pull Off. They can be selected via Key Switches (green color code).

The various attack settings of the Hammer On and Pull Off can be adjusted on the Settings Page.

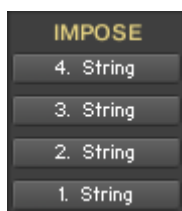
The String Muting can be Reverted via mouse-click and activated via Key Switch (green color code), and the amount of the String Muting effect can be adjusted.

The three Scruggs buttons toggle between six different Scruggs modes. They can be Reverted via mouse-click and activated via Key Switches (green color code), and you can adjust the speed/tempo.



The **Position Display** shows the selected Fret Position and the String that is currently playing.

When **Auto Fret** is turned on, the Fret Position is automatically selected according to the lowest/highest played note.



When one of the **Impose String** buttons are turned on, then the selected string is forced to play its full range and hereby override the Auto String Selection.

The buttons are controlled by Key Switches (red color code) that can be selected on the Key Switch Page.



The **Pluck** knob selects between the five different Pluck Positions. The Pluck Positions can also be selected via Key Switches (cyan color code).

When **Pluck Position Velocity** is On, then the different Pluck Positions are selected depending on the velocity level. The Velocity selection can be adjusted on the Settings Page.

The **Speed** knob controls the speed/tempo of the Slide articulations.



The **Whole Slide** button turns the Whole Step Slide articulation on/off. The button can be controlled by a Key Switch selected on the Key Switch Page.

The **Half Slide** button turns the Half Step Slide articulation on/off.

The two Slide buttons can be controlled via Key Switches (green color code) selected on the Key Switch Page.

The **Hammer On** button turns the Hammer On articulation on/off. The button can be controlled by a Key Switch selected on the Key Switch Page.



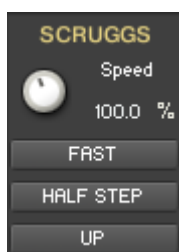
The **Pull Off** button turns the Pull Off articulation on/off. The button can be controlled by a Key Switch selected on the Key Switch Page.

The **Muting** knob controls the amount of the String Muting.



The **Muting** button turns the Muting/Damping of the strings on/off. The button can be Reversed via mouse-click and be controlled via a Key Switch (green color code) selected on the Key Switch Page.

The **Speed** knob controls the speed/tempo of the Scruggs bend.



The **Slow/Fast** button toggles between Slow or Fast Scruggs bend samples.

The **Half/Whole Step** button toggles between Half or Whole Step Scruggs bend samples.

The **Up/Down** button toggles between Up or Down Scruggs bend samples.

The three Scruggs buttons can be Reversed via mouse-click and be controlled via Key Switches (green color code) selected on the Key Switch Page.



The **Harmonic** button turns the Harmonic on/off. The button can be controlled by a Key Switch selected on the Settings Page.

About String Selection

With string instruments, like the banjo, a certain note can often be played on multiple strings. For example, D3 can be played on all four strings of the banjo, with each string having its own very distinctive sound.

When a real banjo player plays a note on the banjo, he will typically choose the string on which the note can be played with a minimum of effort. That is, without moving the left hand too much.

When you play the sampled banjo instrument from a keyboard, it's a little more difficult to deal with the string selection.

So we've made a script that will help you taking care of the string selection.

There are two different ways to select the strings that will be played:

1. You can either set/select a Fret Position, and then the scripted string-algorithm will automatically select the correct string according to the Fret Position.

The Fret Position is set/selected with Key Switches (yellow color code).

2. Or you can override the Fret Position and Force/Impose the string that you want to play. You Impose a string by holding down a Key Switch (red color code).

When you release the Impose String Key Switch key, the Fret Position will return back to the last selected position.

About the scripted String-algorithm

Here's a diagram that shows the note/string pattern, the string-algorithm uses when it selects strings. (In the example below, the 5th Fret Position is selected).

5. Fret											
1.					x	x	x	x	x	(x)	(x)
2.					x	x	x				
3.					x	x	x	x			
4.	(x)	(x)	(x)	(x)	x	x	x	x	x		

About the scripted Fret-algorithm

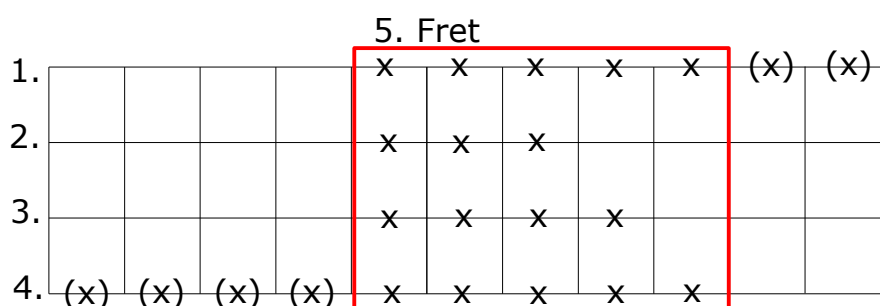
If you turn on the **Auto Fret** button, then a scripted Fret-algorithm kicks in and helps you select the Fret Position.

Here's how the Auto Fret-algorithm works:

As soon as a note is outside of the current "Fret Zone", a new Fret gets automatically selected, all depending on if the note is higher or lower than the current "Fret Zone".

A "Fret Zone" = All the notes that are inside the String-algorithm (the red rectangle) when a Fret is selected (five frets/half-steps).

In the example below, the 5th Fret Position is selected.



So playing a note outside the current "Fret Zone", will move to a new Fret and hereby also move the "Fret Zone".

If you want to override the Automatic Fret selection, you can still select the Fret with the Key Switches.

About the Reverse Concept

The three Scruggs buttons – Fast/Slow, Half Step/Whole Step and Up/Down – and the String Muting button, can all be **Reversed**.

When you **Reverse** a button, via a mouse-click, the button is added an asterisk after the button text, to show you that it is **Reversed**.

The **Reversed** button now works in the opposite direction when you use the Key Switch to toggle the two different articulations.



The Settings Page:



On the Settings Page you can adjust the various attack settings of the Hammer On and Pull Off Articulations. On this Page you can mouse-click the two Art. Buttons, to help you when you adjust the settings.

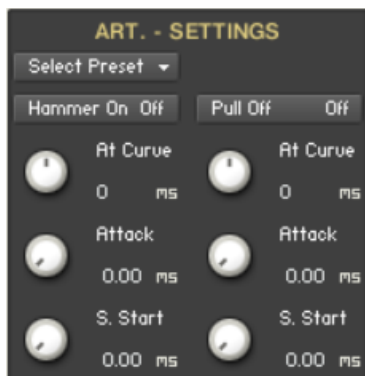
If the Pluck Position Velocity is turned On, then you can adjust the velocity levels that will select the different Pluck Positions.

You can also select between 25 different combinations of Layers/Pluck Positions.

Both the Articulation settings and the Pluck Position Velocity settings can be Saved/Recalled as Presets, and Saved/Loaded as a Bank.

Here you also adjust the Sustain Pedal release time and how much the velocity will affect the Volume and the LP Filter Cutoff.

And last you can add body and string Resonance to the Banjo sound.



The **At. Curve** knob adjusts the curve shape of the attack phase. A value of zero results in a linear curve, negative values make the shape more concave, and positive values make it more convex.

The **Attack** knob adjusts the initial time it will take the envelope to reach its maximum level after it has been triggered.

The **Sample Start** knob adjusts the start point of the samples.



The **Pluck** knob selects between the five different Pluck Positions. The Pluck Positions can also be selected via Key Switches (cyan color code).

When **Pluck Position Velocity** is On, then the different Pluck Positions are selected depending on the velocity level.

The four **Layer** values set the lowest velocity level at which the Pluck Position will be selected.

The **Layer Combi** drop-down Menu lets you select between the 25 different Layer Combination possibilities.



The **Sustain Pedal** knob controls the length of the sustain when the sustain pedal is pressed down. With this knob you can control the amount of *virtual resonance* of the banjo.



The **Velocity Volume** knob adjusts how much the velocity controls the volume.

The **Velocity Cutoff** knob adjusts how much the velocity controls the filter cutoff.



The **Banjo Resonance** knob controls the amount of the Banjo Resonance Impulse Response.

The P.B./Vibrato Page



On the P.B./Vibrato Page you select and adjust all the various Pitch Bend and Vibrato settings.

The Pitch Bend range is set manually, and can be set independently for Up and Down Bend.

Moving the Pitch Wheel will only bend the last playing note.

The Pitch Bend can also have a scripted P.B. Vibrato added, when the Pitch Wheel is moved up or down and reaches its maximum.

The P.B. Vibrato can select between seven different waveforms.

The Vibrato can either work as a Global Vibrato or only add Vibrato to the last played, and still held, note.

You can freely choose a CC# to control the Vibrato Amount, and set the Range of the controlled Vibrato Amount.

The Global Vibrato can select between two different waveforms.

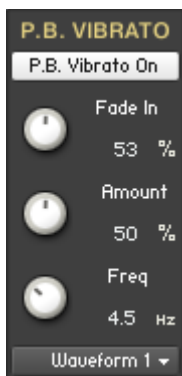
The Last Note Vibrato can select between seven different waveforms.

When the **Link** button is On, the PB Up and PB Down knobs are linked, and they behave like one knob.



The **PB Up** knob controls how many semitones will be bent, when the Pitch Wheel is moved upward. The knob is bipolar (+-), CTRL/Command + Click sets the knob to zero.

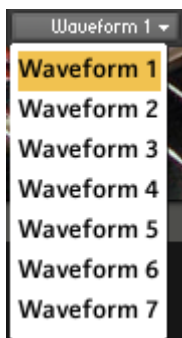
The **PB Down** knob controls how many semitones which will be bent, when the Pitch Wheel is moved downward. The knob is bipolar (+-), CTRL/Command + Click sets the knob to zero.



If the **Pitch Bend Vibrato** is turned on, a scripted LFO vibrato will be added, to only the last played note, when the Pitch Bend reaches its maximum.

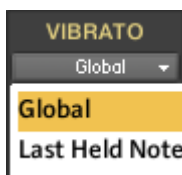
The **P.B. Vibrato Fade In** knob controls the fade in time for the scripted LFO Vibrato that is added to the last played note, when the Pitch Bend reaches its maximum.

The **Pitch Bend Amount** knob controls the amount of the scripted LFO Vibrato that is added to the last played note, when the Pitch Bend reaches its maximum.



The **P.B. Vibrato Freq** knob controls the speed of the scripted LFO Vibrato that is added to the last played note, when the Pitch Bend reaches its maximum.

With the **P.B. Waveform Menu** you can select between the different waveforms that will control the P.B. Vibrato.



With the **Vibrato Menu** you can select between a **Global Vibrato** that is added to all ringing notes, or a **Last Held Note Vibrato** that is added to the last played, and still held, note.

The **Vibrato CC Control** knob selects the CC# that will modulate the Vibrato Amount.

The **CC# Range** knob controls the LFO Vibrato Amount range, when you move the selected CC# controller.

The **Vibrato Freq** knob controls the speed of the Vibrato.

With the **Vibrato Waveform Menu** you can select between the different waveforms that will control the Vibrato.



About the Intelligent Pitch Bend

With the new scripted Intelligent Pitch Bend algorithm you can now do any kind of bend (one string bend):

1. Play one note and P.B.
2. Play a note and let it ring while you play a second note and P.B., then only the second (or last played note) will be P.B.
3. P.B. and then play a note, then move P.B. back to zero. If you have P.B. Vibrato turned on, then it'll be automatically ignored in this case.
4. Play one note and P.B. and then play a second note while you still hold down the first note/key, then only the first note is P.B.

The Key Switch Page:



On the Key Switch Page, you can freely assign which key that will trigger the various Key Switches.

Each Key Switch group has its own display, that shows the selected keys for the KS, and also has its own key color coding.



To assign a Key Switch, do this:

1. Activate the **Learn** button. 4. String
2. Then play the Key that you would like to be the Key Switch for the Preset. You can either play your connected MIDI keyboard, or click on the virtual keyboard in KONTAKT.

4. String = A1

The **Display** now shows the new note name of the Key Switch, and the color code on the virtual keyboard updates to the selected key.

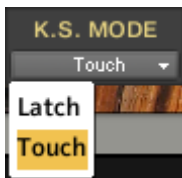


When you turn the **Velo – KS** button on, the velocity selection gets activated and the Key Switch selections are deactivated for the five different Articulations.

A new **Display** appears, that shows the velocity number for each Articulation.

Also the Key Color Coding (green) gets updated, to reflect the new settings.

Also a new knob – **Art. Vol.** - appears. With this knob you can adjust the volume of the Articulations.



With the **K.S. Mode Menu** you can select between two modes. When **Touch Mode** is selected, the K.S. is only turned on as long as you hold down the K.S. key. If **Latch Mode** is selected, then the K.S. turns On on the first hit and Off on the second hit of the K.S. key. It's also possible to **mouse click** the buttons in **Latch Mode**. The **Touch Mode** is the default Mode.

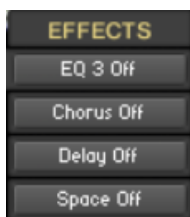
It's only the **String Impose**, the **Slides**, the **Hammer On**, the **Pull Off** and the **Harmonic** that can shift between the two K.S. Modes.

The Effects Panel

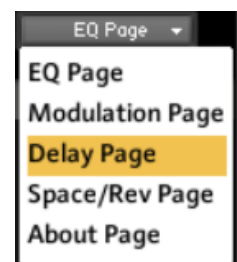


The Effect Panel has four different Pages. Here you select and edit all the various Effect parameters. You can also Save/Recall up to six Presets for each Effect, and Save/Load the Presets as Banks.

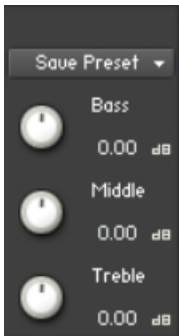
The Effects On/Off and the Pages:



The four Effect buttons turn the various Effects On and Off, and open the corresponding Page. You can also navigate between the different Effect Pages, using the Page Menu.



The EQ Page:



The EQ can either be a simple Bass/Middle/Treble Equalizer, with predefined Frequency and Bandwidth. Or an Advanced 3-Band Parametric Equalizer.



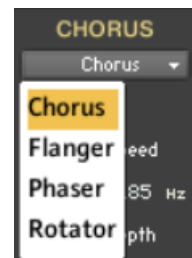
The **Freq.** knob chooses the frequency at which boosting or cutting will appear.

The **Bandw.** knob sets the width of the frequency band in octaves to boost or cut.

The **Gain** knob controls the amount of boost at positive values, or the amount of cut at negative values.

The Modulation Page:

On the Modulation Page, you can choose between four different modulation types.



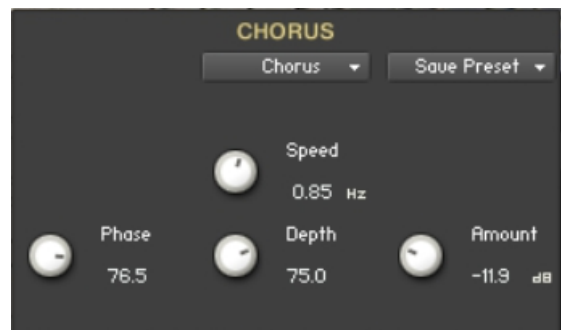
Chorus:

The **Depth** knob sets the amount of LFO modulation applied to a signal. Higher amounts result in a stronger effect.

The **Speed** knob sets the speed of the LFO modulating the signal.

The **Phase** knob adjusts the phase difference between the two LFOs that drive the left and right stereo channels.

The **Amount** knob sets the amount of processed signal sent to the main output.



Flanger:

The **Depth** knob sets the amount of LFO modulation applied to a signal. Higher amounts result in a stronger effect.

The **Speed** knob sets the speed of the LFO modulating the signal.

The **Phase** knob adjusts the phase difference between the two LFOs that drive the left and right stereo channels.

The **Color** knob adjusts the range of the flanging effect. Lower values sweep the effect toward the higher end of the flanging range, while larger values sweep the effect toward the lower end.

The **Feedback** knob routes the processed signal back to the Module's input. Higher values create a sharper, more intense effect.



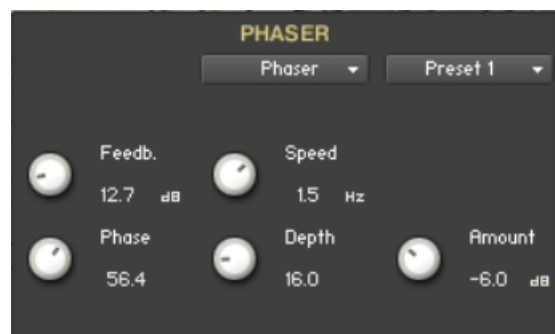
Phaser:

The **Depth** knob sets the amount of LFO modulation applied to a signal. Higher amounts result in a stronger effect.

The **Speed** knob sets the speed of the LFO modulating the signal.

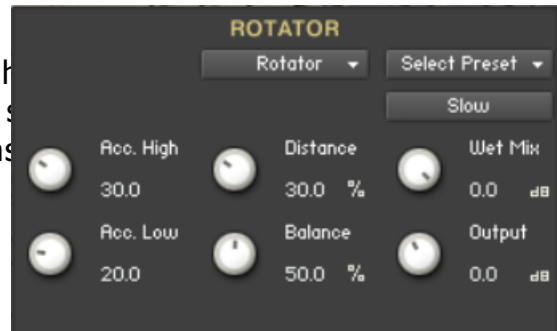
The **Phase** knob adjusts the phase difference between the two LFOs that drive the left and right stereo channels.

The **Feedback** knob routes the processed signal back to the Module's input. Higher values create a sharper, more intense effect.



Rotator:

The **Acceleration High/Low** knobs adjust how the treble/bass parts of the cabinets will react to speaker position, the speaker will change it's speed in



The **Balance** knob sets the ratio of the sound produced by the rotating speakers high frequency horn compared to the low frequency woofer. Higher values produce more highs, lower values more bass.

The **Distance** knob edits the distance between the virtual microphones and the rotating speaker. Higher values increase the distance.

The **Wet Mix** knob controls the effects strength. Turn fully clockwise to hear the rotating speakers only.

The **Output** knob sets the rotators overall output level.

The **Speed** button switches the speed of the rotator speaker. Choose between slow and fast.

The Delay Page:

The **Feedback** knob sends a portion of the output signal back to the delay line, which creates repeating echoes. A higher value gives more echoes.

The **Damping** knob reduces high frequencies in the feedback signal, so each successive echo has a lower high-frequency response.



The **Time** knob sets the interval of the delay, in either milliseconds or rhythmic values synchronized to external MIDI Clock, depending on the Sync button state.

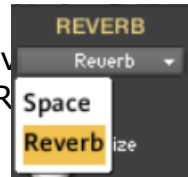
The **Pan** knob - setting a value higher than 0 results in a panning effect where each consecutive echo alternates between the left and right channel. The higher the value, the greater the stereo spread.

The **Amount** knob sets the amount of processed signal sent to the main output.

If the **Sync** button is turned on, the Delay is synchronized to an external MIDI Clock.

The Space/Reverb Page:

On the Space/Reverb Page you can choose between two different reverb types – Space (convolution reverb) and Reverb (algorithmic reverb). The Reverb uses less CPU than the Space.

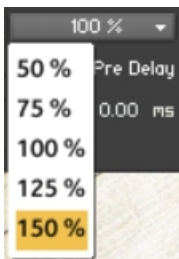


Space:

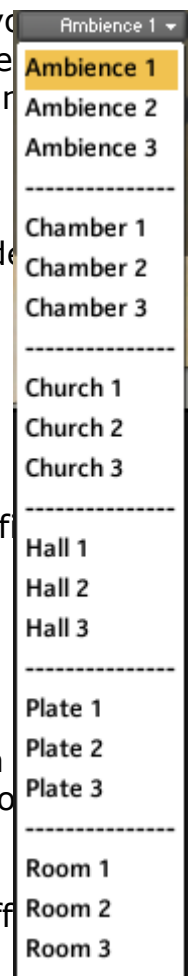


With the **Select Space** Menu, you can choose between eighteen different Impulse Responses, that can be loaded in the convolution plugin.

The eighteen Impulses are divided into three different categories.



With the **Space Size** Menu, you can choose between five different sizes of the selected Impulse Response.



The **Pre Delay** knob determines the room size by setting the length of the reverb effect. Higher values simulate larger rooms, lower values smaller rooms.

The **High Pass** knob attenuates frequencies below the chosen cutoff frequency.

The **Low Pass** knob attenuates frequencies above the chosen cutoff frequency.

The **Amount** knob sets the amount of processed signal sent to the main output.

Reverb:



The **Predelay** knob introduces a short amount of delay before the reverb takes effect. Increase this parameter to simulate larger rooms, decrease it for smaller rooms.

The **Color** knob determines the type of material used to construct the room. Lower values are softer surfaces, higher values are harder surfaces.

The **Size** knob determines the room size by setting the length of the effect. Higher values simulate larger rooms, lower values smaller rooms.

The **Stereo** knob - higher values increase the stereo effect. Use lower values to simulate sitting closer to the stage, and higher values for sitting further back in the hall.

The **Damping** knob sets the amount of absorption in the room. Higher values simulate more absorption.

The **Amount** knob sets the amount of processed signal sent to the main output.

=====

Script, Patch and Presets by Bo Clausen.

Enjoy the Bluegrass Banjo V3!

Dennis Burns - Bolder Sounds – February 2016

=====

Customer Support

For any questions, technical issues inquiries etc Please contact Bolder Sounds via email at sales@boldersounds.net.

=====

LICENSE AGREEMENT (EULA)

You have purchased a single-user license use these samples to be used in any type of music production, i.e. making demos, records, remixes, commercials, jingles, post productions, commissioned pieces, sound tracks for film, theater, musicals, live performances, computer games or multimedia. Samples may not be utilized or resold in the form of Sample Library Music or Sample-related endeavors (e.g. "Joe's Sample Collection" which contains our products). Written permission from Bolder Sounds is required. You CAN NOT trade, re-sell, lend, rent, copy, duplicate, upload or download to any database, BBS, or Server any of our sounds because Bolder Sounds owns the rights to the samples and programs, Bolder is licensing these to a single user for music production. Use of these samples MAY NOT be utilized in separate commercial applications such as the Apple ipad or the Android etc.. without written consent from Bolder Sounds.

Installation of this library constitutes full acceptance of these terms.



Creative Sample Libraries Since 1992