





User's manual





- → 3.5 Gb ncw compression format
- 3940 samples, 24 bit, 44.1 KHz
- → Up to 12 velocity layers, 21 frets on each string with round-robin algorithm
- FINGERED, SLAP and PALM-MUTE in one patch
- Different natural legato for FINGER, SLAP and PALM-MUTE articulations
- THUMB and POP slap articulation, with Auto and Manual selection
- Auto and Manual String and Position Selection
- Attack control
- Slide-up, Flageolets, X-notes (two modes for x-note performance)
- Repetition keys for X-notes and last articulations
- Realistic glissando note-to-note
- → Gliss-FX
- AMP cabinet and Bass tone effects
- Multiple FX and Noises (strokes, fret noises, releases)

You cannot use the "Libraries" tab to "Add Library" for this product. Only encoded and locked "Powered-By-Kontakt" libraries are loaded through the "Libraries" window.

In NI KONTAKT browser enter the folder in which you installed IEMB and load patch Ilya Efimov Modern Bass.nki.

If you use a typical size of the buffer preloading in Kontakt, this library will use 230 MB of RAM.





- 1. Please go to the download links you received after purchase and download all of the files.
- 2. Make sure you put all downloaded files into a single folder.
- 3. Unpack the downloaded files to any folder. Please note that the sample files you downloaded are a multi-part archive, so you do not need to extract every file; you only need to extract the first file that contains 'part1' in its name. To extract your files we recommend using Winrar for PC users, or UnrarX or Rar-Expander for the Mac. They're all free and you can find them here:

http://www.rarlab.com/ (for PC users)
http://www.unrarx.com/ (for MAC users)
http://download.cnet.com/unRAR/3000-2072\_4-26159.html (for PC users)
http://rar-expander.en.softonic.com/mac (for MAC users)

- 3. You need to have the full retail version of Kontakt 4.2.4 or later to use this library. The free Kontakt Player does NOT support this library.
- 4. Open the Kontakt 4 browser (look on the left-hand side of the Kontakt user interface) and click the "Files" tab. Find the library folder, which you extracted earlier, and double click on the Ilya\_Efimov\_Modern\_Bass.nki file which should be in that folder. You can use the Quick-Build Database option to allow Kontakt to find and store the location for faster browsing and loading.

You cannot use the "Libraries" tab to "Add Library" for this product.

Only encoded & locked "Powered-By-Kontakt" libraries.







## **Graphic User Interface**

The major part of the graphic interface depicts a guitar fret board. When you use your MIDI-keyboard the markers display the positions of the guitarist's left hand fingers. The markers change colors and letterings, depending on the articulation being used. Current articulations are displayed below the fret board. The Four frets of the natural left-hand playing position are highlighted in orange on the fret board.

The Options button opens a multi-tab panel, allowing you to edit the library's settings.

Note:

Some key switches of the library are velocity-sensitive and have two ranges: low (0-100) high (101-127)



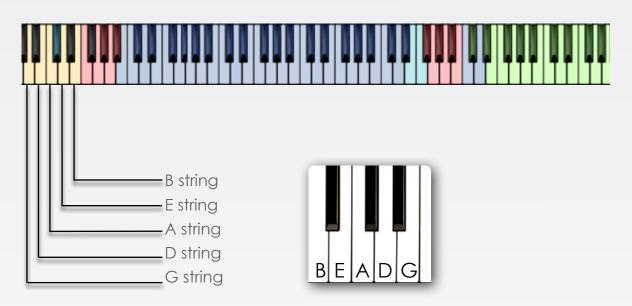


# **String Selection**

The bass guitar often allows identical notes to be played on different strings. The different positioning required results in varied timbre. The string selection and Playing Positions are normally selected automatically according to guitar fingering. However, the user may wish to choose to manually select the strings used or to determine the left hand playing position.

Select String Keys

You may select a string by using A-1, B0, C0, D0, E0 keys. On the NI Kontakt virtual keyboard these keys are colored yellow.



If the note you need is not available on the string you select, it will be played automatically on another string in a natural playing position.

The low B string is not involved in the string selection algorithm automatically. Notes will be played on the B-string only in two cases: when the notes are played in the range lower then E3; when you select B-string via KS A-1.

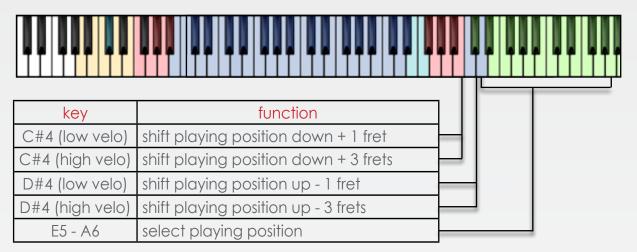




#### Position selection

Playing position may be adjusted by switching the fret setting at any time, with the "Set position to fret" keys (E5 to A6). On the NI Kontakt virtual keyboard these keys are colored green. The keys correspond to the notes on the E string.

You may also use the "Shift Position" keys located at **C#5** and **D#5** to shift from the current position. Low velocities will shift -1/+1 fret, high velocities -3/+3 frets.



The main range of the playing position has 4 frets (4 semitones). We extended this range by one fret so that the string will change correctly when playing chromatic scales. If a note cannot be found in the playing position range, the algorithm will look for this note on another string within the playing position range. If the note still can not be found within this range, the algorithm will look for it on adjacent frets and the playing position will be shifted. The playing position is crucial for the automatic string selection.

Example:

The playing position is at fret 4 and you play a B2 followed by a D3. Both notes are within the playing position and both notes will be played on the G string. If you want the D3 to be played on the B string you have to use the "Select String" feature, or set the playing position to fret 3.

The shifting of the playing position is accompanied by the sound of fingers sliding on the strings.

You can set the volume and frequency of this effect on the **Options\Noise** page, using the **Fret-Noise** knob. In the regular mode (**Guitar Mode**) you cannot play more than five notes simultaneously. Nor can you play more than one note on a string at the same time.





# **String Selection Chord Mode**

If you play chords, **Chord Mode** will help to minimize the use of the "Select String" or "Set Playing Position" functions. This mode is for identifying chords or a few simultaneous notes in the four-fret playing position range. That is why, to correctly find a playing position algorithm, the computer must know the whole chord. To play a bass guitar chord with all notes stuck with exact simultaneous precision is unlikely. It is this discrepancy among notes by a few milliseconds that makes it necessary to set up a small delay to identify the chord. The fewer discrepancies there are among the notes you play the lower the value of the delay that you can set. Set the delay time in the **Options\Performance\String Selection**.

By default there is an optimal delay time: **10 ms.** Playing chords on a MIDI-keyboard within this time span is easily accomplished.

To actived this mode go to the page Option/ Performance/String Selection section or use the velocity sencitive **C#0** key.



# **Open Strings mode**

You can play on the open strings without changing the playing position, by turning on "Open Strings" mode.

When this mode is activated the label is displayed in the Guitar view. In this mode you can use white keys from **A-1** to **EO** as open strings. This mode operates like "Open Strings Chord" mode but is not identical. In the "Open String Mode" the strings will change, depending on the playing position. In the "Chord Open Strings" mode, the algorithm tries to find each following note on the adjacent string and this interferes with the logical determination on the playing position for playing melody lines.

This "Open Strings" mode will not influence the playing position when you use white keys as open strings. The "Open Strings" mode is switched on and off by the keyswitch **D#0** 

key	function
D#0 (high velo)	Turn on Open Strings
D#0 (low velo)	Turn off Open Strings



# Performance mades



#### Performance modes

## Guitar mode

We recommend making "Guitar" your primary mode when using the library. All articulations/FX etc. are available in this mode.

## Keyboard mode

The algorithm "Automatic String Selection" is turned off in this mode. The first four guitar frets are used in this mode as is common in other libraries.

#### MIDI-mode

To use "MIDI Guitar" instead of "MIDI Keyboard" mode, you need to switch the MIDI mode on the **Options\Performances** page\

Performance Option section.

Selecting Midi Mode enables a 5-dropdown menu allowing you to set the midi channel for each string.

# **Velocity intensity**

Go to the Options\Performance page. Adjust the Velo intensity knob. This parameter changes the velocity sensitivity threshold of the whole Library.

#### **Attack**

To change the attack of a sound, use CC4 controller. By increasing the value of CC4, you will decrease the length of the pick's attack on the string. You can also set a value of the CC4 (Attack) on the **Option\Performance** page.

The sound remains unchanged when the value of this parameter equals 0.

# Pitch Bend range

To define the range of the pitch bend, use the Pitch bend knob on the **Options\ Performance** page. Maximum value - 2 semitones.





The library contains more than 16 different articulations. For ease of use, many are selected automatically, thus reducing the need for extensive keyswitches. The basic of performance techniques included are: Finger Playing, Slap and Palm-Mute. For a smoother, more flexible playing experience, we have combined these articulations in a single patch. Legato articulations (hammeron and pull-off) were recorded for each of these basic articulations. When the Legato mode is on, it will be selected for each articulation automatically. The name of the performed articulation will be displayed on the GUI.



The three basic performance technique keys are as follows:

## **Fingered**

To select the "Fingered" technique, press the F#4 key.

# Slap

In the "Slap" technique, the bassist replaces the usual plucking motion of the index and middle fingers with "slaps" and "pops". In the "slap", the bassist uses the thumb to strike the strings (usually the lower E and A strings) near the base of the guitar's neck. In the "pop", the bassist will use the index or middle finger of the plucking hand to snap the strings (usually the higher D and G strings) away from the body of the bass, causing them to bounce off the fretboard.

The "thumb-slap" and "pop" techniques are selected automatically. To switch between the pop and thumb techniques manually, press the A0 key switch. To select the "slap" technique, press the **G#4** key switch.

To use the slap technique for just a few notes while using the "Fingered" articulation, hold down the **A0** key switch.

#### Palm-mute

To select the "Palm-mute" technique, press the **A#4** key.

keyswitch	articulation
F#4	fingered
G#4 \ A0	slap \ pop
A#4	palm-mute





## Legato

Legato on the bass-guitar is a left-hand technique of playing notes (by a right-handed player). Up legato is called "hammer-on", down legato is called "pull-off". In the Legato mode, overlapped notes will trigger either "hammer-on" or "pull-off" articulations, depending on the direction of note movement.

There are two ways to activate auto legato mode.

- 1. Continuous. Press the "Auto leg" button on the GUI main page, or use the **G0** keyswitch. High velocity Auto Legato ON, low velocity OFF
- 2. You can also turn on a short-term Auto Legato by holding down the **G4** keyswitch.

The range for the legato detection can be set on the Options\Performance page\Legato.

If you do not hear legato, then the algorithm has changed a string. To avoid this, alter the playing position or select a string with the help of "Select Strings" keys or use Easy legato mode.

key	function
G0 (high velo)	Turn On Legato Mode
G0 (low velo)	Turn Off Legato Mode
G4 (hold key)	Turn On Legato Mode



# **Easy legato**

When the Easy Legato is ON the hammer-on \pull-off articulations will be played when the string is changed. To activate this mode, go to: **Option\Performance\Legato Options** or use the velocity sencitive **F#0** key.

# Slide up

To select the slide-up articulation, press and hold down the **B4** key

# **Flageolet**

To select the flageolet articulation, press and hold down the A4 key





## Glissando

Glissando articulation on a bass-guitar is used as both a melody embellishment, and as an effect. We have recorded multiple versions in different tempos for every fret – within an octave range – of each string. Press and hold **A#0** (Gliss key) and the Gliss mode algorithm will automatically switch among glissando versions for you!

A glissando can only be played on a single string. If you do not hear a glissando while holding the GlissKey it means that the target (following) note of your glissando is impossible on that string, Glissando speed depends on the velocity of the target note toward which the glissando is headed. The lower the velocity value is, the slower the speed.

min - 60 BPM, max - 200 BMP

The target note can sound in two ways.

- 1. If you would like to hear a target note with an active attack (as if the guitarist picked the string after glissando was over) release the starting note of glissando before it is over.
- 2. If you would like to hear a target note without any attack (as if the guitarist did not play with his right hand) hold the starting note of glissando until it is reaches the target note.

The volume of glissando depends on the volume of the staring note and depends on how long the starting note lasts before glissando starts.

# **Repetition Keys**

There are two repetition keys:

**E4** key repeats the last played note or the interval.

**F4** key repeats the last played or the interval with X-mute articulation.

If you hold an articulation keyswitch before pressing "Repetition Key", it will repeat the corresponding articulation.





## **Vibrato**

Is activated with the Modulation wheel (CC1)

You can control intensity and speed (frequency) of the vibrato on the **Options**\ **Performance\Vibrato Options** or use MIDI controller to automate it.



	CC1	vibrato level
	CC8	vibrato intensity
I	CC9	vibrato speed

#### X-Note.

X-notes can be played in two ways:

- 1. Use the repetition F4 key.
- 2. Use X-note Velo Mute Mode.



## Velo Mute Mode.

When this mode is on X-note articulation will be playable in lower velocity range. It possible to change the split threshold of the velocity range on the page **Options\Noise\Threshold**.

## **Articulation volume**

We have set, by default, what we believe to be the most optimal volume levels for each articulation. But you can edit the volume of each articulation if you wish. Go to page **Options\Art.Vol.** on the left-hand side of this page



you will see a drop-down articulation menu. Choose the articulation you would like to change and set the volume using the control knob. On the right-hand side of the **Options\Art.Vol** page you will see a table containing information about the individual volumes of articulations.





## **Noises and FX**

To re-create a believable live guitar sound and simulate live performance, the Library has a few FX sounds. Some of them are automated; other FX sounds can be added as desired. They are as follows

#### Release

This sound plays every time you release the key or the sustain pedal (CC64). You can set the length of time from the attack of the last played note during which the Release volume is decreased.

To control these noises, go to: Options\Noise.

**Volume**. Release volume can be controlled on the main interface page.

**Frequency**. Frequency of random noises.

**Time**. This determines the length of time from the attack of the last produced note during which the level of noise decreases.

**Decrease**. This determines the number of dBs by which the noise level decreases during the time determined in the time parameter. This parameter depends on Time linearly.

#### **Fret Noise**

This is the common slight scraping sound of the guitarist's left hand fingers moving along the strings. This FX is triggered when playing position is changed. For added realism, these noises have been recorded from every string. The volume and frequency of this noise can be controlled using the knobs on the Option\Noise page as with the Release noise.

#### Gliss FX

To play the different Gliss-FX, press and hold the **G#0** key, then play any note in the instrument's range.

# Sound Options. AMP and Bass tone

To turn on AMP and control Room Ambience, Bass amp Treble and Bass frequencies simply adjust with the corresponding knobs. Control the bass guitar's tone using the Tone knob located in the right side of the main interface.







## **User presets**



To save your user settings as a preset, Go to: Option\Performance\Presets section, select one of the drop-down menu's 10 empty presets and press the SAVE button. To load the presets choose a Preset on the drop-down menu and press the LOAD button.

## **Controllers reassignments**

Your sequencer can control any function of the Library. The default list of keyswitches and controllers is contained in a table at the end of this Manual. It is also replicated as a separate document.

All the key-switches can be reassigned according to taste. Any MIDI-controller may be assigned to any parameter of the Library. To see the mapping of controllers for each parameter or to reassign them

go to: **Options\CC**. On the left-hand side of the page are two drop-down menus – Function and CC. Once you have selected the function, determine the controller number that you would like to control the given function. On the right side of the page is a table with the list of pre-assigned controllers. Any changes that you make will be displayed in this table.







# **KeySwitches reassignments**

The reassignment of key-switches is similar to controller reassignment. To reassign key-switches go to: Option\Keyswitch. In the Function menu select any available articulation/ function and reassign it a new key-switch from the Key menu. On the right-hand side of the **Options\Keyswitch** page there is a table displaying the pre-assigned keyswitches with all the changes that you have made. To save and reuse your changes in the future you must "resave Patch".

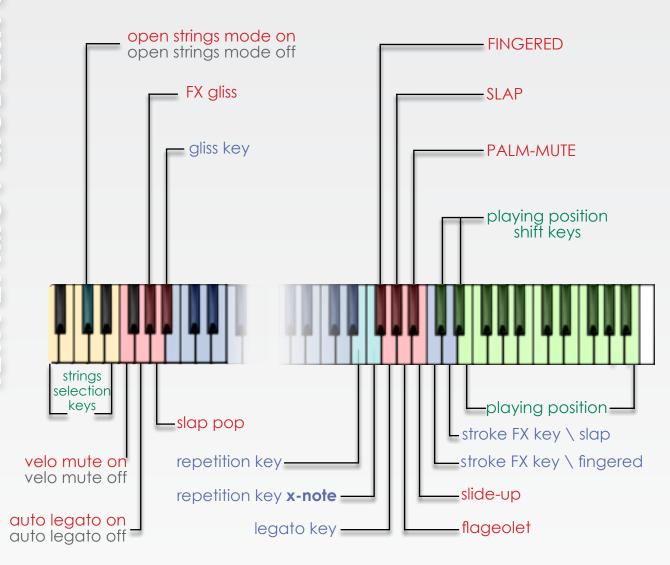
You can still return to the default controller settings, even after having resaved a patch, by pressing the Reset button which is in: **Options\CC**.

A similar Reset button is provided in: **Options\Keyswitch**.













key	function
A-1	select string B
ВО	select string E
C0	select string A
C#0 (high velo)	velo mode ON
C#0 (low velo)	velo mode OFF
D0	select string D
D#0 (high velo)	open strings mode ON
D#0 (low velo)	open strings mode OFF
EO	select string G
F0 (high velo)	X-note mode ON
F0 (low velo)	X-note mode OFF
F#0 (high velo)	easy legato ON
F#0 (low velo)	easy legato OFF
G0 (high velo)	auto legato ON
G0 (low velo)	auto legato OFF
G#0	FX glissando
A0 (hold)	slap pop
A#0	gliss key (note-to-note gliss)
E4	repetition key
F4	repetition key X-note
F#4	fingered
G4	legato key (hammer-on \ pull-off)
G#4	slap
A4	flageolet
A#4	palm-mute
B4	slide-up
C5	hit 1
D5	hit 2
C#5 (velo)	down shift playing position
D#5 (velo)	up shift playing position
E5 - B6	playing position keys





cc number	function
ccl	vibrato
cc4	pitch band range
cc5	attack
сс7	channel volume
cc8	vibrato intensity
сс9	vibrato frequency
cc10	pan
ccll	volume
cc14	open string mode on\off
cc15	auto legato on\off
cc16	easy legato on\off
cc21	chord mode on\off
cc22	chord mode time
cc29	legato range
cc30	strum time
cc31	velocity sensitivity
cc67	IR select
cc68	reverb send
cc69	reverb pre-delay
сс70	release on\off
cc71	release volume
cc72	release frequency
cc73	release time
сс74	release decrease
cc83	Volume
cc84	Tone
cc105	AMP on\off
cc109	AMP treble
cc110	AMP bass





## **Credits**

Produced by Ilya Efimov
Co-produced by Maxim Rybakov
Script by Günter Hirscher
Design by Ryo Ishido and Ilya Efimov
Guitar by Maxim Rybakov
English Manual by Dale Skiba

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