



VS BIWA ENGINE v2.6.4

USER GUIDE

by **VERSUS** AUDIO



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■ User Guide Overview

VS BIWA USER GUIDE explains the script engine "VS BIWA" of Versus Audio products, and explains the products described below.

In this guide, "VS BIWA.nki" is used as an example for explanation.

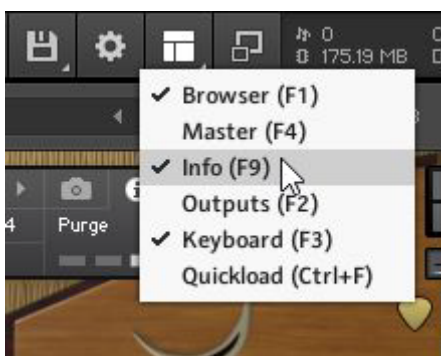
We recommend that you start the target instruments and read this guide.

(* The presence / absence, number, and range of installed functions may differ depending on the instruments and version. The description of this guide may be changed without notice due to version upgrades or corrections.

Target product : 「VS BIWA」

You can display simple help even in the instruments.

If you display KONTAKT's Info and move the mouse cursor to the knob or menu of the instruments, help will be displayed, so please use it as well.



"PLAY" screen



① Fret board

This is a display example in the state of [Mode:Mono/Poly/Power/Octave]

When you start the instruments, the PLAY screen is displayed first.

On the PLAY screen, a blue marker that is the playing range and a cyan marker that indicates the lowest note are displayed. The markers move on the fretboard in sync with the keyboard color of the playing range. When you press the cyan keyboard, you will hear the sound at the cyan position on the fretboard. (* If the position is physically impossible for some playing styles, another position is automatically specified, or another playing style is automatically specified.)

In [Mode: Power] and [Mode: Octave], multiple strings are played at the same time, so the playing range of the lowest note among the constituent notes is displayed with a marker. ([Mode] is "A" at the bottom right of the image.)

When you press a key in the playing range to make a sound, a white block will appear on the fretboard. The type of sound actually sounding (SU: sustain, etc.) is displayed in the block.

(The thicker one of the Biwa strings is called the 1st string, but to prevent confusion, the thinner one is the 1st string, just like the guitar.)

②Information bar

Mainly displays information about the key switch pressed when the key switch is operated. The state of ② in the image indicates that the [Mode: Mono] key switch has been pressed.

③Knobs

(*See"■Knobs")

④Help switch

Displays help according to the state of the instruments. It is used when you do not understand the operation or when checking the key switch.(Help content is in Japanese)

⑤Panic switch

If you press the panic switch when the instruments is unstable or when the release key does not stop the sound, all sounds are stopped and internal variables related to sounding and sounding stop are initialized.

⑥Stroke direction display

If the pointed side of the pick points downward, it means a down stroke, and if it points upward, it means an up stroke. (This is a display-only function and cannot be operated.)

⑦Main menu

The most important items for setting the instruments, such as how to play, how to play, and the fret position, are lined up.

Everything in the main menu supports key switch and CC (control change) operations.

The color of the small bar ("C" in the image) just to the left of the menu represents the color of the corresponding keyswitch. Gray is not a key switch but can be operated with CC. When you press this small bar, the corresponding key switch turns black and the operation with the key switch etc. is invalidated. Press it again to return. The keyswitch is enabled when the small bar is light and disabled when it is dark. It can also be used to check the position of the key switch.

(* For the functions of the main menu, see "■Key switches and main menu")

⑧Screen change switch

Switch to the PLAY screen, VOLTONE screen, or SETTING screen. The image shows the PLAY screen selected.

(* For the SETTING screen, see"■SETTING screen")

(* For the VOL,TONE screen, see"■VOL,TONE screen")

⑨Velocity information display

Displays velocity information with the current settings. [Play: Multi,All] Sometimes you can select the playing style according to the velocity, so the velocity range in which each playing style sounds is displayed. "Velocity to Volume" is displayed for playing styles that specify the volume by velocity.

When the [Legato] function is ON, the tone changes depending on the strength of the velocity of the note behind the legato input.

"Legato 100-127: so" displays information that soft legato off are performed when the velocity value at the time of legato input is 100 to 127.



Playing Range

① Fret board

The image is a display example in the state of [Mode: Chord / Form]. In [Mode: Chord / Form], the blue marker that is the playing range is not displayed. Instead, the [CHORD EDIT] button and the chord search function (D in the image) that imitates the keyboard for one octave are displayed. Chord search function Specify the search conditions with the cyan switch on the left side, and set the keyboard of the matching playing range to cyan. (*For the chord search function, see "■ Chord search")

When you press the [CHORD EDIT] button, the chord editing function (E in the image) is displayed. (* For the chord editing function, see "■ Chord editing")

② Information bar

Mainly displays information about the key switch pressed when the key switch is operated. The "Mode - Chord (Vel <64: Form Mode - 64 <= Vel: Chord Mode)" displayed in the image is displayed when the key switch corresponding to [Mode: Chord] is pressed. When the velocity is less than 64, it is [Mode: Form], and when the velocity is 64 or more, it is [Mode: Chord], and the information is displayed in the same way with other key switches.

Key switches and main menu



Top of Help ① Playing style selection [Play: ●●] (C-2 to G-2) (* The range and number will vary depending on the articulation of the Instruments.)

Select a playing style. In the [Play: Multi] states, the playing style is specified by the numerical value of the velocity of the keyboard within the playing range.

If you want to fix the playing style to a certain style, operate the purple key switch in the upper part of the help ① to switch the playing style. The abbreviations for playing styles described in the instruments are SU: Sustain, so: Soft legato, BR: Brushing, TR: Tremolo, IU: InUp, ID: InDown.

Depending on the instrument, HO: hammer-on, PO: pull-off, etc. may be included.

In [Play: SU, so, BR, IU, ID, Short, noisySU, noisyBR] you can specify the strength of the volume by the strength of the velocity.

[Play: Multi, All, TR] can specify the volume by changing the control by changing the setting. You can change the speed of the tremolo playing method on the setting screen.

Top of Help②Release (spare) (mute noise) (G # -2)

This is a spare release key switch.

Top of Help③Pick scrape, etc. (A-2)

Pick scratches and glissandos with different lengths and tones are integrated into one key. The timbre is specified by velocity.

Top of Help④Fret noise (A # -2)

Fret noise with different lengths and tones are integrated into one key. The timbre is specified by velocity.

Top of Help⑤Fret position selection [Posi: ● fret] (C-1 to G # -1)

Specifies the fret position for each string. The low position, high position, etc. are specified here.

When [Auto fret] is ON, the position is automatically changed according to the slide playing style and playing conditions. If you want to fix the position, turn off [Auto fret].

In [Mode: Chord / Form], it is not necessary to specify the position, so the key switch at this location switches to each string performance.

Top of Help⑥Legato mode [Legato:off,Fretnoise,Slide,soft,Multi] (A # -1)(Depends on the instrument)

A legato sound is produced by pressing one key and the other within the playing range.

In the case of [Legato: each playing style], the sound of the specified playing style is played.

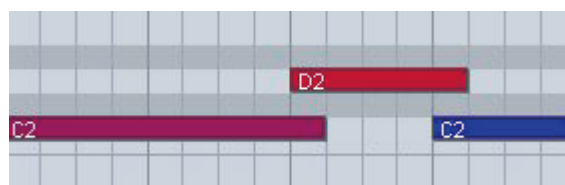
In [Legato: Slide], the notes of all strings are continuously slid to the fret, which is the pitch of the keyboard that was input later. The slide speed is slower as the velocity of the keyboard entered later is weaker, and faster as the velocity of the keyboard is stronger. By inputting multiple times, it is possible to express the speed change during sliding.

[Legato: Fret noise] sounds fret noise. The length of the fret noise produced by legato becomes longer and stronger as the distance between the frets from the front note to the rear note increases.

In the case of [Legato: Multi], the playing style changes depending on the velocity of the keyboard entered later.

(If the upper and lower limits of the number of frets are exceeded, or if [Hold] is off and [Mode: Poly] is set, the legato function will not be executed.)

Legato input can be continued.



Top of Help⑦Mode selection [Mode: ●●●]• **[Mode: Mono] (C0)**

This mode is for playing each string monophonically. When you press a key in the playing range, all preceding notes are automatically stopped.

If you press the keys of another string at the same time, the polyphonic operation will be performed only at that moment.

• **[Mode: Poly] (C#0)**

This is a mode in which each string is played polyphonically. It is used when playing arpeggios.

• **[Mode: Power] (D0)**

This is the mode to play the power chord.

The chord specification menu is displayed. ([Pwr: 5th / 5th + octave up / 4th])

The playing range is limited by [Powercode Limit] on the setting screen.

• **[Mode: Octave] (E0)**

This mode is for playing octave playing.

• **[Mode: Chord] (B0 velocity 64 or higher)**

It is a mode to play chords. Chord selection key + Plays the chord set for each keyboard in the playing range. You can also set different chords for all the keys within the playing range.

• **[Mode: Form] (B0 velocity less than 64)**

This mode is for playing chords in a fixed form.

(*: Adjust the stroke speed of each playing style with the knob [STROKE TIME].)

Top of Help⑧Repeat keys (F0)

It has the effect of playing the keyboard that was played immediately before. Use this when you want to process the same pitch over and over again at high speed.

Top of Help⑨Play the key on the octave (F # 0)

Play the key one octave above the keyboard that was played immediately before. To minimize the position change, the two higher strings are given priority and sounded.

Top of Help⑩Release Keys

Stops all ringing sounds and generates the following release noise. The volume of each release sound is adjusted automatically.

- (G0/G#0) It will be released silently.
- (A0/A#0) Mute noise (release noise) is emitted at the same time as the release.

Top of Help⑪1 string open string Key

Play the 1st open string.



Top of Help ⑤ Each string performance (C-1 to F-1)

This is a key switch unique to [Mode: Chord / Form]. The blue keyboard of each string playing range is assigned to each string, and the fret sound corresponding to the chord specified by [Chord] and [Form] is played. When [Instrument] is set, if you play it so that it is interrupted, it will sound monophonically and stop all preceding notes. If you continue to play while pressing the key of each string playing range, it will sound polyphonically, the preceding note on the same string will stop, and the note on the different string will be maintained. Press the leftmost key to stroke all strings.

Center of Help ① [Quick Chord] (C3)

When set to On, the sound will be played at the same time you press a key within the playing range. If you do not want the chords to sound, turn off [Quick Chord].

Center of Help ② Chord selection [Chord: ●●] (Chord: C4 to D5)

Specify the chord [Chord: ●● (, m, 7, M7, m7, mM7, dim, m7-5, aug, sus4,7sus4,6, m6, add9, user)] on the red keyboard of ② and play. Specify the basic chord [Chord: ●● (C to B)] on the blue and cyan keys shown as the range (red and cyan keys when [Quick Chord] is Off). For example, if you combine [Chord: m] and [Chord: C], you get Cm. You can freely edit the fret position of the chord.



Bottom of Help①String selection [Strings: ●● str] (C6 to F6)

The playing range is adjusted so that all frets on the specified string are playable. In the case of [Strings: auto], the position of [Posi: ● fret] is prioritized. When you operate [Posi: ● fret], it automatically becomes [Strings: auto].

Bottom of Help②MIC selection [MIC: ●●] (C7 to D7 * The range depends on the number of MICs installed in each instruments.)

Select MIC. The MIC to be used must be loaded on the SETTING screen [Load MIC: ●●]. Sounds that are not loaded will not be pronounced.

Bottom of Help③Stroke / picking direction selection [Down / Up / Alternate / Economy / Auto Alt./Auto Eco.] (G7-C8)

Specifies the stroke picking direction. Choose from Down, Up, Alternate, Economy, AutoReturn Alternate, AutoReturn Economy. The automatic recovery automatically becomes a downstroke after a certain period of time has passed. It automatically returns at the timing specified in the option [Stroke Timing: ● / ●] on the setting screen.

Bottom of Help ④ Percussion playing range (F5-B5)

This is the key to play the sound of hitting the body.

Main menu ⑤ [Hold] (default CC # 64)

[Hold] In the ON state, the sound continues to sound even if you release the keyboard in the playing range. [Hold] When turned off, the sound stops as soon as the keyboard is released, generating release noise. [Hold] In the OFF state, there is a drawback that it is difficult to handle the slide playing method because no sound is produced unless the keyboard is held down. Also, due to the characteristic that no sound is produced unless you keep pressing it, in [Mode: Poly], the input method for polyphonically sounding multiple strings and the legato input method are the same, so in [Mode: Poly] Legato input is disabled and cannot be used.

■ Knobs



① **Knob [STROKE TIME], ② [STROKE TIME 2(Random)]**

Specifies how many ms it takes from string to string when stroking multiple strings.

① determines the standard speed, and ② gives randomness. For example, in the case of (1) 10ms (2) (0-5.0) ms, the stroke speed changes in a random number of seconds of 10.0ms-15.0ms. (2) When set to (0 --0.0) ms, the randomness disappears and it is fixed at 10.0 ms.

③ **Knob [VIBRATO SPEED]**

Specifies the vibrato speed.

The CC to perform vibrato is specified in the control change setting [Vibrato: CC # ●] on the setting screen.

④ **Menu [Sync]**

Specify whether to operate [VIBRATO SPEED] with frequency or tempo sync.

■ Chord search



When it is [Mode: Chord / Form], the chord search function is displayed.

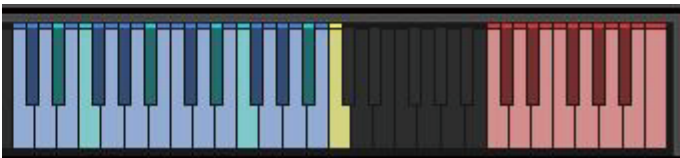
Specify the search key in ①. ② displays the constituent notes (C to B) of the note played immediately before.

Symbol: " \supseteq " means a subset (including), and if ① includes ②, it is considered to be conforming.

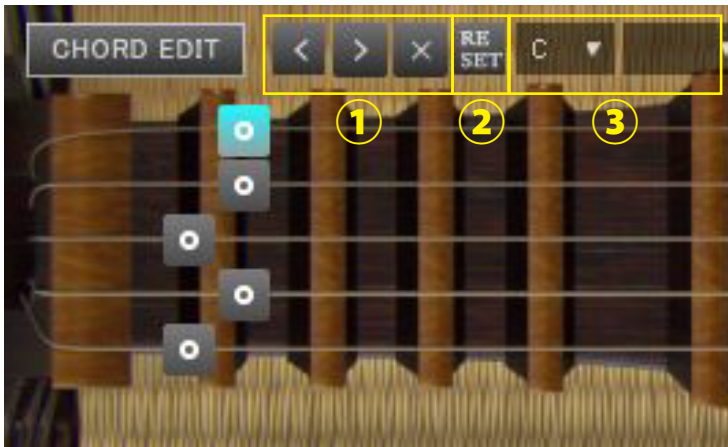
Symbol: " \subseteq " means a subset (included), and if ① is included in ②, it is considered conforming.

The " \supseteq " part in image 9 can be changed to " \subseteq " by clicking.

The keys in the playing range that contain the chords that match the search are displayed in cyan.



■ Chord editing



This image is [CHORD EDIT] in the [Mode Chord / Form] state.
This is what you see when you press.

If you press [CHORD EDIT] in the [Mode: Chord / Form] state, you will be in the chord edit mode.

A gray pointer is displayed on the fret board, and when you select the pointer, it turns blue as shown at the top. You can select multiple pointers by holding down the Shift key or Ctrl key while selecting.

The position of the selected pointer can be changed with ① "<" and ">". You can control the fret positions of all strings at the same time by holding down the Alt key.

If you press "x", the pointer will also become x and move out of the fret board, indicating that the chord you are editing will not sound.

② Press "Reset" to reset the pointers of all strings of the chord being edited to the default values.

③ is the chord preset function (insert function). Applies the selected chord preset to the chord you are editing. Specify the fundamental tone (C-B) in the left menu of ③, and chord (, m, 7, M7, m7, mM7, dim, m7-5, aug, sus4, 7sus4,6, m6, add9, fret) in the right menu of ③.) is specified.

Chord editing during [mode: Chord] is applied individually to the chords specified by the two [Chord] in the main menu. Therefore, even with the [Chord: m] and [Chord: C] keyboards, it is possible to store chords that differ from the notation of "Cm" by editing the chords. (The notation cannot be changed.)

The chord edit at [mode: Form] is applied to the chord form of the lowest key in the playing range of the form specified by [Form] in the main menu, and becomes the reference for each keyboard in the playing range. If it exceeds the fret range, it will be automatically adjusted to the upper fret limit.

"VOL,TONE" screen



Press the "VOL, TONE" button at the bottom left to display the VOLTONE screen.

① **Menu [Each MIC Stereo / Mono L / Mono R / Mono C] , Pan**

Specifies the stereo mono for each microphone. (Mono L: Left CH, R: Right CH, C: Left CH + Right CH)

② **Switch [each MIC PHASE]**

Inverts the phase of each microphone. "Normal" is the normal phase and "Reverse" is the inverted phase. Mainly used to get a phase-out effect.

③ **Knobs [each MIC VOL]** ④ **Knobs [each MIC WIDTH]**

Adjust the volume and width of each microphone.

⑤ **Menu [Curve selection (Linear / Light)]**

Change the curve of volume change with respect to velocity. Linear changes the volume linearly with respect to velocity, but Light makes it loud even with a light touch.

⑥ **Knob [VEL-VOL]**

Adjusts the amount of volume change with respect to velocity.

⑦ **Knob [ATTACK]** ⑧ **Knob [RELEASE]**

Adjust the length of the attack and release.

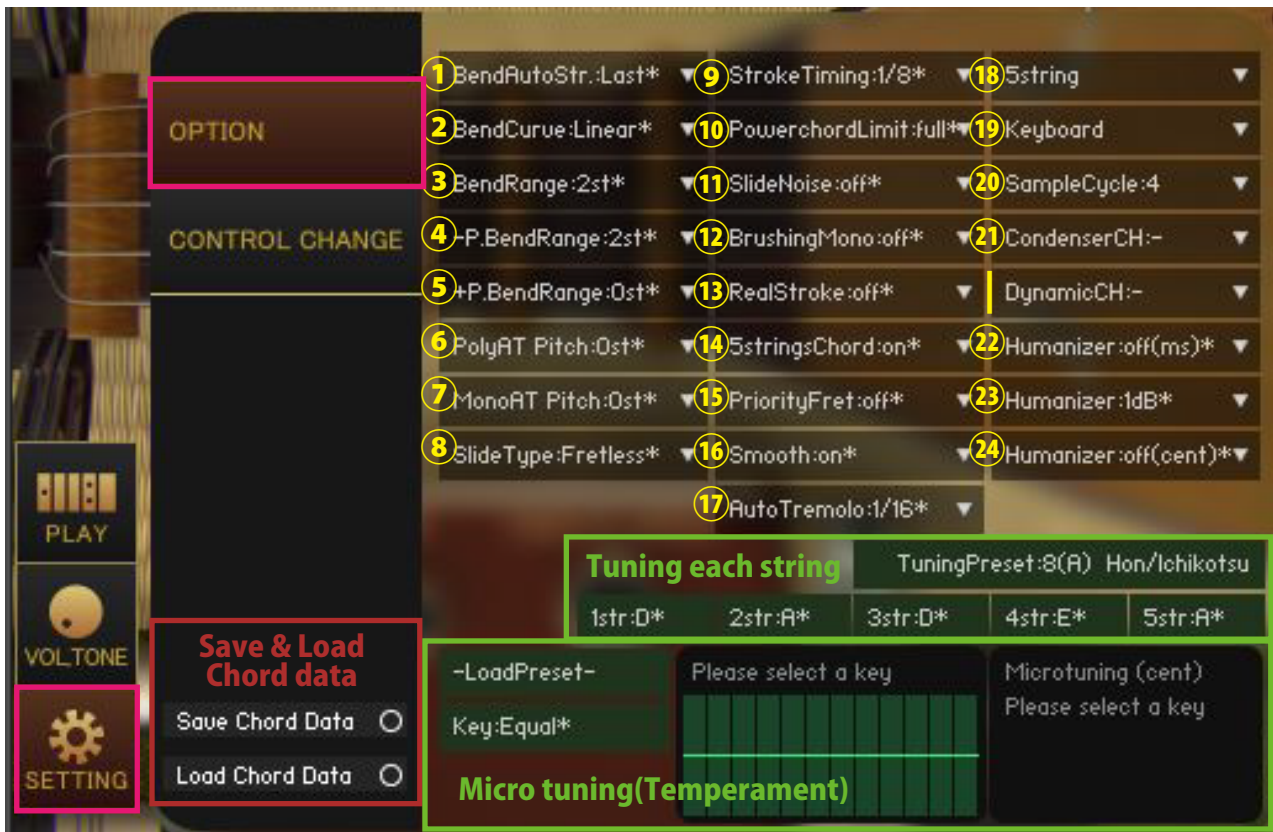
⑨ **Knob [MASTER VOL] (default CC # 11)** ⑩ **Knob [MASTER TONE]**

Adjust the master volume and master tone.

⑪ **Sample loading on/off switch for each mic**

When turned on, the sample of the corresponding mic will be loaded and ready for use. Turn off to purge samples and reduce memory usage.

"SETTING" screen



Click the "SETTING" button at the bottom left of the image to display the setting screen.

The value with "*" in the menu indicates that it is the default value.

①[Bend Auto Str: Last / High / High + / Low] Automatic choking string selection

Select the string to be operated with [Bend Auto (default setting: plus value of pitch bend)] on the control change setting screen.

[Last] selects the last string [High] highest string [High +] second highest string [Low] lowest string.

The strings to be choked are automatically selected each time you play the keyboard in the playing range. If only one string is sounding, that string is selected, and if two or more strings are sounding, the string is automatically selected according to the selected algorithm.

If the automatic selection does not work, the automatic selection is reset by setting the control change value set in [Bend Auto] to 0 once.

If you want to choke each string individually, unlike the automatically selected strings, enter the control change specified in [Bend 1str to 5str]. If the choking value for each string overlaps with [Bend Auto] and [Bend 1str to 5str], the higher value has priority.

②[BendCurve]

Specifies the choking curve.

③[BendRange:●fret]

Specifies the choking bend range.

④[-P.BendRange:●fret]

Specifies the range of negative pitch bend values.

⑤[+P.BendRange:●fret]

Specifies the range of positive pitch bends.

⑥[PolyAT Pitch]

Specifies the amount of pitch change for each note due to polyphonic aftertouch (polypressure)

⑦[MonoAT Pitch]

Specifies the amount of pitch change due to monophonic aftertouch (channel pressure)

⑧[Slide Type:Fretless/Fretted]

Select Fretless if you want to change the pitch smoothly when sliding, and Fretted if you want to change it step by step.

⑨[StrokeTiming:●/●]

You can select the stroke timing. When the stroke picking direction is [Pick: Auto Alt./Auto Eco.], When the time specified in [Stroke Timing] elapses, it automatically returns to the down direction.

⑩[PowerchordLimit]

When in [Mode: Power], the playing range is limited to the bass strings only. When set to [Powercode Limit: full], the limit is released and the 5th and 4th strings (1st string + 2nd string, etc.) can be used.

⑪[SlideNoise]

When turned on, the noise generated when the frets and strings collide during slide playing is produced.

⑫[BrushingMono]

When turned on, only the root note is played during brushing performances in power chord playing and octave playing.

⑬[RealStroke]

When turned on, the bass strings will not be played when the stroke width is wide during the upstroke.

⑭[5stringsChord]

When turned on, the 5-string sound will also be played during the main menu [Mode: Chord / Form]. When it is OFF, the 5th string is not played, and only the 1st to 4th strings are played.

⑮[PriorityFret]

When [Mode: Mono / Poly], the sound at the specified fret position is given priority.

⑯[Smooth]

When turned on, it automatically adjusts so that the joints of sounds become natural.

⑰[Auto Tremolo]

You can select the tempo-synchronized picking speed of the tremolo. If you set it to Manual, it will become a tremolo if you input notes continuously.

⑱[4string/5string] (* Depends on the number of recorded strings)

Change the number of strings in the instrument.

⑲[Instrument/Keyboard]

[Instrument] Faithfully to the recorded instrument, it automatically mutes so that two or more notes on the same string do not sound.

[Keyboard] Allows you to play like a piano or keyboard.

⑳[SampleCycle:2-A/2-B/4]

Change the number of round robins. Since 2-A and 2-B use different samples, they are mainly used as double tracks.

㉑[Condenser/DynamicCH>(* The name of the microphone may differ depending on the instruments.)

It is used to specify the output channel for each pickup and para-out. It is a condition that the output channel is set on the KONTAKT side before starting the instruments. After the settings are complete, the channel will be added to the menu when the instruments is started. Select [Condenser / Dynamic CH:-] to return to the default settings. If you change the output channel, the output before the insert effect is applied will be output to the specified channel.

㉒[Humanizer(ms)]

The timing is shifted by delaying the input within the playing range for a randomly selected time (ms). When [Humanizer: 10ms] is selected, a random delay time between 0 and 10ms is generated.

㉓[Humanizer(dB)]

Applies a randomly selected volume (dB) to all sounds. When [Humanizer: 5dB] is selected, a random volume change between 0 and 5dB is given to all sounds.

㉔[Humanizer(cent)]

Applies a randomly selected pitch (cent) to all notes. When [Humanizer: 5 cent] is selected, a random pitch change between 0 and 5 cents is given to all notes.

Tuning each string

Change the tuning for each string. If you change the tuning, the chord data will be initialized to the selected tuning. If the playing range covers the release key switch, the playing key has priority and the release key switch cannot be used. In that case, use a spare release key switch.

Save & Load Chord data

- Save Chord Data : Save the current chord data in an nka file.
- Load Chord Data: Load the saved chord data from the nka file.

Micro tuning (temperament adjustment function)

This function allows you to adjust each pitch in cents. Drag the table on the right to adjust the values. Adjustment is applied by selecting [Key: C ~ B]. Select [Key: Equal] to use equal temperament.

You can select a preset from the [-Load Preset-] menu and save the current value with [Save >>> User 12345]. User preset data is saved in the Data folder in the Library folder of each instruments.



①[Vibrato]

Specifies the control change to apply vibrato. Vibrato all sounds.

②[BendAuto]

Specifies the control change to choke the automatically selected strings. The automatic selection algorithm can be selected with [Bend Auto Str] on the option setting screen.

③[Bend1-5str]

Specify the control change to choke the 1st to 5th strings. If there are multiple notes on the same string, only the last note played will be choked.

If it overlaps with the selected string of [Bend Auto], the one with the higher value will be applied with priority.

④[Stroketime]

[STROKE TIME] Specifies the control change that operates the knob (large).

⑤[Stroketime2]

[STROKE TIME] Specify the control change to operate the knob (small).

⑥[Vib.Speed]

Specify the control change to operate the [VIBRA TO SPEED] knob on the PLAY screen.

⑦[MasterVol]

Specify the control change to operate the [MASTER VOL] knob on the VOLTONE screen.

⑧[MasterTone]

Specify the control change to operate the [MASTER TONE] knob on the VOLTONE screen.

⑨[FretPosi]

Specify the control change to operate the main menu [Posi: ● fret].

⑩[Autofret]

Specify the control change to operate the main menu [Aito fret].

⑪[Hold]

Specify the control change to operate the main menu [Hold].

⑫[Monophonic]

Specify the control change to force [Mode: Mono]. If the value is 64 or more, the forced monophonic is canceled, and if it is less than 64, the forced monophonic is canceled and the original is restored.

⑬[Multi/All Vol]

In [Play: Multi], the playing style is specified by velocity, so the volume cannot be adjusted by velocity, but control change can be specified as a substitute for velocity.

■ EFFECT page



① Select effect slot

Select an effect slot. Displays the effect knobs and switches for the selected slot.

② Bypass switch

Effect bypass switch.

③ Load effects

Load effects.

④ Move effect left or right

Swaps the currently displayed effect with the effect in the left and right slots.

(*Available in (KT6) Kontakt 6 and above (KT7) Kontakt 7 and above. If you load an effect that is not supported by the Kontakt version, it will become empty. Parameters that are not supported by the Kontakt version will not respond even if you manipulate them. (KT6) Kontakt 6.8.0 or higher recommended, (KT7) Kontakt 7.5.2 or higher recommended)

⑤ About File Browser

When you open the File Browser in Convolution Reverb, you can use the samples in the folder. Double-clicking a wav file etc. will load it as an IR. The folder address is displayed at the bottom of the screen. "File Browser (Library)" displays the browser based on the nki storage folder, and "File Browser (Documents)" displays the browser based on the specified folder in Kontakt itself.

macOS: Macintosh HD/Users/*Your User Name*/Documents/Native Instruments/User Content/Kontakt

Windows: C:/Users/*Your User Name*/Documents/Native Instruments/User Content/Kontakt

■ Credit

Artwork (packages and GUI 3D / 2DCG), players, recordings, scripts, engineers : Hironari Watanabe

※"KONTAKT" is a product of Native Instruments.

Versus Audio

URL: <https://versusaudio.com/>

mail: info@versusaudio.com