

www.Suonopuro.net




Virtual Vertical Flutes

for Electronic Wind Instruments, Keyboards or MIDI

Made by *Gino Chimenti*

Manual

Virtual instrument for  **KONTAKT**

Introduction

The **New Dr Xiao & Mr Shakuhachi** is a **virtual instrument** for Kontakt, emulating two ancient bamboo flutes from Asia: the xiao and the shakuhachi.

The **XIAO** is a Chinese vertical end-blown flute. It first appeared in the Han dynasty (206 bc–220 ad). The xiao is general made of purple bamboo and has a **graceful and mellow sound**.

The **SHAKUHACHI** is a traditional Japanese bamboo flute that was originally derived from the Chinese xiao in the 8th century. The shakuhachi's blowing end is cut obliquely outward, so that subtle varieties of tone color can be produced. The bell (flared end) consists of the trunk of the bamboo plant with its root ends. The shakuhachi is capable of producing **loud, penetrating and breathy tones**.

The **new version** of Dr Xiao & Mr Shakuhachi is based on a much more **advanced algorithm** than the previous one. It allows you to obtain both the typical **realism** of virtual instruments entirely based on sampled sounds, and the **versatility and ease of control** of instruments mainly based on algorithms. The result is **two virtual instruments of the highest level**, which exceed the limits of the original flutes, both in terms of extension and dynamic range.

With Dr Xiao & Mr Shakuhachi you can start a note with a wide range of nuances, **from portato to accented**, or effects: **bending** or **muraiki** (strong breath). You can perform both **legato** phrases and **glissato** passages, up to twelfth intervals (19 semitones of distance), with great realism. It also has a **wide dynamic and tonal range**, adjustable and controllable in many ways, and **four and a half octave range**. The **crescendo** and **diminuendo** are very natural, without earing overlapping notes.

Dr Xiao & Mr Shakuhachi also have a **wide range of effects**, which transform the flute sound into something more modern: **brilliance effect, chorus, distortion**, adjustable **breath noise**, automatic **vibrato, flutter, stereophonic effect**, and more.

Dr Xiao & Mr Shakuhachi are **designed to get the best**, in terms of expression and control, from **any kind of MIDI instrument**:

- **Electronic Wind Instruments** (Akai EWI, Roland Aerophone, Yamaha YDS, Berglund NuEVI, etc.);
- **MIDI strings** (Cantini MIDI violin, Zeta MIDI violin, etc.);
- **MIDI converters**, like the Sonuus i2M;
- **MIDI keyboards** (NI Komplete control, M-Audio Oxygen, etc.);
- **MIDI controllers** (TEC breath controller, MIDI expression pedal, Yamaha BC3, etc.).



Features

- 2000 samples at 24bit/48kHz.
- A modern and complex algorithm for a very realistic sound and great playability.
- **The Perfect Crossfade:** transition from piano to forte and vice versa on **3 or 4 levels** without hear overlapping notes.
- **Editable Dynamic Controller and Range.**
- **Two monophonic modes with real time automatic recognizing of legato and staccato:** by dynamic controller or by keys.
- **Play on release mode:** when you release a note, the software plays the previous note still pressed.
- **Configurable legato mode and real time controlled glissando.**
- Playing **staccato**, each new note is **slightly different** from the previous one, with multiple and gradual gradients from soft to marcato.
- **Two parallel voices** at configurable intervals, **as used by Michael Brecker.**
- **Polyphonic mode** for polyphonic instruments and **sustain or hold 1st note** modes for monophonic instruments.
- **Bending technique**, which consists in starting a note with an ascending glissando, live controllable in duration (Xiao only).
- **Muraiki technique**, which consists of a loud blow at the beginning or during a note (Shakuhachi only).
- Typical xiao/shakuhachi note **release technique (RFX).**
- **Automatic vibrato** configurable and controllable live.
- **Flutter-tonguing effect** configurable and controllable live.
- Easy to use **Chorus, Stereo, Compressor, Three-band equalizer, Convolution reverb, Distortion and Delay** effects.
- Adjustable and live controllable **breath noise.**
- **A Brilliance filter**, which boosts or cuts high frequencies dynamically.
- **Keyswitches** that can be also disabled and a **live options activator** to instantly switch from one configuration to another.
- **4 and a half octaves of range.**
- **Splitter by Suonopuro**, to split and layer many sounds across your keyboard or your MIDI instrument.

System Requirements

- **A COMPUTER:** Windows or Mac or Maschine+ by Native Instruments.
- **NI KONTAKT 5.8.1 or higher FULL retail version (tested with Kontakt 7).** **It is NOT compatible with Kontakt Player.** You can open and run any patch of Dr Xiao & Mr Shakuhachi in Kontakt player just for 15 minutes. After that, the demo period of the player times out and you have to re-start and reload the library.
- **A MIDI CONTROLLER:** an Electronic Wind Instrument or a Keyboard or any kind of MIDI instrument or DAW.

License Agreement

Thank you for purchasing the Dr Xiao & Mr Shakuhachi by Suonopuro. By using this product, **you must accept this license agreement:**

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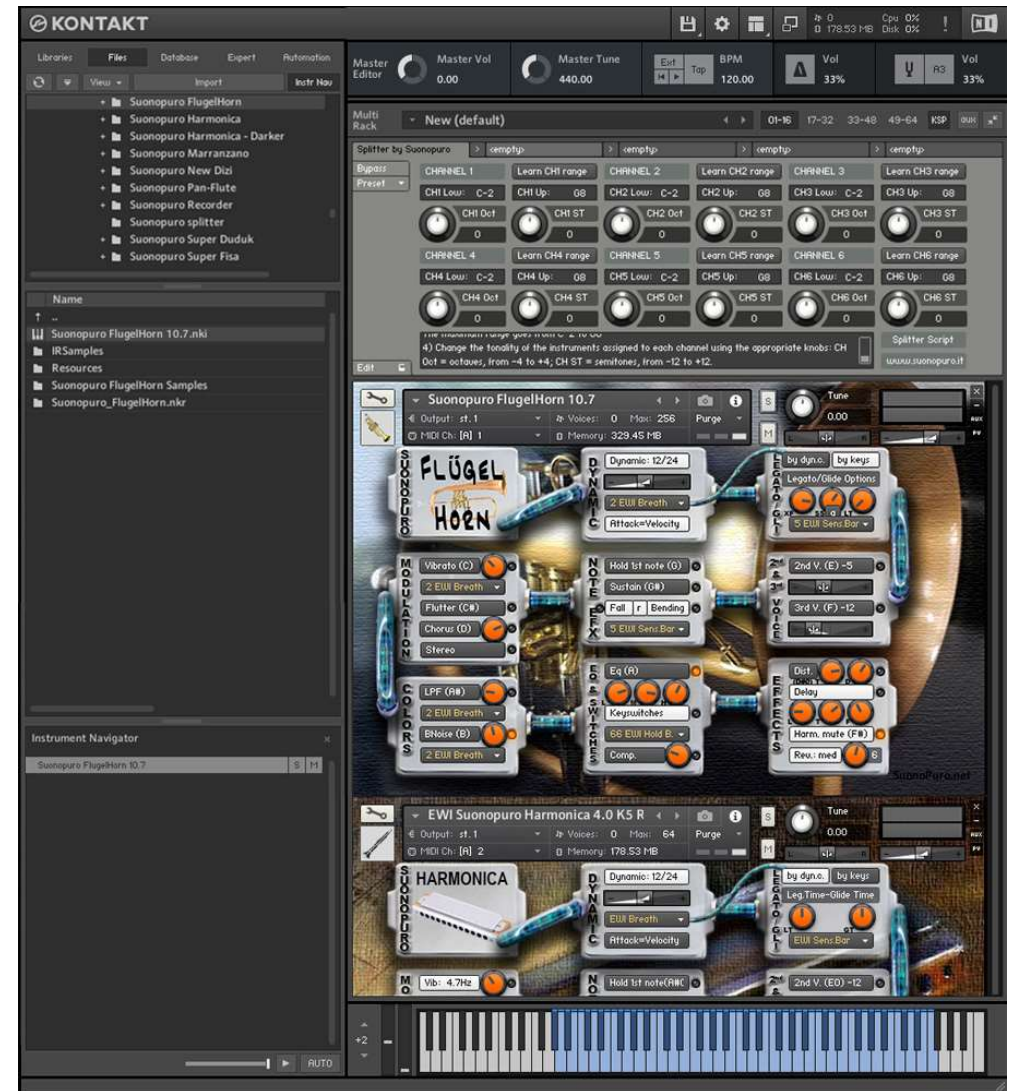
Installation

- **Download and unzip** (unrar) the S_New_Xiao_Shaku.rar file into a folder of your hard-drive, using the password that was notified.
- **Keep all data within said folder.** Do not move the audio files to another folder, otherwise Kontakt will search for files.
- **Launch Kontakt** 5.8.1 or a higher version.
- From the files tab of the Kontakt browser, find the folder where you unzipped the Dr Xiao & Mr Shakuhachi and **double click on the file you want to load.**
- **Select the desired channel and options, and play.**
- You can also **install as a library** with the standard procedure.
- If you are experiencing latency issues or unexpected glitches, please adjust the buffer size from the driver configuration menu of your sound card.

The Suonopuro Dr Xiao & Mr Shakuhachi folder, for each instruments, contains:

- **2 preconfigured files** (.nki) for **Electronic Wind Instruments** that work with the MIDI-CC2 whose name starts with **EWI** or **EVI** (Electronic Valve Instrument);
- **A preconfigured file** for the **Yamaha Digital Sax (YDS)** or other instruments that work with the MIDI-CC11.
- **2 preconfigured files for keyboard:** the first, whose name starts with **KEY**, whose dynamics are controlled by the force with which the keys are pressed, and the second, named **KEY+WHEEL**, whose dynamics are controlled by the modulation wheel;
- **An empty multi file** (.nkm) containing the **Suonopuro Splitter**, to split and layer many sounds across your MIDI instrument.

All instrument files are equal, share the same code and can be easily adapted to work with any MIDI instrument.



The **Dynamic Range Slider** defines the difference in volume between pp and ff, from 0 = minimal, to 24 = very wide.

The **Dynamic Controller Menu** allows you to select how to control the dynamic, from pp to ff. You can choose any kind of MIDI controller, like the Breath Controller CC2, the Expression Pedal CC11, the Velocity (the speed of the key-press) or a fixed value. It also controls the legato / staccato in "by dyn.c." mode.

Attack=Velocity button allows you to control how to start a note, from soft to marcato: or totally by the speed of the key-press (velocity) or partially by the MIDIcc selected in the dynamics controller menu.

The **Vibrato Button** puts on a pitch and volume modulation controlled via the sensor selected on the **Modulation Controller Menu** below.

The **Flutter Button** enables a flutter-tonguing style mode, also regulated via the sensor selected on the **Modulation Controller Menu** above.

The **Vibrato Frequency Knob** on the right, adjusts the base frequency of the modulation.

The **Chorus Button** generates a detuned and modulated copy of the audio signal.

The **Chorus Depth Knob**, to the right of the button, adjusts the range of modulated detuning.

The **Stereo Button** activates a stereophonic effect. The **Knob** adjusts the spread between channels.

The **Brilliance button** activates the dynamic control of the mid-high frequencies via the sensor selected in the **Brilliance menu** below.

The **Brilliance knob** adjusts the mid gain on the high frequencies.

The **BNoise knob** adjusts the average volume of the breath noise, which is activated by the **BNoise Button** and controlled by the sensor selected in the **BNoise menu** below.

The **Release FX** allows you to release a note with the typical xiao effect, by playing a note out of the flute range. On the EWI just detach your left thumb from the octave rollers, continuing to blow. The r button moves the yellow notes from low to high register, for EVI (Valve Instr.) or for the EWI Er fingering (EVI reverse).
Warning: the "RFX" function slightly reduces the flute range.

Each of these two buttons activates a **Monophonic Mode**, which allows you to play in a more expressive way. Turn off both buttons to enter **Polyphonic Mode**. The monophonic modes differ in the way of **controlling the legato and the staccato**:

1) by dynamic controller: while the selected dynamic controller sends values greater than 0, then notes will be legato, otherwise the note will break off and the next one will be staccato. This mode is most suitable for wind or string MIDI instruments.

2) by keys: to play legato, you must press the key of the next note before releasing the key of the previous note. This mode is typical of keyboard instruments but also works with an EWI. When you release the key of the last note played, if there are other keys pressed, the software will play the penultimate note among those whose key is still pressed (**Play on release mode**).

Legato XFade Time (XF) is the duration in ms of the crossfade between a note and a legato sample. Higher values result in a smoother transition.

Sample Start (SS) determines the playback position of a legato sample. Higher values make the legato faster but less realistic. The **a Button** randomly changes this value, making the legato more varied.

Legato Tolerance (LT) is the time in ms within which the system still considers two consecutive notes as legato in "by keys" mode. After recording a MIDI track, it may be necessary to increase this value for proper playback.

With the **Glide Controller Menu** you can choose how to activate a glissando effect (a pitch sliding from a note to the next) and control its duration.

2nd V. and 3rd V. Buttons activate, respectively, the second and the third parallel voice.

The **Interval Sliders** indicate, respectively, the intervals in semitones between the note you are playing and the notes of the second and the third voices. You can set them from -24 (2 octaves lower) to 24 (2 octaves upper).

Distortion Button causes a distortion by clipping high sample values.

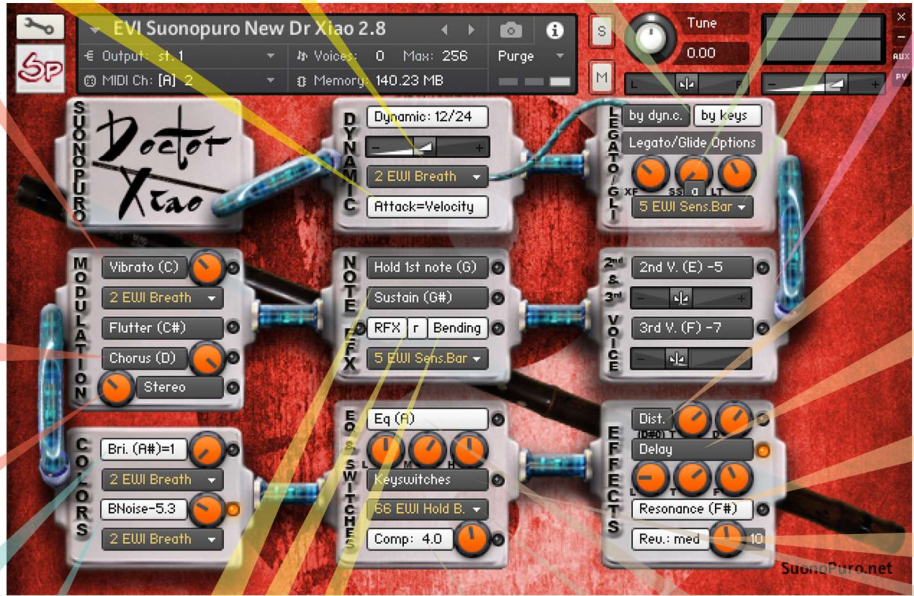
Tone Knob controls the brightness of the dist. sound. **Drive Knob** adjusts the amount of distortion.

The **Delay Button** enables a delay effect with 3 adjustable parameters: **Level** (in dB), **Time** (in ms) and **Feedback** (in %).

The **Resonance button** simulates the internal resonance of the flute tube.

The **knob** below the resonance button, regulates its intensity.

With the **Reverb Button** you can activate a convolution reverb choosing between **short**, **dark**, **medium** or **long**. The **Reverb Knob** adjusts the reverb level.



Hold 1st Note sustains the first note you play with a single breath.

The **Sustain Button** "sustains" all the notes you play with a single breath. Warning: these two functions work only in Legato by dyn. c. mode with any controller other than the velocity.

The **Bending/ExtraB. Button** enables an effect that starts the notes with a little **glissando** (Dr Xiao) or with a **Muraiki** (Mr Shakuhachi), a strong blow at the beginning or, if BNoise is on, also during a note. It is activated via the controller selected in the **Menu** below.

This is a **three-band Equalizer**, which divides the frequency bands into L (low), M (middle), and H (high).

The **Activator Controller Menu** allows you to select a controller to activate each function marked with this yellow led: ● When this controller sends a value of 0, the marked functions are activated or deactivated. In this example, double clicking on the EWI HOLD button ↓ you will activate the Delay and the Breath Noise will be disabled.

This **button** activates a **compressor** efx and the **knob** to its right adjusts the **compression level**.

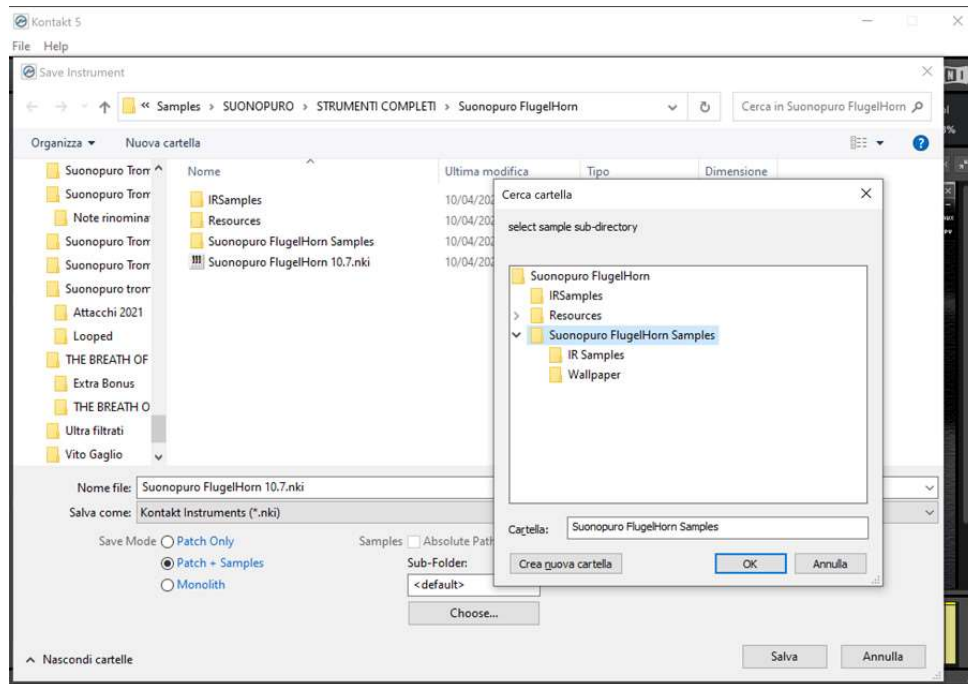
The **Key-switches button** activates the following function keys:

Release FX A
Glissando G#
Bending/ExtraB G
Resonance F#
3rd voice F
2nd voice E
Distortion D#
Chorus D
Flutter C#
Vibrato C
Breath Noise B
Brilliance A#
Equalizer A
Sustain G#
Hold 1st note G

How to save a configuration

To save a customized file, please follow the instructions below:

1. Open the "Files" menu;
2. From "Save as..." select the file you want to save;
3. From the "Save in:" menu, select the "Suonopuro Dr Xiao and Mr Shakuhachi" folder. Do not change this folder, to avoid problems with convolution reverb files;
4. In the "Save Mode" box, select "patch + samples";
5. Select the correct "sample sub directory" by clicking the button "..." and selecting the folder "Xiao samples new", if you are saving a Dr Xiao instrument, or the folder "Shakuhachi samples new" if you are saving a Mr Shakuhachi instrument, **then** click OK. Attention: since the two folders contain different files with the same name, please be careful not to mistake the folder. If so, restore original files from rar file.
6. In "File Name", insert a name of your liking and save.



How to setting-up additional controllers

To assign any of Dr Xiao & Mr Shakuachi's sliders or knobs to a certain MIDI controller:

1. Click the knob or slider you want to assign a MIDI controller to.
2. Select **Learn MIDI CC# Automation**.
3. Turn the knob or move the slider on your MIDI hardware controller. The control should pick up the movement instantly.

Alternatively:

1. In Kontakt's left browser, select "**Automation**" and then "**MIDI Automation**".
2. Select a source from the list and drag it onto a knob whose parameter you want to automate.

3. With "**From %**" and "**To %**", at the bottom of the pane, you can alter the scaling of the assignment so that the automation values are mapped to a limited range of the assigned parameter. For reverse operation, enter a value greater than To% on From%.

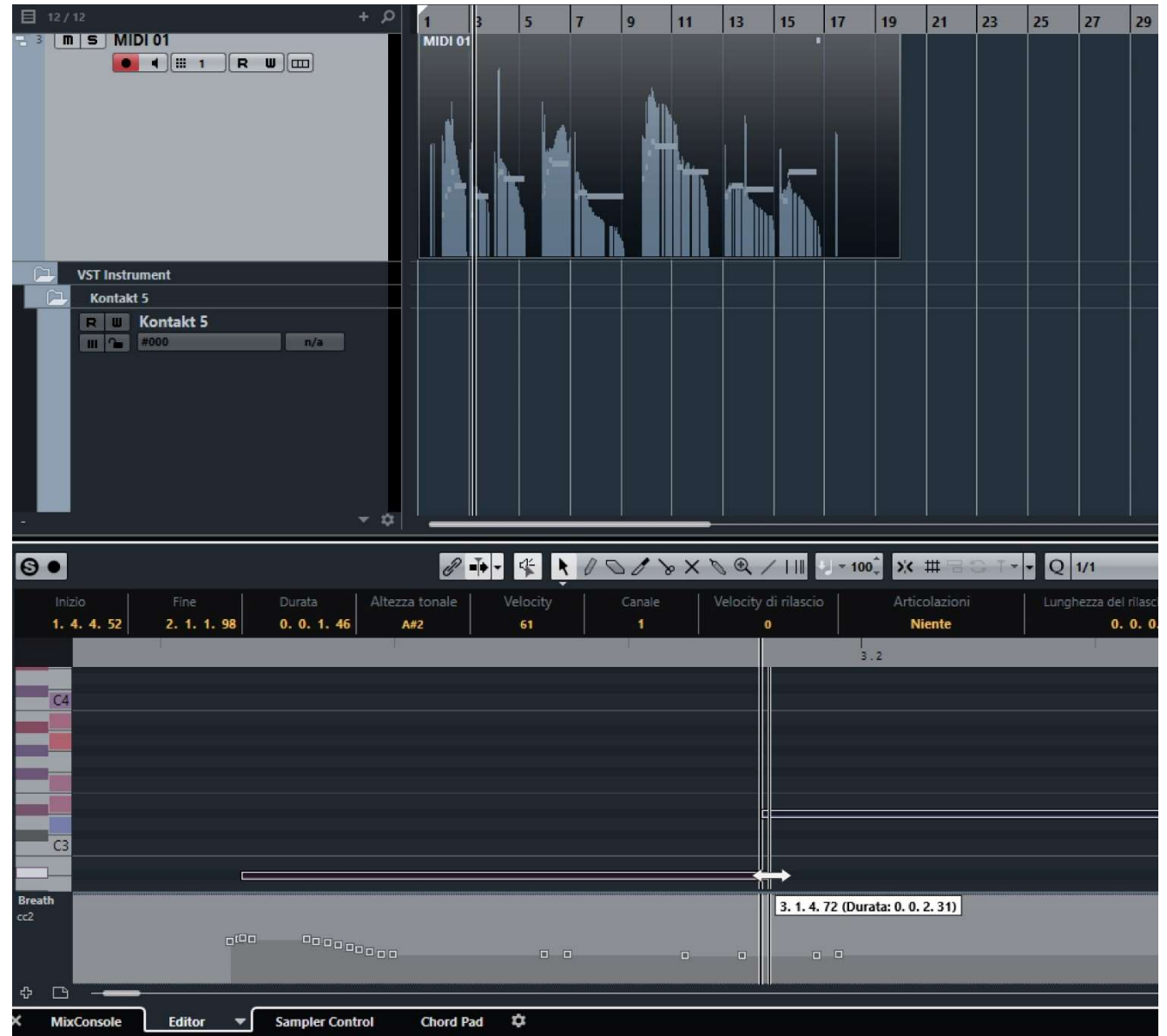
You can add additional MIDI controllers (CC#s) to the same KONTAKT knob. You can also assign multiple knobs or sliders to the same MIDI controller.



How to play a MIDI track correctly

If, after recording a part in MIDI, the ties are not reproduced correctly, proceed as follows:

1. Select the part and open it in the MIDI editor.
2. Select all (Ctrl A) and zoom in on the point where two tied notes meet.
3. Extend all the notes by dragging the end of the first tied note so that it slightly overlaps the second tied note.



Suonopuro Splitter

The Splitter by Suonopuro is a **multiscript** for Kontakt that allows you to **split and layer many sounds** across your keyboard or your MIDI instrument.

For instance, you could put a Super Duduk in the bottom half of the keyboard, and a Dr Xiao & Mr Shakuhachi in the right.



Instruction:

1. Load the first sound you want to use, and set it to channel 1;
2. Now choose the lowest and the highest notes of the range you want to use to play the instruments assigned to channel 1. You can do this in 2 ways:
 - a. By typing the lower and the upper note (from C-2 to G8) in the "CH1 Low:" and "CH1 Up:" text fields.
 - b. By clicking on the "Learn CH1 range" button and playing on your instrument first the lowest note and then the highest one of the desired range.
3. Transpose the instruments assigned to channel 1 with the appropriate knobs:
 - a. **CH1 OCT** changes the octaves, from -4 to +4
 - b. **CH1 ST** transposes by semitones, from -12 to +12
4. Do the same with the other sounds, up to channel 6; (leave or set your keyboard, or the MIDI instrument you use, to MIDI channel 1).