KONTAKT
FACTORY LIBRARY

Document authored by: Native Instruments GmbH

Document version: 1.0 (08/2011)

Germany
Native Instruments GmbH
Schlesische Str. 29-30
D-10997 Berlin
Germany
www.native-instruments.de

USA
Native Instruments North America, Inc.
6725 Sunset Boulevard
5th Floor
Los Angeles, CA 90028
USA
www.native-instruments.com

NATIVE INSTRUMENTS

Table of Contents

1 Overview

1.1 General Structure of the Library

The KONTAKT Factory Library is divided into seven Instrument collections:

- Band
- Choir
- Orchestral
- Synth
- Urban Beats
- Vintage
- World

This manual will give you an insight into the different features available from each of the individual collections. First of all, let us take a quick look at each of the collections.

1.1.1 Band

The Clavinet from the Band collection.

The band collection contains many of the instruments you would expect to find in any style of band ensemble, whether jazz, funk, soul or rock. As well as the fundamental rhythm section instruments (drums, bass and guitars) you will also find a selection of acoustic and electric pianos, electric organs, saxophones and brass (both solo and ensembles).

1.1.2   Choir

The Alto Vowels from the Choir collection.

The choir was specifically recorded for the KONTAKT Library. It is based on a chamber choir comprising of female sopranos and altos, and male tenors and basses. The Choir collection contains a variety of vowels, with patches allowing you to morph between them using dynamic keyswitches or the mod wheel. The Performance View features (PV button in the Instrument header) make it possible to create a sound ranging from an intimate baroque chorale to a bombastic cinematic soundtrack.

1.1.3   Orchestral

The Cello Ensemble from the Orchestral collection.

The orchestral collection contains many articulations of all of the important orchestral instruments. The KONTAKT script allows you to dynamically switch between playing styles for many of the included instruments.

1.1.4 Synth

The 700 Dirt Bass from the Synth collection.

This collection contains all of the contemporary styles of synthesized instruments you could want. The new Performance View for this collection allows you to mix two sample sets and combine them with filters and effects to produce the sound you need.

1.1.5   Urban Beats

The Urban Beats Instrument.

The Urban Beats is full of pre-made and sliced loops exclusive to KONTAKT. The new Performance Views allow you to play the Slices, mix the included loops, produce your own beats, and even dynamically apply effects using your MIDI keyboard.

1.1.6   Vintage

The Vintage collection.

This collection contains all the old style electronic gear. Drum machines, string machines, analogue and digital synths and even toys are all included here. The Instruments here are intended to be authentic and thus contain some of the flaws (and thus also the character) of their original counterparts.

1.1.7 World

The World collection.

The World collection contains Instruments from a variety of different musical cultures — useful for adding an exotic edge to your tracks.

1.2   Options Page

An example Options page from the Vintage collection.

Every Instrument in the KONTAKT Library contains an Options page that allows you to adjust certain MIDI performance parameters like velocity curves and keyrange. The Options page is accessed by clicking on the Options tab at the bottom of the KONTAKT Instrument.

1.2.1   Keyrange
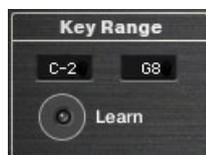
The Key Range section of the Options page.

The Key Range section of the Options page acts like a MIDI filter. Any note below the Min value and above the Max value will be ignored by the Instrument. This can be useful for building a split keyboard Instrument, allowing you to play, for example, a solo flute on the right hand and an accompanying piano on the left hand.

The Learn button allows you to set the Min and Max values simply by pressing the MIDI keys you wish to assign them to.

How to use the Learn function:

1. Press the Learn button once.
2. Press the desired Min value note on your MIDI keyboard.
3. Press the desired Max value note, after which the Learn function will automatically deactivate itself.

If you wish to clear the key range values, you can simply click the Learn button twice without playing any keys and the Min and Max values will return to their default settings.

1.2.2   Velocity
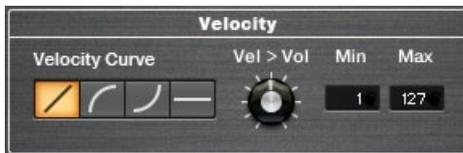
The Velocity section of the Options page.

In the Velocity section of the page you can easily set the curve of you MIDI velocity response, the minimum and maximum values for the velocity range, and the velocity to volume amount.

-   Applying a value curve to MIDI velocity is as simple as clicking on the desired Velocity Curve button.
-   The Min and Max values act as a limiter to the incoming MIDI values. If you play a MIDI note with a velocity below the Min value, the velocity will be set to the Min value. Likewise, if you play a note with a velocity above the Max value, the velocity of that note will be automatically reset to the Max value.
-   The Velocity to Volume knob (Vel > Vol) controls how much the incoming velocity data affects the volume of the Instrument. In most real instruments, the softer you play, the lower the volume of the instrument. So, with this function you are able to mimic

this same effect. However, since many Instruments in the KONTAKT Library feature multiple velocity layers, each with their own volume settings, it may be necessary to limit the Velocity to Volume setting.

1.2.3   Pitch Bend

The PB Range section of the Options page.

In the PB Range section, you can set the range of your Pitch Bend control. This can be set anywhere between a fraction of a tone, to a full octave. Most Instruments have the range already set, but if you feel you wish to adjust these values, it is easily done with these two controls Down and Up.

1.2.4   Transpose

The Transpose section of the Options page.

The transpose controls alter the incoming MIDI so that you may change the tonal range of an Instrument on your keyboard, without altering the pitch of the samples. This can be useful in certain performance cases (for example, quickly transposing the key of a song without needing to relearn the part), or can be used in combination with the key range controls to further adjust keyboard splits, allowing you to play two Instruments in the same octave range without having to play the exact same notes.

1.2.5   Tuning

The Tuning section of the Options page.

This section of the Options page allows you to adjust the scale in which you are playing. It offers a variety of different tuning options as well as the ability to select the key of the scale (as many scales rely on tuning in unequal intervals from the main pitch).

1.2.6   Randomize

The Randomize section of the Options page.

This section allows you to randomize certain attributes of each note as you play the Instrument. There is a master On/Off switch that allows you to activate or deactivate the randomization features. Each of the four knobs (Volume, Velocity, Pan and Pitch) then allows you to set the amount of randomization for each of the four attributes. The random values are generated with each note on message (ie. every time you press a key), so this effect will not act like a random LFO, nor will it be triggered continuously with looped samples.

1.3   Drum and Percussion Kit Layout

In the Band, Synth and Vintage Collections, the layouts for the drum Instruments are very similar, but in each case differ in performance style from the other melodic instruments. The MIDI keyboard mapping for the drums in these collections all adhere to the same basic template:

- Individual drum hits are on MIDI notes C1-B2.
- Drum loops and patterns are on MIDI notes C3-B3.
- Some Instruments offer tuned percussion in the octave C0-B0.

Each of the individual drum hits can be independently edited from the Performance View. You can select a drum instrument for editing by three different methods:

- Selecting the instrument from the list in the drop-down menu.
- Turning on Select by MIDI and pressing the MIDI key of the instrument you wish to edit.
- Use the NOTE knob to cycle through the instruments by their MIDI note assignments.

With the exception of the Master FX, all of the parameters on the drum instruments Performance View are edited on a per instrument level. This makes it very easy to tune and pan the parts of the drum kit separately.

1.3.1   Drum and Percussion Performance Views

An example Performance View from the Synth collection.

Both the Synth and Vintage collections share the same Drum Performance View controls. The Band Collection shares a lot of the same features, with only one exception: the filter. This is replaced with an articulation engine that allows you to apply certain playing techniques to the drums like flams and release strokes.

An example Performance View from the Band Drums.

Instrument

- In this section you are able to select the instrument you wish to edit using the INSTRU-MENT menu, the NOTE knob or by MIDI note if the SEL BY MIDI control is active.
- The second row of controls offers mix control of LEVEL and PAN, as well as a TUNE control and a SOUND knob, which morphs between a variety of preset EQ settings.

Sends

Again working on a per instrument basis, this section allows you to send a duplicate of the instrument signal to the REVERB and DELAY master effects, working much like the auxiliary send on a mixing console.

Volume Envelope

A basic AHD envelope is provided for each of the drum instruments. Each control in this section adjusts the time range of each of the envelope phases. This can be useful for tightening up a snare by shortening the Hold and Decay times to remove the tail of the sound.

Master FX

There are three master effects for the Band, Synth and Vintage drums. Each of these effects can be accessed by clicking on the effect tabs with the corresponding name. The effects can be switched on and off by clicking on the LEDs to the left of these tabs.

Reverb

The REVERB tab of the MASTER FX section.

The reverb effect makes use of KONTAKT's convolution effect and all the impulse responses provided in KONTAKT.

- The top drop-down menu selects the impulse response category and the lower menu selects the impulse response itself.
- The overall volume of the reverb effect can be controlled with the RETURN/AMOUNT knob.

Delay

The DELAY tab of the MASTER FX section.

The delay effect provides you with a nice echo for whatever signals you send to it.

- The TIME control adjusts the time between echoes.

- The FEEDBACK knob controls the amount of the signal that is fed from the delay's output back into the input (in basic terms, it controls the number of echoes).
- The RETURN/AMOUNT knob controls the overall volume of the effect.

EQ

The EQ tab of the MASTER FX section.

Clicking on the EQ tab offers control over a fixed 3-band EQ for the main drum mix.

Filter

The FILTER section.

Only available in the Synth and Vintage Collections, this section offers control over a per instrument lowpass filter. It is important to note that the Velocity Sensitivity (VEL SENS) is an additive modulation control. So, if you set the Cutoff (CUTOFF) to its minimum value, and the Velocity Sensitivity to the maximum value, you will have total control over the filter cutoff value with the velocity of your MIDI keyboard or sequencer.

Articulations

The ARTICULATION knob.

In place of the filter for the Band Collection, this section allows you to apply a drum performance technique to the selected drum instrument (for example, flam or ruff). The articulation type is selected from the ARTICULATION knob. Each articulation then has up to two different control parameters to allow fine tuning of the effect.

1.4   Keyswitches

Both the Choir and the Orchestral Collections are making extensive use of keyswitches. This section will describe the concepts behind the way they are used in these specific Collections.

1.4.1   A Brief Introduction to Keyswitches

This term is usually used to describe keys, ie MIDI notes, which are not used to trigger specific samples, but to control the behavior of an Instrument in a different way. For example, in the Choir Collection there are certain keys on the lower range of the keyboard that control which vowel is sung by the choir, while in the Orchestral Collection there are keys that control the type of articulation (staccato, sforzando, etc) performed by the musicians. Under the hood, in both cases, the keyswitches are actually used to select a different sample set to be triggered by the rest of the keyboard.

1.4.2   Standard vs Dynamic Keyswitches

Both the Choir and the Orchestral Collections use two different types of keyswitches:
- Standard keyswitches indicated by red colored keys.
- Dynamic keyswitches indicated by cyan colored keys.
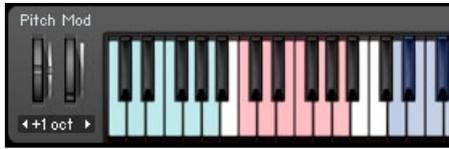
Keyswitch coloring on KONTAKT's virtual keyboard (blue is used for the Instrument playing range)

The best way to describe the difference between them would be by using an example: Having loaded any of the keyswitch controlled Instruments of the Choir Collection, you will have access to an Instrument that, by default, sounds like a choir singing an "a" sound.

Standard Keyswitches

Using the standard keyswitches you can change the default "a" vowel to any other of the available vowels. So, if you press the key switch for "o" (F0 by default), the next time you will play within the main playing range the choir will be singing the vowel "o". And you do not have to keep it pressed — the choir will keep singing this vowel until you press a different keyswitch. In addition, if you use a keyswitch while holding some notes, the change between vowels will not be immediate. It is only the notes played after the use of the keyswitch that will be affected by it.

Dynamic Keyswitches

On the other hand, the dynamic keyswitches can be used for on the fly changes. A dynamic keyswitch affects the notes that are already sounding when it is pressed. There are two dedicated controls that adjust how the change between sample sets is implemented and what happens when the dynamic keyswitch is released:

▪ **Dynamic Fade** knob: Controls the length of the crossfade between the two sample sets.
▪ **Dynamic Release** switch: When on, the original sample will be retriggered as soon as the dynamic keyswitch is released. When off, releasing the dynamic keyswitch will leave the currently selected sample set playing.

Mapping

Each one of the instruments that are using both standard and dynamic keyswitches comes with its own assignments, depending on the main Instrument playing range. However, after loading the Instrument, the user is free to remap them using KONTAKT's Performance View:

The articulation menu of the Orchetral Collection (part of its Performance View).

The Key column is editable by the user, either by clicking and dragging or by double clicking and typing. The value entered in this column is the note for the standard keyswitch of each articulation. The dynamic keyswitches are always automatically mapped an octave lower than the standard ones.

2   The Instrument Collections

2.1   Band

As stated in the overview section, this collection covers all acoustic and electro-acoustic instruments for genres like rock, funk, jazz, hip-hop etc. A quick overview over this collection:

Name	Short Description
Horns	Various solo and section horns
Acoustic Pianos	1 grand , 1 upright and 1 variation
Electric Pianos	Clavinet, Mark I, Mark II, Wurly and variations
Organ	Various drawbar settings from an authentic Hammond C3
Guitar	Various electric guitars, and one nylon strung guitar
Bass	3 electric and 2 upright basses
Drum Kits	13 kits from purely acoustic to mixed electro-acoustic

Each one of the Instruments has a Performance View that is designed for that specific type of instrument. However there are some elements of the Performance Views that are shared throughout the whole Band Collection, excluding the drum kits. Here is how the Performance View of the guitar Instruments looks like:

An example of the Band Collection Performance View layout.

The Performance View is comprised of three main sections: Instrument Controls, Instrument FX (or Performance for the horn Instruments) and Master FX. The first two sections are tailored specifically for each one of the Instruments, while the Master FX section provides the same options for all Instruments.

2.1.1 Master FX

This section is comprised of three effect types, the controls for which are accessed by clicking on the corresponding tab. You can turn the effects on and off by clicking on the orange LEDs on the left side of their names.

Reverb

The REVERB controls of the MASTER FX section.

Through this tab you have control over the convolution effect module that is used in all the Instruments.

- There are two drop-down menus through which you can choose the **category of impulse** and the **impulse itself**, respectively. Most of the impulses are of various types of reverbs, either of real spaces or based on popular reverb units. One of the categories is a special one, featuring impulses of guitar cabinets.
- The AMOUNT knob provides control over the reverb send level.

Cabinet

The CABINET tab of the MASTER FX section.

Through this tab you have control over a speaker cabinet emulation.

- You can select the desired cabinet type using the drop-down menu. There is a wide range of options, including guitar, bass and Leslie cabinets.
- The AIR knob controls the level of early reflections in the room response. This simulates the distance of the microphone to the farthest wall, adding space to the sound.

The cabinet emulator is patched as an insert effect.

Equalizer

The EQ tab of the MASTER FX section.

The EQ tab provides control over the gain of a fixed 3-band-EQ processor. The gain range is from -12dB to +12dB. The frequency and bandwidth settings have been fine tuned for each instrument.

2.1.2   Horns

This category can be broken down to two subcategories: solo instruments and instrument sections. The differences between the two lie on the Instrument Controls section:

Instrument Controls (Solo Instruments)

A Band Collection solo horn's Performance View.

- The SOLO switch does not just turn the Instrument to monophonic mode, but also enables the Unisono-Portamento script, which intelligently triggers the right samples for realistic legato performances.
- The KEY NOISE knob (only available on the saxophone Instruments) controls the level of the samples of the noise produced by the instrument's keys when played by the musician's fingers.
- The RELEASE knob controls the level of the release samples.
- The SOUND knob morphs through 10 preset EQ settings (turn all the way to the left for a neutral setting).

Instrument Controls (Instrument Sections)

A Band Collection horn section's Performance View.

- The SPREAD switch doubles up the voices triggered by each note and spreads them both in pitch and in the stereo field.
- The LEARN KS switch and the ARTICULATION knob are connected to each other. All the horn sections of the Band Collection have been recorded in 4 different articulations: sustain, short, crescendo and fall. You can jump through the different articulations either by using the ARTICULATION knob, or by using the pre-assigned keyswitches:
  ◦ C0 for sustain
  ◦ C♯0 for short
  ◦ D0 for crescendo and
  ◦ D♯0 for fall

- The LEARN KS switch is there if you want to change those assignments. Just turn the switch on, and play the note you want to assign to the currently selected articulation. The switch will turn itself off and the new assignment will be reflected on the virtual On-Screen Keyboard:
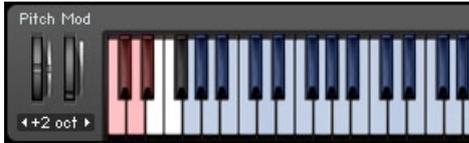
- The SOUND knob morphs through 10 preset EQ settings (turn all the way to the left for a neutral setting).

Performance

- The CHORD switch enables the chord function of the built-in harmonizer. You can select the desired chord using the CHORD knob. The exact notes that are going to be triggered are relying upon the Key and Scale settings.
- The KEY and SCALE knobs constrain the performance to the selected scale of the selected key. All other incoming notes will be automatically transposed to the next higher note that is a part of the selected scale. Turn the SCALE knob off for a chromatic scale (no effect). The scale constraint functionality also affects the notes of the chords produced using the Chord controls.

2.1.3   Acoustic Pianos

There are three acoustic pianos available in the Band Collection: a concert grand, an upright and a variation of the upright.

A Band Collection acoustic piano's Performance View.

Instrument Controls

- The SUS RESO knob controls the sustain sample resonance and release sample volume. When used in conjunction with a sustain pedal, Sustain Resonance gives an effect of spaciousness similar to that of reverb. It can be thought of as the tonal nuances created by the strings and body after the dampers are lifted.
- Released keys also have a similar effect on undampened high notes, generating overtones. The RESO REL switch adjusts the intensity of the release samples and in turn, controls the overall presence of these tones.
- The NOISE knob adjusts the volume of the piano action as a key is released, plus the volume of the pedal mechanism, thus creating a more realistic sound.
- The SOUND knob jumps through 10 preset EQ settings.

Instrument FX

- The COMP switch turns a compressor on and off.
- The STEREO knob controls the width of the stereo field. Extreme left is mono, while the middle is the sound as originally recorded and right is artificially expanded.

- The CHORUS and DELAY knobs control the send levels of the two effects.

2.1.4   Electric Pianos

As mentioned in the overview, the full sample content of Native Instruments' Elektrik Piano has been used to create KONTAKT's electric piano Instruments. There are four instrument types available, plus variations. The main four instruments are a clavinet, two classic electric pianos (mark I and mark II) and a wurly. Most of the controls found on all four types are identical, with just one control on the clavinet instruments making the difference: it has a WAH instead of a SATURATOR knob in the lower left.

The Performance View of the Mark I.

Instrument Controls

The first three controls adjust the vibrato effect settings:

- The VIB STEREO switch selects between volume (Off state) and pan (On state) modulation.
- The VIB AMT knob adjusts the intensity.
- The VIB SPEED knob adjusts the frequency of the modulation.

- The NOISE knob adjusts the level of the release noise samples, ie the sound produced when releasing the keys.
- The SOUND knob jumps through preset EQ settings specially tailored for each one of the four instrument types. Extreme left turns the EQ off.

Instrument FX

- The WAH knob (only available on the clavinet instruments) provides three wah settings. The Mod Wheel setting allows you to control the wah effect using the modulation wheel. The second and the third settings (Auto Fast and Auto Slow, respectively) enable an LFO controlled wah effect, in two different frequency settings. Both Auto Wah settings are tempo-synced.
- The SATURATOR knob (only available on the mark I, mark II and wurly instruments) controls the saturation amount. Extreme settings can lead to nice distortion.
- The PHASER knob controls the amount of a phaser effect.
- The two last knobs, DEL TIME and DEL AMT, adjust the time and the amount of a delay effect.

2.1.5   Organs

The organ used for these samples is an old, authentic Hammond C3 of 1957. The various sample sets used were based on recording different drawbar settings. Many controls which you would find on a real organ are available: Percussion, Vibrato/Chorus, Distortion and a Rotator.

The organ's Performance View.

Instrument Controls

The percussion controls adjust the settings of the percussion effect like that of a real organ.

- On a real C3, the PERCUSSION switch would activate a circuit which amplifies one of the upper drawbars and lets it decay over time. The result is a highly characteristic sound that is indispensable for jazz and many other styles.
- You can select which drawbar is used for the percussion effect using the PERC HARM switch.
- The VIB/CHORUS knob controls the depth and type of an emulation of the patented Scanner Chorus/Vibrato system effect.
- The SOUND knob morphs through 10 preset EQ settings (turn all the way to the left for a neutral setting).

Instrument FX

The first three controls adjust the settings of the rotator emulation:

- The ROTATOR switch turns it on and off.

- The R SPEED switch adjusts its speed between fast and slow.
- The R BAL knob controls the balance between the rotator speaker's high frequency horn and low frequency woofer.
- The R SPEED switch is pre-assigned to the modulation wheel.
- Through adjusting the DRIVE knob you can produce effects from subtle saturation to extreme distortion.

2.1.6   Guitars and Basses

The guitar and bass Instruments share most of the same controls:

The guitars Performance View.

The basses Performance View.

Instrument Controls

- The SOLO switch turns the instrument to monophonic mode.
- The TONE knob emulates the behavior of the tone pot found on electric or electro-acoustic guitars and bass guitars.
- The NOISE knob adjusts the level of various noises, depending on the instrument, from the noise of fingers sliding on the fret board to fingers muting the strings.
- The PICKUP knob (only available on the guitar instruments) emulates the sound of different pickup settings.
- The STOP knob (available on the bass instruments) sets the sustain of each note to a fixed length, ignoring the length of the incoming notes.

Instrument FX

- The COMP switch turns a compressor on and off.
- The WAH knob provides two wah settings. The Mod Wheel setting allows you to control the wah effect using the modulation wheel. The Auto setting enables an envelope follower controlled wah effect.

The two last knobs adjust the settings of a distortion stomp box effect:
- The DRIVE knob controls the drive amount.
- The DIST TONE knob sets the brightness of the processed signal.

The Elektrik Guitar

The "Elektrik Guitar.nki" Instrument has two unique controls:

The Elektrik Guitar Performance View.

- POSITION: Choose a playing position on the fret-board of the guitar.
- STYLE: Choose a playing style. *Mute* enables palm muted samples, *Harm.* enables artifical harmonics, and *Flag.* natural harmonics. The natural harmonics are not mapped tonally on the keyboard, but according to their position on the guitar string.

2.2   Choir

The Choir Collection, sampled exclusively for Native Instruments, provides a complete set of soprano, alto, tenor and bass voices. Each section of the choir was split in two groups and recorded separately to provide maximum flexibility and this was put into use in the majority of the provided Instruments. In addition, a significant amount of patches make

use of the new Authentic Expression Technology giving you a new level of control: the choir voices can seamlessly morph between vowels while holding a key/note. Here is the folder structure of the Choir Collection:

Name	Short Description
Vocal Keyswitches	Patches using keyswitches to switch between vowels.
Vocal Morphs	Patches utilizing the AET filter to morph between vowels.
Vowels Alto	Patches featuring the alto section providing additional control over the two groups.
Vowels Bass	Patches featuring the bass section providing additional control over the two groups.
Vowels Choir	Patches featuring the whole choir providing additional control over the two groups.
Vowels Soprano	Patches featuring the soprano section providing additional control over the two groups.
Vowels Tenor	Patches featuring the tenor section providing additional control over the two groups.

In total, the Choir Collection is comprised of three main types of Instruments:
- Keyswitch Instruments,
- Morph Instruments and
- Group mix Instruments.

We are first going to discuss the features that are common throughout the whole Choir Collection.

2.2.1   Common Features

Here is an example of the Performance View of one of the morph Instruments:

The Choir Morph Instruments Performance View.

Instrument Controls

- The Sound knob morphs through preset EQ settings.
- The Chord knob enables the chord function of the built-in harmonizer. You can deactivate it by turning it all the way to the left, or you can select the desired chord using any of the other options. The exact notes that are going to be triggered are relying upon the Key and Scale settings.
- The Key and Scale knobs constrain the performance to the selected scale of the selected key. All other incoming notes will be automatically transposed to the next higher note that is a part of the selected scale. Turn the Scale knob to its off position for a chromatic scale (no effect). The scale constraint functionality also affects the notes of the chords produced using the Chord knob.

Master FX

Through this section you have control over the convolution effect module that is used in all the Instruments.

- There are two drop-down menus through which you can choose the category of impulse and the impulse itself, respectively. Most of the impulses are of various types of reverbs, either of real spaces or based on popular reverb units. One of the categories is a special one, featuring impulses of guitar cabinets.
- The Amount knob provides control over the reverb send level.
- The On/Off switch quickly turns the convolution processor on and off. Turning the effect off over turning the Amount knob down has the benefit of saving CPU resources.

2.2.2 Keyswitch Instruments

Each one of the Instruments of this category includes all available vowels. There are five Instruments available, one for each section (bass, tenor, alto, soprano) plus an additional one utilizing the whole range of the choir.

A keyswitch choir Instrument's Performance View.

- The Dynamic KS switch turns the dynamic keyswitches on or off, while the Dynamic Release and Dynamic Fade knobs control the respective parameters (for a detailed description of the keyswitch functionality please see section ↑1.4, Keyswitches).
- As well as using the key switches to switch through vowels, you can also select a vowel by clicking on it's name in the Vowel menu.
- The Key column can be used to remap the keyswitches, while the Load buttons can be used to load or unload any of the sample sets of each one of the vowels. This can be used to save memory by unloading a sample set when it is not used in a certain project.
- The Level, Attack and Release knobs adjust the respective parameters of the currently selected vowel.
- The Group 2 switch activates the second group of the choir. When activated, the two groups are also slightly spread in the stereo field.

2.2.3 Morph Instruments

These Instruments use the all new Authentic Expression Technology filter to morph between vowels. The names of the Instruments describe their vowel content:

- Choir Morph [a-e]
- Choir Morph [a-e-i-o-u]
- Choir Morph [a-i]
- Choir Morph [a-m]
- Choir Morph [a-u]

All instruments are essentially only using the "a" sound sample set, and achieve the morphing by applying the spectral fingerprint of the other vowels to those original samples.

The Choir Morph Instrument's Performance View.

- If you want to morph between the vowels using your mouse you can use the Morph knob. Alternatively you can use the modulation wheel or aftertouch capabilities of your keyboard.

▪ To control the intensity of the modulation use the Mod Wheel and Aftertouch knobs. You can also invert the polarity of the controls using the Invert switches.

2.2.4 Group Mix Instruments

As previously stated, all the choir sections (bass, tenor, alto and soprano) where split into two sub groups, which were recorded separately. In the Instruments of this category you have extensive control over the two groups. You can find those Instruments in the following folders:

▪ Vowels Alto
▪ Vowels Bass
▪ Vowels Choir
▪ Vowels Soprano
▪ Vowels Tenor

Here is a screenshot of the Performance View:

A group mix choir Instruments Performance View.

- You can control the volume and panning of the two groups by using the Volume and Pan knobs.
- By default, when playing polyphonically both groups sing all notes. You can change that behavior by using the Split Chords switch. By doing so each chord is split between the two groups.
- The Attack and Release knobs provide control over the respective parameters.

2.3   Orchestral

The complete Vienna Symphonic Library Orchestra from the KONTAKT 3 Library has been extended with the addition of solo strings plus a concert hall organ. In addition to the VSL content, the Orchestral Collection features a fine selection of orchestral percussion and two grand pianos. All the content has been reworked utilizing the new Performance View possibilities. The old VSL instruments are still provided in the form of "legacy instruments", which you can find in the "Legacy VSL Instruments" folder. Here is the full folder structure of the Collection:

Name	Short Description
VSL Strings	Solo and ensemble string instruments, including a harp
VSL Woodwinds	Solo and ensemble woodwinds
VSL Brass	Solo and ensemble brass instruments
VSL Percussion	Pitched and unpitched percussive instruments
Orchestral Percussion	Various percussive instruments
Keyboard Instruments	Two concert grands, a harpsichord and church organs (including the new VSL organ)
Legacy VSL Instruments	See appendix

There are two main types of Instruments in the Orchestral Collection: multi-articulation Instruments and single articulation Instruments. These two types do share some features.

2.3.1   Common Features

The pitched percussive Instruments Performance View.

Instrument Controls

- The Sound knob morphs through preset EQ settings.
- The Chord knob enables the chord function of the built-in harmonizer. You can deactivate it by turning it all the way to the left, or you can select the desired chord using any of the other options. The exact notes that are going to be triggered rely on the Key and Scale settings.
- The Key and Scale knobs constrain the performance to the selected scale of the selected key. All other incoming notes will be automatically transposed to the next higher note that is a part of the selected scale. Turn the Scale knob to Off for a chromatic scale (no effect). The scale constraint functionality also affects the notes of the chords produced using the Chord knob.

⚠️ It should be noted that the scale constraint and chord functionality is not available on the unpitched percussive Instruments.

Master FX

Through this section you have control over the convolution effect module that is used in all the Instruments. There are two drop-down menus through which you can choose the **category of impulse** and the **impulse itself**, respectively. Most of the impulses are of various types of reverbs, either of real spaces or based on popular reverb units. One of the categories is a special one, featuring impulses of guitar cabinets.

- The Amount knob provides control over the send level.
- The On/Off switch quickly turns the convolution processor on or off. Turning the effect off over turning the Amount knob down has the benefit of saving CPU resources.

2.3.2 Multi-Articulation Instruments

All the Instruments in the folders with the VSL prefix fall into this category. The instruments have been recorded in various articulations — including fortepiano, sforzando, staccato, tremolo and pizzicato.

The multi-articulation orchestral Instruments Performance View.

- The Dynamic KS switch turns the dynamic keyswitches on or off, while the Dynamic Release and Dynamic Fade knobs control the respective parameters (for a detailed description of the keyswitch functionality please see section ↑1.4, Keyswitches).
- Other than using the keyswitches to switch through articulations, one can use the Articulation menu — just click on the desired articulation.
- The Key column can be used to remap the keyswitches, while the Load buttons can be used to load or unload any of the sample sets of each one of the articulations. This can be used to save memory by unloading a sample set when it is not used in a certain project.
- The Level, Attack and Release knobs adjust the respective parameters of the currently selected articulation.

2.3.3　Single Articulation Instruments

All other Instruments include only one articulation. These Instruments, on top of the **Sound** knob functionality, also have a fixed 3-band EQ module:

The single articulation orchestral instruments Performance View.

- The Bass Gain, Mid Gain and Treble Gain knobs adjust the gain levels of their respective bands. The Mid Freq knob adjusts the frequency of the Mid band. The three switches turn the bands on and off.
- For the unpitched percussive Instruments, the scale constraint and chord functionality has been replaced by an articulation engine:

The Performance View of the unpitched percussive Instruments.

- The articulation engine allows you to apply a drum performance technique to the selected drum instrument. You can select the instrument by either using the Note knob or — when the Sel by MIDI switch is on — by just playing the note it is assigned to on the MIDI keyboard.
- The articulation type is selected from the Articulation knob.
- Each articulation then has up to two different control parameters to allow fine tuning of the effect (the ones that are labeled as n/a in the screenshot above, since the Articulation knob is set to the Off state).

2.4   Synth

The purpose of the Synth Collection is to supply you with contemporary and easy to use synth sounds. The samples for this collection come from various sources, from hardware analog/digital machines to acoustic instruments and software synthesizers. All samples however have been processed and mastered for a more "production-ready" sound (in contrast to the Vintage collection, where all samples are recorded "pure").

Name	Short Description
Pad	Various pad sounds
Choir	Synth choir patches
Bass	Analog/digital bass sounds
Lead	Analog/digital lead sounds
Mallet	Short, percussive sounds
Synth Drums	A collection of synth kits, featuring preprogrammed grooves
Arpeggiator	Synth sounds featuring an arpeggiator
Sequencer	Synth sounds featuring the poly step script module

All of the synth instruments — except for the drum kits — share a common Performance View. A slightly altered variation of the same Performance View is used for the Arpeggiator and Sequencer sounds, with the only difference being in the voicing section of the Performance View.

The Synth Collection Performance View.

The best way to describe the functionality of the Synth Performance View would be comparing it with a 2-oscillator, 1-filter synthesizer, with an extensive master effects section. However, instead of two simple oscillators, two unique sample sets are available for each patch.

2.4.1 Filter

The Filter section is comprised of two filter modules plus the familiar Sound knob.

- The SOUND knob morphs through preset EQ settings.
- You can have only one of the two filter modules (LP and HP) active at any given time. You can switch between them using the two buttons. Depending on the Instrument you have loaded, the types of the filters might differ (with the types being indicated by the labels under the buttons). The four filter parameters are specific to each one of the filters, so that if you change the filter type and then go back to the original, the previous settings will be maintained.

- The CUTOFF and RES knobs control the cutoff frequency and resonance of the active filter.
- The VEL-FREQ knob adjusts the cutoff frequency's sensitivity to the velocity of the incoming notes. The higher the velocity, the higher the cutoff frequency.
- The ENV. AMT knob adjusts the cutoff frequency's sensitivity to the dedicated filter envelope generator. The knob is bipolar, meaning that the left half gives negative amounts, and the right half positive. You can adjust the shape of the envelope from the Envelope section of the Performance View.

2.4.2 Part Mix

Through this section you have control over the two sample sets of the loaded Instrument.

- You can adjust the volumes using the respective knobs or deactivate them using the orange LEDs. Deactivating a sample set actually reduces the amounts of voices used, resulting in lower CPU consumption.
- The SPREAD knob is used for widening the sound output. The first half of its range spreads the two sample sets in the stereo field, and the second half adds a subtle detuning effect.

2.4.3 Voicing

This section has three pairs of controls.

- The CHORD switch turns the automatic chord generator on and off. You can select the desired chord using the PRESET knob. When loading any of the Arpeggiator or Sequencer sounds, you will notice that the CHORD switch is replaced by an ARP or a SEQ switch respectively. Those switches turn the arpeggiator or the poly step module on and off. In this case the CHORD knob's functionality changes as well, with its extreme left setting turning the chord effect off.
- The GLIDE switch turns the glide/portamento functionality on and off, while the GLIDE knob controls the intensity of the effect by adjusting the time it takes to glide between two notes. The glide effect can only be triggered when playing legato.
- The SOLO switch turns the instrument to monophonic mode. However, this is only relevant to the input, since one can still use the chord functionality while still being in Solo mode. The LEGATO switch changes the behaviour of the Instrument in the sense that the envelopes are not retriggered when playing legato. It also changes the way

the samples are triggered to emulate the same effect, i.e., it adjusts the sample start times to give the impression that no envelopes are being retriggered when playing legato. The LEGATO switch has an effect only when the SOLO switch is active.

2.4.4   Envelope

In this section, you can adjust the shape of the two available envelopes.

▪ Use the FILTER/VOLUME switch to toggle between the two.
▪ Use the ATTACK, DECAY, SUSTAIN and RELEASE knobs to adjust the respective parameters.
▪ Adjust the ENV. AMT knob of the Filter section to have full control over the effect of the filter envelope to the cutoff.

2.4.5   Master FX

This section is comprised of three tabs, each for a different type of effect. You can turn the effects on and off by clicking on the **orange LEDs** on the left side of their names.

Reverb

The REVERB tab of the MASTER FX section.

Through this tab, you have control over the convolution effect module that is used in all the Instruments.

▪ There are two drop-down menus through which you can choose the category of impulse and the impulse itself, respectively. Most of the impulses are of various types of reverbs, either of real spaces or based on popular reverb units. One of the categories is a special one, featuring impulses of guitar cabinets.
▪ The AMOUNT knob provides control over the send level.

Chorus

The CHORUS tab of the MASTER FX section.

Through this tab you have control over the chorus effect. You can adjust the depth, speed and amount of the effect using the respective knobs.

Delay

The EQ tab of the MASTER FX section.

Through the DELAY tab you can adjust the feedback, time and amount parameters of the delay effect, using the respective knobs.

2.5 Urban Beats

The Urban Beats Collection consists of Sliced beats and grooves and features its own unique layout.

2.5.1 MIDI Mapping

All Urban Beats Instruments are split into four sections, mapped to the MIDI keyboard as follows:

- Notes C1-B2 trigger single Slices from the loops.
- Octave C3-B3 selects mixer presets for the original loops.
- Octave C4-B4 triggers editable drum patterns based on the loop Slices.
- Octave C5-B5 controls Master FX presets.

2.5.2 Performance Views

Drumkit

First Performance View page of the Urban Beats Drumkit.

The first Performance View page controls the effects for the loop Slices. It is similar in layout to the Synth and Vintage Drum collections. See section ↑1.3, Drum and Percussion Kit Layout for more details on this Performance View page.

Loops

Second Performance View page of the Urban Beats Drumkit.

As may be evident from the layout, this Performance View acts as a mixer for the individual tracks of the original loops. The Volume slider settings are automatically stored into whatever slot you have selected with the Preset control. It is important to note that only the volume settings are stored in the preset slots, and not mute or solo states. You can also select a mixer preset using the MIDI notes C3-B3. Each of the eight channels in the mixer has an identical set of controls:

- Main Volume slider, the settings for which are automatically stored in the currently selected preset.
- Solo (S) and Mute (M) buttons.
- A Sound (SND) knob, which morphs between several EQ presets.
- A Saturation (SAT) amount control.
- A Delay (DEL) send amount.
- A Reverb (REV) send amount.

▪ The send controls can be accessed by clicking the INSERTS/SENDS button at the bottom left of the Performance View.

Groovebox

Third Performance View page of the Urban Beats Drumkit.

The Groovebox Performance View is a reworked version of the drum computer. Here you can create patterns that trigger the loop Slices, allowing you to completely re-arrange the loops.

The Pattern Settings allow you to copy and paste patterns to different preset slots. These functions are accessed using the drop-down menu. Preset slots can be selected using either the corresponding MIDI key (C4-B4) or by using the orange knob.

▪ The functions of the controls in the GLOBAL OPTIONS are as follows:
  ◦ SWING: controls the deviation from the beat of the "in-between" notes of the pattern.
  ◦ QUANT: Quantizes the MIDI trigger to the master clock, so that the triggered pattern will always be in synch with your host.

- ◦ LATCH: when active, keeps the triggered pattern playing, even after the trigger key is released.
- ▪ The Tune Grid control (TUNE GRD) sets the range of the transpose pattern (the blue shaded sequence track) in semi-tones.
- ▪ The REMIX PATTERN section allows you to semi-randomly re-arrange the programmed patterns. Simply choose a setting with the TYPE knob, then hit NOW! to re-arrange the pattern.
- ▪ The drum computer gives you eight tracks, each with two bars of either 16th or 32nd note grids (toggled with the 32nd Note Grid button). As with the Pattern Settings section, you can also copy and paste track patterns as you wish.

Programming patterns with the drum computer is a simple task:

1. Click on the track you wish to program at the bottom of the Performance View.
2. Choose a track destination from the drop-down menu labelled TRACK OUTPUT.
3. Program the beat using the orange grid for velocity and the blue grid for pitch transposition.

Master FX

Fourth Performance View page of the Urban Beats Drumkit.

This is where you can adjust a variety of master effects that will be applied to all of the audio from the Instrument.

The main advantage of this section is that you can cycle through effects settings using the keys of your MIDI keyboard, or by using the orange Preset knob to the left of the Performance View.

The effects in this section are as follows:

- Saturation – controlled by the SATURATE knob.
- Morphing Equalizer – controlled by the SOUND knob
- CONVOLUTION – allowing you to color the sound with unusual impulse responses.
- FILTER – with adjustable resonance (RESO knob) and both lowpass and highpass modes. Moving the LP<>HP knob to the right increases the cutoff frequency of a highpass filter, and moving it to the left decreases the cutoff frequency of a lowpass filter.
- REVERB and DELAY sends – the settings for which can be accessed from the Drumkit page.

2.6   Vintage

If you are looking for retro, look no further. The Vintage Collection contains sampled versions of electronic instruments from the 60s to the 80s. Below is a comprehensive list of the included Instruments and where to find them.

2.6.1   Included Instruments

Folder	Short Description
Analogue Machines	Various hardware analog synthesizers
Digital Machines	Various digital synthesizers from the 80s and 90s, including: Yamaha DX7 (1983) Yamaha FS1R (1998) Yamaha TX81Z (1986) Kawai K5000 (1996)
Drum Machines	A collection of classic drum machines: Roland TR-808 (1980) Roland TR-909 (1984) Roland CR-78 (1978) Oberheim DMX (1981) Sequential Circuits DrumTraks (1984) Linn Electronics Linndrum (1982)
Electone Organ	Sounds from the Yamaha Electone Organ series
Electronic Pianos	Presets from a collection of electronic pianos from the 70s and 80s: Roland EP-10 Roland EP-20 Yamaha CP11 Crumar Roady RMI Electra-Piano 300B

Folder	Short Description
Electronic Toys	A collection of musical childrens toys: BeeGees Rhythm Machine (Mattel) Concertmate Drum Computer Casio CS01 Magic Wand: Droopy the Dragon (Texas Instruments) Peo 800 Mini Organ (Phips) Yamaha Handysound HS-200 Casio Rapman Casio SK1 Suzuki Tronichord Casio VL-1 Yamaha VSS-30 For more information on these instruments, please visit: http://www.miniorgan.com/
F100	Various sounds from the Hammond F100 Extravoice tube synthesizer (1961)
Mellotron	Various Mellotron Tape Sets
Memory	A selection of presets from a Memorymoog (1982)
Mini	A selection of patches from a Minimoog (1971)
Mini 700	A selection of presets from a MiniKorg 700 (1974)
Orchestrator	Various sounds from a Crumar Orchestrator (1978)
String Melody II	A selection of presets from a Logan String Melody II string machine (1977)
YC-30	Various sounds from a Yamaha YC-30 organ (1970)

2.6.2 Performance Views

An example Performance View from an Electone Organ patch.

- All Performance Views for the Vintage Collection share the same basic layout with only minor variations.
- The drum machines and rhythmic electronic toys use the drum and percussion layout, which is explained in chapter ↑1.3, Drum and Percussion Kit Layout.

Filter

- Every melodic Instrument features a filter with two states. Most Instruments feature allpass and vowel filters to choose from, but certain other patches feature low and highpass filters.
- The filter can be modulated by both velocity and an LFO.
- The whole filter can be activated or bypassed using the LED button to the top right of the section.

Instrument Controls

- All of the Vintage Collection Instruments have a Fat switch, which activates unisono mode, and a Sound knob that morphs between several EQ presets.
- The bottom two controls in this section vary depending on what type of Instrument you have loaded. In most cases they control a tremolo effect, but they may also control distortion effects or layer volumes.

Voicing

This section controls the voicing settings for the Instrument. The behavior of the controls are as follows:

- Solo: toggles monophonic voice mode (so you can play only one note at a time).
- Legato: alters the monophonic mode so that, when you play in a legato style, KONTAKT transposes the currently played sample, instead of triggering a new one.
- Glide: activates portamento, the rate of which is controlled by the Time knob.
- Chord: activates an auto-chord mode. The chord type can be selected with the Preset knob.

Volume Envelope

All Instruments feature an Attack Decay Sustain Release envelope for the volume. This behaves as standard in all patches, except the Sting Melody II Instruments, in which it only affects the main Instrument layer and not the percussion and bass layers.

Master FX

All Instruments feature rotator, cabinet and phaser master effects. Each can be activated by clicking on the LED button to the left of the effect name. The editable parameters for each effect can be accessed by clicking on the effect name tab.

Rotator

The Rotator tab of the Master FX section.

This is an emulation of the rotating Leslie speaker cabinet. It features one switch to toggle between fast and slow rotation speeds, and a knob to set the treble/bass horn balance. Lower settings give more bass horn volume and higher settings give more treble horn volume.

Cabinet

The Cabinet tab of the Master FX section.

Here you can select a modeled speaker cabinet to play your Instrument through. You can select the cabinet type from the drop-down menu below the cabinet picture. The Air knob simulates the early reflections of the recording of the speaker, giving space to the sound.

Phaser

The Phaser tab of the Master FX section.

The Phaser effect for the vintage section is an LFO-modulated stereo allpass filter. The Depth knob controls the strength of the LFO modulation, with the Rate knob controlling the LFO speed. The Amount knob sets the effect signal volume.

2.7   World

The World Collection is where you can find a wide variety of instruments from many regions of the world. Provided in this manual is a reference of the different instruments included, with a brief description and the country/area of origin.

2.7.1   Included Instruments

Flutes

Name	Description	Country/Region
Bansuri	A transverse flute traditionally made from bamboo.	India
Irish Flute	A wooden transverse flute, traditionally tuned to a diatonic scale.	Ireland
Kaval	A wooden end-blown flute.	Balkans
Persian Ney	A wooden end-blown flute, often made of reed.	Iran
Shakuhachi	An end-blown flute, traditionally made from bamboo and tuned to a minor pentatonic scale.	Japan
Turkish Ney	Similar to the Persian Ney.	Turkey

Recorders

Name	Description	Country/Region
High Whistle	A metal whistle (sometimes called a Tin Whistle). Traditionally tuned to a diatonic scale.	Ireland
Low Whistle		Ireland
Piccolo Recorder	A wooden wind instrument. Popular during the Baroque and Renaissance periods.	Europe
Soprano Recorder		Europe
Tenor Recorder		Europe

Reeds

Name	Description	Country/Region
Duduk	A wooden double-reed instrument.	Armenia
Shenai	A quadruple-reed instrument.	India
Zurna	A double-reed instrument.	Turkey

Bagpipes

Name	Description	Country/Region
Highland Bagpipes	A manually inflated bagpipe with three drones and a chanter.	Scotland
Tulum	A droneless bagpipe with two parallel chanters.	Turkey
Uilleann Pipes	A bellow powered bagpipe, with three adjustable drones and regulators, and a chanter.	Ireland

Drones are always mapped to the lower end of the keyboard and the chanter to the higher keys.

In this section, if the Instrument contains any drones or regulators, you will be given control of their volume. You will also have control over whether or not the drones will be latched. In other words, if the latch feature is activated, you need only press the drone key once, and it will play continuously until you press that key again. In these cases the articulations do not effect the drone keys.

Accordians

Name	Description	Country/Region
Accordion	Traditional bellow-driven instrument.	
Harmonium	Hand-pumped reed organ for accompaniment.	India
Melodeon	A diatonic accordion. The lower keys trigger basic chords for accompaniment.	England

Strings

Name	Description	Country/Region
Fiddle	More or less identical to the violin, but played in a different style.	
Kora	A 21-string harp-lute.	West Africa
Nyatiti	A plucked string instrument.	Kenya
Oud	A fretless plucked lute.	Turkey

Name	Description	Country/Region
Sitar	A plucked string instrument, with rich resonating sound and sympathetic strings.	India
Tanpura	The traditional Indian drone instrument, played with open strings.	India

Metallophones

Name	Description	Country/Region
Celesta	A struck metallophone operated by a keyboard.	Europe
Kalimba	A small plucked instrument, also known as a Thumb Pano.	Africa
Music Box	A clockwork, plucked metal instrument.	Europe
Sansa	Similar to the Kalimba.	Africa
Small Gongs	A tuned cymbal.	East Asia
Steel Drums	Tuned percussion, traditionally made from steel oil drums.	Caribbean
Tuned Gongs	Similar to the Small Gongs, but with less overtones and a shorter decay.	East Asia

Percussion

Name	Description	Country/Region
African Shakers	A collection of shakers.	Africa
Bongos	Two small hand drums.	Cuba
Congas	Two large hand drums, often used in Afro-Caribbean and Latin music.	Cuba
Daf – Dayereh	Tambourine-like instruments.	Middle East
Darabuka – Dunbek	Goblet drums.	Middle East
Djembes	Wooden goblet drums.	Africa
Ewe - Toke	Metal percussion (including bell-like instruments).	West Africa
Gongs	Large resonant cymbals.	East Asia

Name	Description	Country/Region
Kroboto – Boba – Kidi	Skinned drums played with wooden sticks in the same ensemble as the Ewe and Toke.	West Africa
Riq	A tambourine-like instrument.	Middle East
Tabla	Two tuned, hand played drums.	India
Taikos	Large drums played with wooden sticks.	Japan
Timbales	Single skinned drum similar to a highly tuned tom.	Cuba
Tonbak – Tar – Davul	A collection of skinned drums from Persia and the surrounding area.	Middle East

The Percussion instruments have a Performance View similar to the other drum and percussion instruments (described in chapter ↑1.3, Drum and Percussion Kit Layout). In this Collection, however, the keyboard layout is not standardized. Some patches have drum hits over two octaves and some over three. It is important to note that not all of the patches contain loops in the highest octave.

2.7.2 Performance Views

The Instrument page of the Shakuhachi's Performance View.

Instrument Controls

These vary from Instrument to Instrument, but all patches in the World Collection feature the SOLO switch and the SOUND knob.

- The SOLO switch not only puts the Instrument into monophonic mode, but, in certain cases, it also activates a legato mode designed to give a more natural sound when playing sustained instruments.
- The SOUND knob morphs between several EQ presets.

Articulation

Every Instrument in the World Collection contains a new articulation engine. These are simple ornaments that can help give authenticity to your playing. The articulations are triggered by dynamic keyswitches, this means that you can trigger an ornament even while holding a note.

You can edit the articulations using the three knobs:

1.   You may select a keyswitch slot either by playing the corresponding key, or by selecting the slot with the NOTE knob.

2.   You can then choose an articulation to assign to that key with the TYPE knob.

3.   The speed of the selected articulation can be adjusted with the SPEED knob.

If you do not wish to use the articulations, you can easily deactivate them with the ON/OFF switch.

Master FX

The World Collection Instruments have only one master effect: a convolution based reverb. You can select an impulse response with the two drop-down menus; the higher one selecting the category of impulse responses, and the lower selecting the actual sample. The overall mix of the effect can be controlled with the DRY/WET knob.

3   Credits

Library Concept and Specification: Nicki Marinic

Sound Design: Nicki Marinic, Paul Maurer, Adam Hanley, Dinos Vallianatos, Tobias Menguser, Ema Jolly, Robert Linke

Performance View Graphic Design: Gösta Wellmer, Max Mondon, Mirko Wannemacher

KSP programming: Nicki Marinic, Josef Natterer, Paul Maurer, Adam Hanley, Dinos Vallianatos

Sample Library: Native Instruments, Vienna Symphonic Library, Thomas Koritke, Chris Hein, Digital Sound Factory, Beatlab/Timetools, Pettinhouse, Christoph Marotzke, Danny Zelonki, Summa, Stephan Rühl, Denis Gökdag

IR Sample Library: Acousticas, Studio Devices, echochamber, Native Instruments

4   License Agreements

4.1   Native Instruments License Agreement

This license agreement is an agreement between you and Native Instruments. It governs your use of the sample-library for KONTAKT supplied to you by Native Instruments. By downloading, installing or otherwise using the samples and instruments, you agree to be legally bound by the terms of this license agreement.

The provided samples, instruments and presets are produced exclusively by Native Instruments, Vienna Symphonic Library, Chris Hein, Beatlab/Timetools, Pettinhouse, NDB - Notre Dame de Budapest, CKSDE, Spirit Canyon Audio and others can be used for commercial or non-commercial music and audio productions without the prior permission from Native Instruments under the terms of this agreement.

With the purchase of this sample library you have acquired a single license.

You may make one copy of each CD for backup purposes only. Any other use in whole or in parts (giving, trading, lending, renting, re-issuing, re-distribution or re-sale of this product or any of the contained samples) is expressly prohibited, without the prior written permission of Native Instruments.

This license will terminate automatically without notice by Native Instruments if you fail to comply with any provision of this license. Upon termination you shall destroy all copies of the Sample-Library.

Copyright 2007 - Native Instruments Software Synthesis GmbH.

4.2   VSL Terms of License

Frequently Asked Questions about using our sample libraries

Do I have to pay additional licensing fees if my use of these samples ends up on a hit record or other high-profile projects?
NO, your original purchase of the disc is your only license fee, and you're free to use it in as many musical recordings as you want, forever. We hope you do get to use our sounds on a hit!

Do I have to credit this disc if I use it on a recording?

With your purchase, you agree to use the following wording in any credits or liner notes accompanying the music recording, be it a music CD, cassette, or soundtrack compilation: "Orchestral samples included in this recording from the Vienna Symphonic Library". Screen credit for film and television use is not required.

Can my writing partner, colleagues or friends use these samples once I've licensed the disc? Can I form a group to buy and share discs?
NO, each person who uses the sounds must purchase their own copy (which licenses them to use the sounds). Anyone other than the original purchaser of the disc, who uses the sounds, is doing so illegally—risking legal action against both them and their clientsContact us regarding package deals for special circumstances.

Can I offer these sounds to clients as part of my recording studio or rental company services? Or, as a freelance sound designer, can I put custom compilation discs together which include your sounds for my composer clients?
NO. Sorry, but each person who uses the sounds (the creative person) has to be a licensed user. Otherwise, this could cause tremendous legal problems for studio or rental clients.

Can I use these samples to make "Music Libraries?"
YES, unlike some Soundware companies, this is fully allowed with all of our products. The sounds have to be used within a musical context, however, and cannot be presented isolated or "solo'ed."

Can I use these sounds in Multimedia projects?
MAYBE, as long as the sounds are irremovably imbedded in music. Contact us if you're still unsure.

Can I use these sounds to make and publish DLS sets?
NO. Any such usage is prohibited without prior clearance from us. Otherwise, you're in direct violation of our license agreements. Contact us for more information.

Is it OK to sell the used disc to someone else if I'm finished with the project that I needed it for?

NO. Unlike your musical gear, music CDs, or even software, you cannot give away or sell these discs to someone else. YOU DID NOT PURCHASE THE DISC. YOU PURCHASED A LICENSE TO USE OUR SOUND RECORDINGS IN YOUR MUSIC. This license cannot be transferred by you.

What if I still have questions?
The following license agreement covers all of your rights in detail. If you still have questions, please contact us any time to discuss any particular licensing questions you may have. We want to help you!
IMPORTANT
DO NOT OPEN THE SHRINK WRAPPED PRODUCT UNTIL YOU HAVE READ THIS LICENSE AGREEMENT. BY OPENING THE PRODUCT (OR AUTHORIZING ANY OTHER PERSON TO DO SO) YOU ACCEPT THIS LICENSE AGREEMENT.

When you purchase this library from an authorized dealer, the sounds and samples are licensed, not sold, to you by the Vienna Symphonic Library GmbH for commercial use in music production, public performance, broadcast, or similar use. You may use any of the samples in a commercial recording without paying any additional license fees. With your purchase, you agree to use the following wording in any credits or liner notes accompanying the music recording, be it a music CD, cassette, or soundtrack compilation: **"Orchestral samples included in this recording from the Vienna Symphonic Library"**. Screen credit for film and television use is not required. The Vienna Symphonic Library GmbH will not be responsible if the contents of these disks does not fit the particular purpose of the Licensee. The sounds are licensed "as is" without warranties of any kind. Vienna Symphonic Library GmbH cannot be held responsible for any direct or indirect or consequential loss arising from the use of this product in whatever form.

1. Definitions. Vienna Symphonic Library GmbH is the copyright owner of any CD, CD-ROM or DVD-ROM included in this package. "You" and "Your" means the person who purchased this license to use this product or for whom the license was purchased. "Documentation" means the manual or guide and any other printed material provided by Publisher with the enclosed product. "License" means the license purchased and granted pursuant to this Agreement.

2. License Grant. The Vienna Symphonic Library GmbH grants to you and only you, subject to the following terms and conditions, a non-exclusive, nontransferable right to use each authorized copy of the enclosed product. The enclosed product is the property of the Vienna Symphonic Library GmbH and is licensed to you only for use as part of a musical performance, live or recorded. This license expressly forbids resale or other distribution of these Sounds or their derivatives, either as they exist on disc, reformatted for use in another digital sampler, or mixed, combined, filtered, resynthesized or otherwise edited, for use as sounds, multisounds, samples, multisamples, wavetables, soundsets, programs or patches in a sampler, microchip, computer, software, game console or any sample playback device. You cannot sell them or give them away for use by others in their sampling or sample playback devices. In the event the Vienna Symphonic Library GmbH terminates this Agreement due to your breach, you agree to return the original and all other copies of the software and documentation to the Vienna Symphonic Library GmbH. The Vienna Symphonic Library GmbH reserves all rights not expressly granted to you.

3. Protection of Software. You agree to take all reasonable steps to protect this product and any accompanying documentation from unauthorized copying or use. You agree not to modify the enclosed product to circumvent any method or means adopted or implemented by the Vienna Symphonic Library GmbH to protect against or discourage the unlicensed use of copying of the enclosed product.

4. Ownership. Ownership of, and title to, the enclosed digitally recorded sounds (including any copies) will be held by the Vienna Symphonic Library GmbH. Copies are provided to you only to enable you to exercise your rights under the license. Only this license is purchased by you.

5. Term. This Agreement is effective from the date you open this package, and will remain in full force until termination. This Agreement will terminate if you break any of the terms or conditions of this Agreement. Upon termination you agree to destroy and return to the Vienna Symphonic Library GmbH all copies of this product and accompanying documentation.

6. Restrictions. Except as expressly authorized in this Agreement, you may not rent, lease, sell, sublicense, distribute, transfer, copy, reproduce, display, modify or time share the enclosed product(s) or documentation.

OPENING THE SHRINK WRAPPED PRODUCT CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS.

The Vienna Symphonic Library GmbH constantly monitors digital product releases and the internet to check for copyright infringements, and will prosecute all piracy and copyright violations to the fullest extent of the law.

5   Appendix

5.1   VSL KONTAKT Orchestra

5.1.1   About the Vienna Symphonic Orchestra KONTAKT Edition

This special edition of the Vienna Symphonic Orchestra was specifically made for KONTAKT to take advantage of the KONTAKT Script Processor for the performance instruments. The library includes 30 instruments of an Orchestra to provide you with a set of Instruments for your orchestral compositions.

The Vienna Symphonic Library is one of the most comprehensive Orchestral Sample Libraries that has ever been created. The structure of the library has been kept as intuitive as possible. In the following sections, you will find exaplanations for the structure and usage of the library, as well as a complete list of the included instruments. You will also find more information on how to use the special performance instruments with the performance script modules.

If you need more information about further VSL-Libraries, or the original instruments, please visit http://www.vsl.co.at.

5.1.2   Instrument Overview

STRINGS
- 01 Violin ensemble
- 02 Viola ensemble
- 03 Cello ensemble
- 04 Double Bass ensemble
- 05 Harp

Playing techniques:
- Staccato: up and down bow
- Long notes: sustained notes, with vibrato
- Special dynamics: fortepiano, sforzando

- Tremolos: sustained tremolos
- Pizzicato: pizzicato
- Performance: legato/repetition
- Harp: Normal/Flageolet

WOODWINDS

- 06 Piccolo Flute
- 07 Flute
- 08 Oboe
- 09 French Oboe
- 10 English Horn
- 11 Clarinet
- 12 Bass Clarinet
- 13 Clarinet & Bass Clarinet
- 14 Bassoon
- 15 Contrabassoon
- 16 Bassoon & Contrabassoon

Playing techniques:

- Staccato: 2 variations
- Long notes: sustained notes, (some with vibrato)
- Special dynamics: fortepiano, sforzando
- Performance: legato

BRASS

- 17 Trumpet solo
- 18 Trumpet ensemble
- 19 French Horn solo
- 20 French Horn ensemble
- 21 Trombone solo
- 22 Trombone ensemble
- 23 Tuba

Playing techniques:

- Staccato: 2 variations
- Long notes: sustained notes, (some with vibrato)

- Special dynamics: fortepiano, sforzando
- Performance: legato

PERCUSSION
- 24 Timpani
- 25 Drums
- 26 Cymbals
- 27 Percussion
- 28 Mallets & Bells

Playing techniques: depending on Instrument, e.g. single strokes, tremolo.
Most of these Instrument folders contain subfolders with the different type of Instruments.

5.1.3   Explanation of subfolders

01 Standard Instruments

These folders contain the basic Instruments with different playing techniques (staccato, sustain, sforzando, fortepiano, pizzicato, and tremolo).
The (all) Instruments have keyswitches assigned (C0-F#0 or C5-F#5) to switch between the different playing techniques.

02 Modwheel X-Fades

These folders contain all Instruments from the standard folder, but instead of having the layers switched via velocity, the layers can be dynamically changed with the modwheel (CC 1). Please notice, that these Instruments use three or more voices per note, resulting in more CPU usage than the standard Instruments.

03 Release Triggers

These folders contain sustain and tremolo versions which have additional release samples, triggered by note-off.

04 Legato Instruments / 04 Repetition Instruments

These special Instruments, which use performance scripts programmed in the KONTAKT Script Processor, are available for:
- Violin ens 14 (legato)

- Viola ens 10 (legato)
- Cello ens 8 (legato)
- Flute (legato)
- Frn Horn ens 4 (legato)

and

- Bass ens 6 (repetition)
- Tromb ens 3 (repetition)

5.1.4   Legato Tool

The Legato Tool script used in the legato Instruments

The Legato Tool in the legato Instruments enables you to perform authentic monophonic legato lines on your keyboard. Specific legato Instruments have been created that work in Legato Mode. Legato Instrument files will always have (legato) in their name, e.g., "Violin ens 14 (legato)", containing violin ensemble Performance Legatos.

Legato Threshold

It may be that your performance on the keyboard leaves something to be desired. So, if you get too many starting notes (non legato) for your liking, you can use the LegTime knob to adapt the time within which the tool will recognize two consecutive notes as legato.

If you set this too high, however, almost every sequence will be played legato even if you intend to play a new starting note. Just experiment with the setting to adjust it to your playing style — or play your sequence first and set the legato threshold during playback.

Function Keys: Ghost, Release Trigger, Repetition Trigger

With the help of function keys, you can access special functions directly on your MIDI keyboard, or insert them in your recorded MIDI track to make your performance even more realistic. By clicking within the appropriate fields, you can set the trigger notes for the function keys.

Ghost: Press this key to have the next starting note muted. For instance, you could later copy these notes to another track to have them played in another technique of your choice. The Ghost function makes it possible to start a legato passage from any other starting note (from another MIDI track), e.g. from a crescendo, a diminuendo, a sforzato. An example: In your sequencer, you record a three bar legato passage in piano (soft), using legato performances. But you want a strong accent on the first note of this passage, instead of the now recorded piano tone. So you decide you want to use a fortepiano tone from the "Special Dynamics".

In this case you put a ghost function key prior to the first note. Now the first note won't be played, but the second note still has the right transition from the ending of the (now silent) first note to the second note.

Now you copy this first note to the MIDI track that is to play the fortepiano note. (Leave the muted note in the legato track, as the second legato note still needs to know where the transition comes from!) Playing both MIDI tracks, you will get the proper transition from the fortepiano note to the legato passage.

Release trigger: Use this if you want to have the last note of a sequence end with a special release sample for increased authenticity. To activate this function, press the trigger note after the last note is played. The release sample will be played after the specified release time (see above).

> ⚠ Attention: if you hold a note too long, the release sample will still be triggered after the natural duration of the note, and you will hear the sample as a distinct extra tone. The notes of legato performances are quite long, of course, but for the sake of your computer's memory they are far from endless...

Repetition trigger: This key has the function of providing a legato repetition instead of a fresh starting note. Press it before the repetition note when it should be part of a continuing legato sequence rather than the beginning of a new one.

> ⚠ Please note: Repetition trigger is not available in the French Horn ensemble (Frn Horn ens 4 (legato)).

5.1.5 Repetition Tool

The Repetition Tool script used in the repetition Instruments

The purpose of the Repetition Tool in the Repetition Instruments is to enable you to create realistic sounding repeated notes. Specific Repetition Instruments have been created to work in with the Repetition tool.

In the VSL KONTAKT Orchestra, Instruments for use with the Repetition Tool have the designation "(repetition)" included in the file name. These are the only Instruments that will work with the Repetition tool.

The Style display

Within the Repetition Tool, you will find a style display (the single line at the top display-ing *LineNr: 1 - 11111 - GroupNr:* in the example above) and a matrix (the larger display to the left). The style display shows the repetition entries themselves. The entries can be tog-gled only between 0 and 1 by using the buttons labeled **I**, **II**, **III** etc., defining whether a sample is to be played or not. So when the style displays shows *11111*, all five repetitions will be played. If it shows *11110*, only the first four repetitions will be played, the last note is omitted.

The two repetition Instruments provided with the VSL KONTAKT Orchestra both contain 5 repetitions, recorded as quarter notes at BPM = 60.

Again, let's have a look at the basic settings.

Another important setting is the **First Keyswitch Delay**. This assures that your performance will be aligned with the meter you're in, and that the repetitions don't lag behind the tempo of your piece. For our current Instrument, it is set to 20 ms.

The **Release Time** defines the time you have to play the next tone of the repetition (your Note off event is being delayed). Since both Instruments have been recorded with quarter notes at 60 BPM, 1 second is a reasonable choice.

The Matrix

The matrix displays 12 lines of repetition sequences with 5 entries each, which you can configure according to your needs.

The first entry shows the line number (up to 12 lines are available). As our current instrument has five repetitions, the basic patterns are all set to five entries.

Each matrix line now has five entries. The sequence of "1s" and "0s" defines which of the Instrument's repetitions are to be played; a sequence of "1–0–1–0–1" will play the first, third, and fifth note. You can now configure the lines for the repetitions you have in mind. Please note that it is not possible to have a matrix line without repetitions—you will not be able to toggle the last "1" in a repetition sequence.

As a general rule for repetition "speed limits": The slower the recorded tempo of the repetition, the higher the possible factor of acceleration (you can easily speed up legato repetitions of quarter notes at 60 BPM (4_60) to at least 120 BPM!). So this means for the two repetition Instruments included with the VSL KONTAKT Orchestra that you can play repetitions faster than quarter notes at 60 BPM but not slower.

Function keys: Jump Last, Skip First

These function keys provide special functions that will make your performance even more realistic. You can set them according to your needs, but make sure that they don't interfere with any of the other keyboard areas that are taken up by play zone, keyswitches, and matrix line switches.

Jump Last: If you press this key, the next sample played will be the last active entry in the matrix line. Normally, this will also be the finishing note of the sampled repetition sequence, so you can place the end of your repetition sequence at will. The next sample played will be the first active entry of the matrix line (normally the starting note).

Skip First On/Off: To play long repetition sequences without employing Chain Mode (see below), you can use these switches. Pressing the key assigned to Skip First On will cause the tool to skip the starting note of the repetition line until you hit the Skip First Off key. Thus, your initial number of repetitions can easily be increased to any amount you like.

Chain Mode

Chain Mode links the matrix lines so that you will get a sequence of repetitions consisting of all the matrix lines—in sequenceThis allows you to create long repetition sequences with a fair amount of variation (even five repetitions tend to become boring if they're always in the same order). You can still switch matrix lines while Chain Mode is activated; the Tool simply jumps to the selected line and continue from there.

The scripts cannot be adapted to other Instruments, as the above Instruments contain many more samples than the other Instruments. If you want to get more "performance Instruments", please contact VSL for more information: http://www.vsl.co.at.

5.1.6   The Orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.
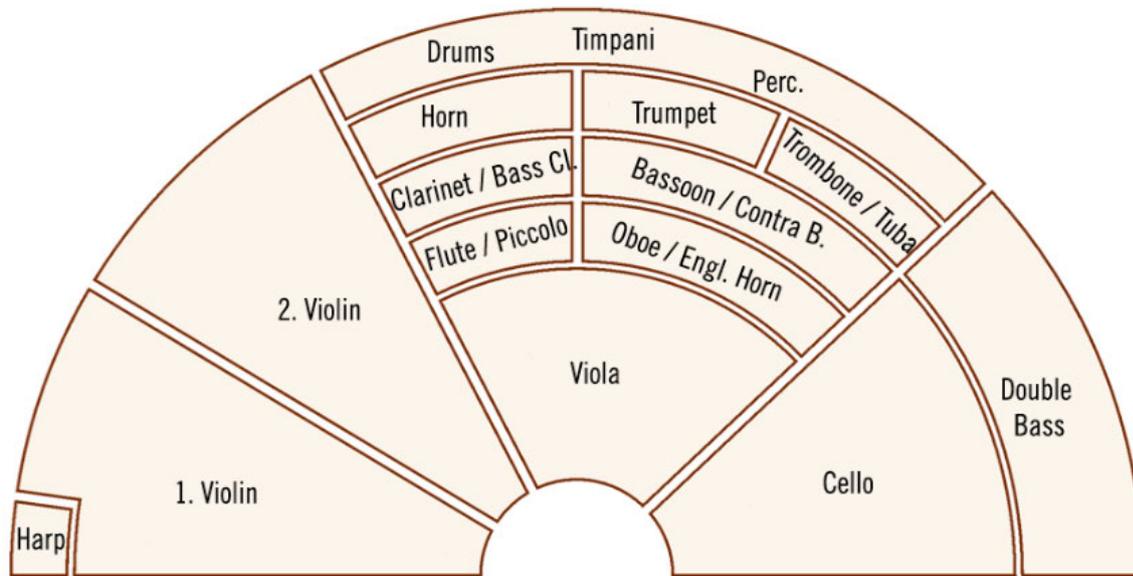
A typical orchestra seating order.

5.1.7 Instrument List

Instruments	Content Description
01 VIOLIN ENSEMBLE	**Violin ensemble with 14 players**
01 Standard Instruments	
Violin ens 14 (all).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato
Violin ens 14 (fortepiano).nki	fortepiano
Violin ens 14 (pizzicato).nki	pizzicato
Violin ens 14 (sforzando).nki	sforzando
Violin ens 14 (stac 1).nki	staccato downbow
Violin ens 14 (stac 1+2 alt).nki	staccato downbow/upbow alternating

Instruments	Content Description
Violin ens 14 (stac 1+2).nki	staccato downbow/upbow keyswitched
Violin ens 14 (stac 2).nki	staccato upbow
Violin ens 14 (sustain).nki	sustain
Violin ens 14 (tremolo).nki	tremolo
02 Modwheel X-Fades	
Violin ens 14 (all X).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato / Modwheel fades between piano and forte
Violin ens 14 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Violin ens 14 (pizzicato X).nki	pizzicato / Modwheel fades between piano and forte
Violin ens 14 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Violin ens 14 (stac 1 X).nki	staccato downbow / Modwheel fades between piano and forte
Violin ens 14 (stac 1+2 alt X).nki	staccato downbow/upbow alternating / Modwheel fades between piano and forte
Violin ens 14 (stac 1+2 X).nki	staccato downbow/upbow keyswitched / Modwheel fades between piano and forte
Violin ens 14 (stac 2 X).nki	staccato upbow / Modwheel fades between piano and forte
Violin ens 14 (sustain X).nki	sustain / Modwheel fades between piano and forte
Violin ens 14 (tremolo X).nki	tremolo / Modwheel fades between piano and forte
03 Release Triggers	
Violin ens 14 (sustain+rls).nki	sustain + release samples
Violin ens 14 (tremolo+rls).nki	tremolo + release samples
04 Legato Instruments	
Violin ens 14 (legato).nki	legato with KSP legato tool

Instruments	Content Description
02 VIOLA ENSEMBLE	**Viola ensemble with 10 players**
01 Standard Instruments	
Viola ens 10 (all).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato
Viola ens 10 (fortepiano).nki	fortepiano
Viola ens 10 (pizzicato).nki	pizzicato
Viola ens 10 (sforzando).nki	sforzando
Viola ens 10 (stac 1).nki	staccato downbow
Viola ens 10 (stac 1+2 alt)nki	staccato downbow/upbow alternating
Viola ens 10 (stac 1+2).nki	staccato downbow/upbow keyswitched
Viola ens 10 (stac 2).nki	staccato upbow
Viola ens 10 (sustain).nki	sustain
Viola ens 10 (tremolo).nki	tremolo
02 Modwheel X-Fades	
Viola ens 10 (all X).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato / Modwheel fades between piano and forte
Viola ens 10 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Viola ens 10 (pizzicato X).nki	pizzicato / Modwheel fades between piano and forte
Viola ens 10 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Viola ens 10 (stac 1 X).nki	staccato downbow / Modwheel fades between piano and forte
Viola ens 10 (stac 1+2 alt X).nki	staccato downbow/upbow alternating / Modwheel fades between piano and forte
Viola ens 10 (stac 1+2 X).nki	staccato downbow/upbow keyswitched / Modwheel fades between piano and forte
Viola ens 10 (stac 2 X).nki	staccato upbow / Modwheel fades between piano and forte
Viola ens 10 (sustain X).nki	sustain / Modwheel fades between piano and forte

Instruments	Content Description
Viola ens 10 (tremolo).nki	tremolo / Modwheel fades between piano and forte
03 Release Triggers	
Viola ens 10 (sustain+rls).nki	sustain + release samples
Viola ens 10 (tremolo+rls).nki	tremolo + release samples
04 Legato Instruments	
Viola ens 10 (legato).nki	legato with KSP legato tool
O3 CELLO ENSEMBLE	**Cello ensemble with 8 players**
01 Standard Instruments	
Cello ens 8 (all).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato
Cello ens 8 (fortepiano).nki	fortepiano
Cello ens 8 (pizzicato).nki	pizzicato
Cello ens 8 (sforzando).nki	sforzando
Cello ens 8 (stac 1).nki	staccato downbow
Cello ens 8 (stac 1+2 alt).nki	staccato downbow/upbow alternating
Cello ens 8 (stac 1+2).nki	staccato downbow/upbow keyswitched
Cello ens 8 (stac 2).nki	staccato upbow
Cello ens 8 (sustain).nki	sustain
Cello ens 8 (tremolo).nki	tremolo
02 Modwheel X-Fades	
Cello ens 8 (all X).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato / Modwheel fades between piano and forte

Instruments	Content Description
Cello ens 8 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Cello ens 8 (pizzicato X).nki	pizzicato / Modwheel fades between piano and forte
Cello ens 8 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Cello ens 8 (stac 1 X).nki	staccato downbow / Modwheel fades between piano and forte
Cello ens 8 (stac 1+2 alt X).nki	staccato downbow/upbow alternating / Modwheel fades between piano and forte
Cello ens 8 (stac 1+2 X).nki	staccato downbow/upbow keyswitched / Modwheel fades between piano and forte
Cello ens 8 (stac 2 X).nki	staccato upbow / Modwheel fades between piano and forte
Cello ens 8 (sustain X).nki	sustain / Modwheel fades between piano and forte
Cello ens 8 (tremolo X).nki	tremolo / Modwheel fades between piano and forte
03 Release Triggers	
Cello ens 8 (sustain+rls).nki	sustain + release samples
Cello ens 8 (tremolo+rls).nki	tremolo + release samples
04 Legato Instruments	
Cello ens 8 (legato).nki	legato with KSP legato tool
04 DOUBLE BASS ENSEMBLE	**Double Bass ensemble with 6 players**
01 Standard Instruments	
Bass ens 6 (all).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato
Bass ens 6 (fortepiano).nki	fortepiano
Bass ens 6 (pizzicato).nkki	pizzicato
Bass ens 6 (sforzando).nki	sforzando
Bass ens 6 (stac 1).nki	staccato downbow

Instruments	Content Description
Bass ens 6 (stac 1+2 alt).nki	staccato downbow/upbow alternating
Bass ens 6 (stac 1+2).nki	staccato downbow/upbow keyswitched
Bass ens 6 (stac 2).nki	staccato upbow
Bass ens 6 (sustain).nki	sustain
Bass ens 6 (tremolo).nki	tremolo
02 Modwheel X-Fades	
Bass ens 6 (all X).nki	Articulations: staccato (1+2 down & up), sustain, tremolo, sforzando, fortepiano, pizzicato / Modwheel fades between piano and forte
Bass ens 6 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Bass ens 6 (pizzicato X).nki	pizzicato / Modwheel fades between piano and forte
Bass ens 6 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Bass ens 6 (stac 1 X).nki	staccato downbow / Modwheel fades between piano and forte
Bass ens 6 (stac 1+2 alt X).nki	staccato downbow/upbow alternating / Modwheel fades between piano and forte
Bass ens 6 (stac 1+2 X).nki	staccato downbow/upbow keyswitched / Modwheel fades between piano and forte
Bass ens 6 (stac 2 X).nki	staccato upbow / Modwheel fades between piano and forte
Bass ens 6 (sustain X).nki	sustain / Modwheel fades between piano and forte
Bass ens 6 (tremolo X).nki	tremolo / Modwheel fades between piano and forte
03 Release Triggers	
Bass ens 6 (sustain+rls).nki	sustain + release samples
Bass ens 6 (tremolo+rls).nki	tremolo + release samples
04 Repetition Instruments	
Bass ens 6 (repetition).nki	repetition with KSP repetition tool

Instruments	Content Description
O5 HARP	
01 Standard Instruments	
Harp (all).nki	modwheel down (0-63) = normal / modwheel up (64-128) = flageolet
Harp (flageolet).nki	
Harp (normal).nki	
WOODWINDS	
O6 PICCOLO FLUTE	
01 Standard Instruments	
Piccolo (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Piccolo (fortepiano).nki	fortepiano
Piccolo (sforzando).nki	sforzando
Piccolo (stac 1).nki	staccato 1
Piccolo (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Piccolo (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Piccolo (stac 2).nki	staccato 2
Piccolo (sustain).nki	sustain
02 Modwheel X-Fades	
Piccolo (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Piccolo (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Piccolo (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Piccolo (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte

Instruments	Content Description
Piccolo (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Piccolo (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Piccolo (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Piccolo (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Piccolo (sustain+rls).nki	sustain + release samples
07 FLUTE	
01 Standard Instruments	
Flute (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Flute (fortepiano).nki	fortepiano
Flute (sforzando).nki	sforzando
Flute (stac 1).nki	staccato 1
Flute (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Flute (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Flute (stac 2).nki	staccato 2
Flute (sustain).nki	sustain
02 Modwheel X-Fades	
Flute (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Flute (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Flute (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Flute (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte

Instruments	Content Description
Flute (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Flute (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Flute (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Flute (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Flute (sustain+rls).nki	sustain + release samples
04 Legato Instruments	
Flute (legato).nki	legato with KSP legato tool
08 OBOE	
01 Standard Instruments	
Oboe (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Oboe (fortepiano).nki	fortepiano
Oboe (sforzando).nki	sforzando
Oboe (stac 1).nki	staccato 1
Oboe (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Oboe (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Oboe (stac 2).nki	staccato 2
Oboe (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Oboe (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Oboe (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Oboe (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Oboe (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Oboe (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Oboe (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Oboe (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Oboe (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Oboe (sustain+rls).nki	sustain + release samples
O9 FRENCH OBOE	
01 Standard Instruments	
French Oboe (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
French Oboe (fortepiano).nki	fortepiano
French Oboe (sforzando).nki	sforzando
French Oboe (stac 1).nki	staccato 1
French Oboe (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
French Oboe (stac 1+2).nki	staccato 1/staccato 2 keyswitched
French Oboe (stac 2).nki	staccato 2
French Oboe (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
French Oboe (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
French Oboe (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
French Oboe (sforzando X).nki	sforzando / Modwheel fades between piano and forte
French Oboe (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
French Oboe (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
French Oboe (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
French Oboe (stac 2X).nki	staccato 2 / Modwheel fades between piano and forte
French Oboe (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
French Oboe (sustain+rls).nki	sustain + release samples
10 ENGLISH HORN	
01 Standard Instruments	
Engl Horn (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Engl Horn (fortepiano).nki	fortepiano
Engl Horn (sforzando).nki	sforzando
Engl Horn (stac 1).nki	staccato 1
Engl Horn (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Engl Horn (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Engl Horn (stac 2).nki	staccato 2
Engl Horn (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Engl Horn (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Engl Horn (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Engl Horn (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Engl Horn (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Engl Horn (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Engl Horn (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Engl Horn (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Engl Horn (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Engl Horn (sustain +rls).nki	sustain + release samples
11 CLARINET	
01 Standard Instruments	
Clarinet (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Clarinet (fortepiano).nki	fortepiano
Clarinet (sforzando).nki	sforzando
Clarinet (stac 1).nki	staccato 1
Clarinet (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Clarinet (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Clarinet (stac 2).nki	staccato 2
Clarinet (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Clarinet (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Clarinet (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Clarinet (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Clarinet (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Clarinet (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Clarinet (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Clarinet (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Clarinet (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Clarinet (sustain+rls).nki	sustain + release samples
12 BASSCLARINET	
01 Standard Instruments	
Bass Clar (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Bass Clar (fortepiano).nki	fortepiano
Bass Clar (szorzando).nki	sforzando
Bass Clar (stac 1).nki	staccato 1
Bass Clar (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Bass Clar (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Bass Clar (stac 2).nki	staccato 2
Bass Clar (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Bass Clar (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Bass Clar (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Bass Clar (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Bass Clar (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Bass Clar (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Bass Clar (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Bass Clar (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Bass Clar (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Bass Clar (sustain+rls).nki	sustain + release samples
13 CLARINET & BASSCLARINET	**Clarinet and Bassclarinet combined in 1 instrument**
01 Standard Instruments	
Clar Combi (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Clar Combi (fortepiano).nki	fortepiano
Clar Combi (sforzando).nki	sforzando
Clar Combi (stac 1).nki	staccato 1
Clar Combi (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Clar Comb (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Clar Combi (stac 2).nki	staccato 2
Clar Combi (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Clar Combi (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Clar Combi (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Clar Combi (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Clar Combi (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Clar Combi (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Clar Combi (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Clar Combi (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Clar Combi (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Clar Combi (sustain+rls).nki	sustain + release samples
14 BASSOON	
01 Standard Instruments	
Bassoon (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Bassoon (fortepiano).nki	fortepiano
Bassoon (sforzando).nki	sforzando
Bassoon (stac 1).nki	staccato 1
Bassoon (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Bassoon (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Bassoon (stac 2).nki	staccato 2
Bassoon (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Bassoon (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Bassoon (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Bassoon (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Bassoon (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Bassoon (szac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Bassoon (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Bassoon (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Bassoon (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Bassoon (sustain+rls).nki	sustain + release samples
15 CONTRABASSOON	
01 Standard Instruments	
C-Bassoon (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
C-Bassoon (fortepiano).nki	fortepiano
C-Bassoon (sforzando).nki	sforzando
C-Bassoon (stac 1).nki	staccato 1
C-Bassoon (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
C-Bassoon (stac 1+2).nki	staccato 1/staccato 2 keyswitched
C-Bassoon (stac 2).nki	staccato 2
C-Bassoon (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
C-Bassoon (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
C-Bassoon (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
C-Bassoon (sforzando X).nki	sforzando / Modwheel fades between piano and forte
C-Bassoonn (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
C-Bassoon (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
C-Bassoon (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
C-Bassoon (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
C-Bassoon (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
C-Bassoon (sustain+rls).nki	sustain + release samples
16 BASSOON & CONTRABASSOON	**Bassoon and Contrabassoon combined in 1 instrument**
01 Standard Instruments	
Bsn Combi (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Bsn Combi (fortepiano).nki	fortepiano
Bsn Combi (sforzando).nki	sforzando
Bsn Combi (stac 1).nki	staccato 1
Bsn Combi (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Bsn Combi (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Bsn Combi (stac 2).nki	staccato 2
Bsn Combi (sustain).nki	sustain
02 Modwheel X-Fades	

Instruments	Content Description
Bsn Combi (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Bsn Combi (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Bsn Combi (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Bsn Combi (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Bsn Combi (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Bsn Combi (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Bsn Combi (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Bsn Combi sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Bsn Combi (sustain+rls).nki	sustain + release samples
BRASS	
17 TRUMPET SOLO	
01 Standard Instruments	
Trumpet (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Trumpet (fortepiano).nki	fortepiano
Trumpet (sforzando).nki	sforzando
Trumpet (stac 1).nki	staccato 1
Trumpet (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Trumpet (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Trumpet (stac 2).nki	staccato 2
Trumpet (sustain).nki	sustain
Trumpet (sustain+flt).nki	Modwheel > Brightness (lowpass filter)

Instruments	Content Description
02 Modwheel X-Fades	
Trumpet (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Trumpet (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Trumpet (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Trumpet (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Trumpet (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Trumpet (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Trumpet (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Trumpet (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Trumpet (sustain+rls).nki	sustain + release samples
Trumpet (sustain+flt+rls).nki	sustain + release samples / Modwheel > Brightness (lowpass filter)
18 TRUMPET ENSEMBLE	**Trumpet ensemble with 3 players**
01 Standard Instruments	
Trump ens 3 (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Trump ens 3 (fortepiano).nki	fortepiano
Trump ens 3 (sforzando).nki	sforzando
Trump ens 3 (stac 1).nki	staccato 1
Trump ens 3 (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Trump ens 3 (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Trump ens 3 (stac 2).nki	staccato 2

Instruments	Content Description
Trump ens 3 (sustain).nki	sustain
Trump ens 3 (sustain+flt).nki	Modwheel > Brightness (lowpass filter)
02 Modwheel X-Fades	
Trump ens 3 (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Trump ens 3 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Trump ens 3 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Trump ens 3 (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Trump ens 3 (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Trump ens 3 (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Trump ens 3 (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Trump ens 3 (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Trump ens 3 (sustain+rls).nki	sustain + release samples
Trump ens 3 (sustain+flt+rls).nki	sustain + release samples / Modwheel > Brightness (lowpass filter)
19 FRENCH HORN SOLO	
01 Standard Instruments	
French Horn (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
French Horn (fortepiano)-nki	fortepiano
French Horn (sforzando).nki	sforzando
French Horn (stac 1).nki	staccato 1
French Horn (stac 1+2 alt).nki	staccato 1/staccato 2 alternating

Instruments	Content Description
French Horn (stac 1+2).nki	staccato 1/staccato 2 keyswitched
French Horn (stac 2).nki	staccato 2
French Horn (sustain).nki	sustain
French Horn (sustain+flt).nki	Modwheel > Brightness (lowpass filter)
02 Modwheel X-Fades	
French Horn (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
French Horn (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
French Horn (sforzando X).nki	sforzando / Modwheel fades between piano and forte
French Horn (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
French Horn (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
French Horn (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
French Horn (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
French Horn (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
French Horn (sustain+rls).nki	sustain + release samples
French Horn (sustain+flt+rls).nki	sustain + release samples / Modwheel > Brightness (lowpass filter)
20 FRENCH HORN ENSEMBLE	**French Horn ensemble with 4 players**
01 Standard Instruments	
Frn Horn ens 4 (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Frn Horn ens 4 (fortepiano).nki	fortepiano
Frn Horn ens 4 (sforzando).nki	sforzando

Instruments	Content Description
Frn Horn ens 4 (stac 1).nki	staccato 1
Frn Horn ens 4 (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Frn Horn ens 4 (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Frn Horn ens 4 (stac 2).nki	staccato 2
Frn Horn ens 4 (sustain).nki	sustain
Frn Horn ens 4 (sustain+flt).nki	Modwheel > Brightness (lowpass filter)
02 Modwheel X-Fades	
Frn Horn ens 4 (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Frn Horn ens 4 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Frn Horn ens 4 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Frn Horn ens 4 (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Frn Horn ens 4 (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Frn Horn ens 4 (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Frn Horn ens 4 (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Frn Horn ens 4 (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Frn Horn ens 4 (sustain+rls).nki	sustain + release samples
Frn Horn ens 4 (sustain+flt+rls).nki	sustain + release samples / Modwheel > Brightness (lowpass filter)
04 Legato Instruments	
Frn Horn ens 4 (legato).nki	legato with KSP legato tool

Instruments	Content Description
21 TROMBONE SOLO	
01 Standard Instruments	
Trombone (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Trombone (fortepiano).nki	fortepiano
Trombone (sforzando).nki	sforzando
Trombone (stac 1).nki	staccato 1
Trombone (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Trombone (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Trombone (stac 2).nki	staccato 2
Trombone (sustain).nki	sustain
Trombone (sustain+flt).nki	Modwheel > Brightness (lowpass filter)
02 Modwheel X-Fades	
Trombone (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Trombone (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Trombone (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Trombone (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Trombone (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Trombone (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Trombone (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Trombone (ssustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Trombone (sustain+rls).nki	sustain + release samples

Instruments	Content Description
Trombone (sustain+flt+rls).nki	sustain + release samples / Modwheel > Brightness (lowpass filter)
22 TROMBONE ENSEMBLE	**Trombone ensemble with 3 players**
01 Standard Instruments	
Tromb ens 3 (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Tromb ens 3 (fortepiano).nki	fortepiano
Tromb ens 3 (sforzando).nki	sforzando
Tromb ens 3 (stac 1).nki	staccato 1
Tromb ens 3 (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Tromb ens 3 (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Tromb ens 3 (stac 2).nki	staccato 2
Tromb ens 3 (sustain).nki	sustain
Tromb ens 3 (sustain+flt).nki	Modwheel > Brightness (lowpass filter)
02 Modwheel X-Fades	
Tromb ens 3 (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Tromb ens 3 (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Tromb ens 3 (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Tromb ens 3 (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Tromb ens 3 (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte
Tromb ens 3 (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Tromb ens 3 (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Tromb ens 3 (sustain X).nki	sustain / Modwheel fades between piano and forte

Instruments	Content Description
03 Release Triggers	
Tromb ens 3 (sustain+rls).nki	sustain + release samples
Tromb ens 3 (sustain+flt+rls).nki	sustain + release samples / Modwheel > Brightness (lowpass filter)
04 Repetition Instruments	
Tromb ens 3 (repetition).nki	repetition with KSP repetition tool
23 TUBA	
01 Standard Instruments	
Tuba (all).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano
Tuba (fortepiano).nki	fortepiano
Tuba (sforzando).nki	sforzando
Tuba (stac 1).nki	staccato 1
Tuba (stac 1+2 alt).nki	staccato 1/staccato 2 alternating
Tuba (stac 1+2).nki	staccato 1/staccato 2 keyswitched
Tuba (stac 2).nki	staccato 2
Tubna (sustain).nki	sustain
02 Modwheel X-Fades	
Tuba (all X).nki	Articulations: staccato 1, staccato 2, sustain, sforzando, fortepiano / Modwheel fades between piano and forte
Tuba (fortepiano X).nki	fortepiano / Modwheel fades between piano and forte
Tuba (sforzando X).nki	sforzando / Modwheel fades between piano and forte
Tuba (stac 1 X).nki	staccato 1 / Modwheel fades between piano and forte
Tuba (stac 1+2 alt X).nki	staccato 1/staccato 2 alternating / Modwheel fades between piano and forte

Instruments	Content Description
Tuba (stac 1+2 X).nki	staccato 1/stacccato 2 keyswitched / Modwheel fades between piano and forte
Tuba (stac 2 X).nki	staccato 2 / Modwheel fades between piano and forte
Tuba (sustain X).nki	sustain / Modwheel fades between piano and forte
03 Release Triggers	
Tuba (sustain+rls).nki	sustain + release samples
DRUMS & PERCUSSIONS	
24 TIMPANI	
Timpani (left).nki	Left hand
Timpani (right).nki	Right hand
Timpani (tremolo).nki	B0 – A#2 tremolo, A#3 – A#5 single strokes
25 DRUMS	
Bass Drum.nki	C2 = left hand, D2 = right hand
Snare Drum ens.nki	C2 = left hand 1, D2 = right hand 1, E2 = left hand 2, F2 = right hand 2. C4 = tremolo, C#4 = tremolo + release samples
Snare Drum.nki	C2 = left hand 1, D2 = right hand 1, E2 = left hand 2, F2 = right hand 2. C4 = tremolo, C#4 = tremolo + release samples
Tamburin 1.nki	C2 = var 1, D2 = var 2, G2 = sforzando 1, A2 = sforzando 2, D3 = tremolo thumb, E3 = tremolo thumb + release, D4 = tremolo shake, E4 = tremolo shake + release samples
Tamburin 2.nki	C2 = var 1, D2 = var 2, G2 = sforzando 1, A2 = sforzando 2, D3 = tremolo thumb, E3 = tremolo thumb + release, D4 = tremolo shake, E4 = tremolo shake + release samples
26 CYMBALS	

Instruments	Content Description
Cymbal half.nki	C4 = tremolo, C#4 = tremolo + release, C5+D5 = single strokes
Cymbal a due.nki	2 cymbals against each other
Tamtam.nki	C1-D#1 = big, C2-D#2 = mid, C3-D#3 = small
27 PERCUSSION	
Triangle 1.nki	C1-C#1 = open side, E1-F1 = muted, G1-A#1 = vibrato
Triangle 2.nki	C1-C#1 = open side, E1-F1 = muted, G1-A#1 = vibrato
28 MALLETS & BELLS	
Celesta.nki	4 velocity layers
Glockenspiel.nki	3 velocity layers
Marimba.nki	2 velocity layers
Tubular Bells (metal).nki	Metal mallets
Tubular Bells (wood).nki	Wood mallets
Xylophone.nki	3 velocity layers