



PERCUSSION

— SYMPHONY ESSENTIALS —



MANUAL



The information in this document is subject to change without notice and does not represent a commitment on the part of Native Instruments GmbH. The software described by this document is subject to a License Agreement and may not be copied to other media. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without prior written permission by Native Instruments GmbH, hereinafter referred to as Native Instruments.

“Native Instruments”, “NI” and associated logos are (registered) trademarks of Native Instruments GmbH.

All product and company names are trademarks™ or registered® trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them.

All specifications are subject to change without notice.

Document authored by: Adam Hanley

Software version: 1.0 (08/2017)

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

NATIVE INSTRUMENTS GmbH

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

NATIVE INSTRUMENTS North America, Inc.

6725 Sunset Boulevard
5th Floor
Los Angeles, CA 90028
USA
www.native-instruments.com

NATIVE INSTRUMENTS K.K.

YO Building 3F
Jingumae 6-7-15, Shibuya-ku,
Tokyo 150-0001
Japan
www.native-instruments.co.jp

NATIVE INSTRUMENTS UK Limited

18 Phipp Street
London EC2A 4NU
UK
www.native-instruments.co.uk



© NATIVE INSTRUMENTS GmbH, 2017. All rights reserved.

Table of Contents

1	Welcome to SYMPHONY ESSENTIALS	6
1.1	Document Conventions	6
1.2	About the SYMPHONY ESSENTIALS Line of Products	7
2	Choosing the Right KONTAKT Instrument	8
3	Playing SYMPHONY SERIES Instruments	9
3.1	Performance Controls	9
3.1.1	Dynamics	9
3.1.2	Attack	10
3.1.3	Release	10
3.1.4	Tuning	10
3.1.5	Velocity	10
3.2	Mapping	10
3.3	Round Robins	11
3.4	Articulations and Variations	13
4	KONTAKT Snapshots	14
4.1	Saving a User Snapshot	14
4.2	Loading a Snapshot from the Snapshot Menu	16
4.3	Loading Snapshots from the File System	17
4.4	Deleting a User Snapshot	17
5	Audio Mix-down	19
5.1	Applying Master Effects	19
5.1.1	Applying EQ	19
5.1.2	Applying Reverb	20
5.1.3	Applying Comp & Filter	22

5.2	Balancing Section Volumes	24
6	Credits	25

1 Welcome to SYMPHONY ESSENTIALS

Thank you for purchasing SYMPHONY ESSENTIALS PERCUSSION. This document will give you information about the library, as well as step-by-step instructions and advice on how to achieve the best results with it.

We hope that you will enjoy using the SYMPHONY ESSENTIALS products.

1.1 Document Conventions

This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information can be expected:



The speech bubble icon indicates a useful tip that may often help you to solve a task more efficiently.



The exclamation mark icon highlights important information that is essential for the given context.



The red cross icon warns you of serious issues and potential risks that require your full attention.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open...*, *Save as...* etc.) in the software and paths to locations on your hard disk or other storage devices is printed in *italics*.
- Text appearing elsewhere (labels of buttons, controls, text next to checkboxes etc.) in the software is printed in **blue**. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.
- Important names and concepts are printed in **bold**.

- References to keys on your computer's keyboard you'll find put in square brackets (e.g., "Press [Shift] + [Enter]").
- ▶ Single instructions are introduced by this play button type arrow.
- Results of actions are introduced by this smaller arrow.

Naming Convention

Throughout this document, we will refer to SYMPHONY ESSENTIALS PERCUSSION as just PERCUSSION.

1.2 About the SYMPHONY ESSENTIALS Line of Products

SYMPHONY ESSENTIALS PERCUSSION is part of the SYMPHONY ESSENTIALS line of KONTAKT Instruments. This series supplies composers with a comprehensive tool set for creating highly realistic orchestral productions with an expansive sound full of character.

PERCUSSION gives you a production-ready **STEREO** mix with a parametric **EQ**, convolution **REVERB**, **COMPRESSION** and **FILTER** effects that let you adjust the sound to suit any project you're working on.

Five performance controls are pre-assigned to MASCHINE controllers and the KOMPLETE KONTROL S-series of keyboards.

2 Choosing the Right KONTAKT Instrument

PERCUSSION ships with a total of 22 KONTAKT Instruments (**.nki files**). To help you select the right one for your specific task, here is an overview of the included Instruments.

Single Instruments

Single Instruments are KONTAKT Instruments that only contain articulations from a single percussion instrument.

Single Instruments can be found in the following folders:

- **Cymbals:** a collection of cymbals and gongs
- **Drums:** percussion instruments with membranes, like Bass Drums, Snares, and Toms
- **Metal:** metallic percussion that are not part of the Cymbals selection, for example: Triangles
- **Wood:** percussion for which wood is the main sound source, for example: Shakers

Tuned Percussion

Like the Single Instruments, the Tuned Percussion contain only one percussion instrument in an nki. However, these instruments are tonal and can be played chromatically.

Examples include: Glockenspiel and Marimba.

Orchestral Percussion Kit

The Orchestral Percussion Kit contains a number of different percussion instruments in one nki. In some cases this is an easier way of getting all of the percussion you need into your track, but with less flexibility in the mix options.

3 Playing SYMPHONY SERIES Instruments

3.1 Performance Controls

When you load a PERCUSSION Instrument, the Performance Controls are the most prominent feature of the Instrument's user interface. These controls are used to refine the response and sound.



The Performance Controls

3.1.1 Dynamics

The [Dynamics](#) control is assigned to the Mod Wheel (MIDI CC 1) by default. It allows you to control the loudness and intensity of the Tremolo articulations (rolls) in real-time. That way, you can easily automate intensity changes to e.g. transition from leading to supporting passages.

If the Dynamics control is not available, because there are no Tremolo articulations in the loaded Instrument, it is still present and displays an intensity meter for the incoming MIDI notes.

3.1.2 Attack

The **Attack** control allows you to increase the fade-in time per note, which can change the hardness of the initial transient. By setting the **Attack** time to higher values, you can cause the notes to fade in slightly, giving the notes a soft and gentle character.

3.1.3 Release

The **Release** control applies an additional envelope to the fade-out phase of the notes.

Reducing the Release setting to 0% shortens the naturally recorded reverb tails to a minimum, producing a very “dry” sounding result, which can sometimes make the result sound artificial. However, this can be very useful when adding internal or external reverb effects, as this allows the additional reverb to avoid conflicting with the natural sampled ambience.

3.1.4 Tuning

The **Tuning** control sets the overall pitch of the instrument(s).

Even if the instrument is not tuned percussion, matching the tone of a drum to the key of your track can help fit it into your mix.

3.1.5 Velocity

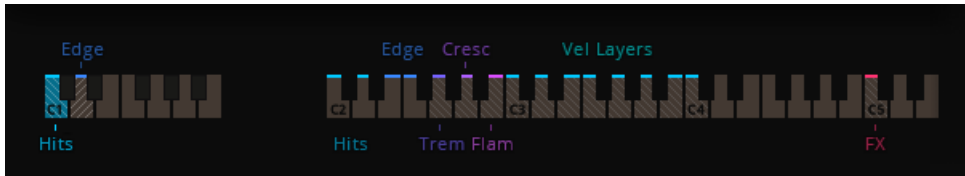
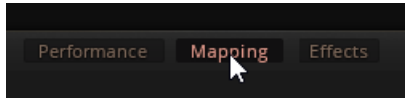
The **Velocity** slider controls the dynamic range of the MIDI notes.

The dynamic range is unaffected when the slider is in the central position. Turning the slider down will make the incoming notes softer and turning it up will make them louder.

3.2 Mapping

All of the Single Instruments have a Mapping page which displays the articulation mapping for the Instrument.

- ▶ Click on the Mapping tab to view the instrument mapping.



The Mapping Page

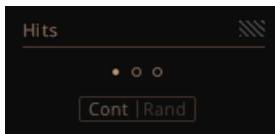
This page is not interactive, but gives you a quick reference for the layout of the Instrument.

Velocity Layers

Some Instruments have a section of the keyboard labelled [Vel Layers](#). These keys contain a breakout of the different samples from each velocity layer, allowing you to control the intensity of a drum hit with different MIDI keys, rather than MIDI velocity. This can be useful if you want precise control of the intensity, but don't have a responsive MIDI keyboard.

3.3 Round Robins

Most Instruments in the library have been recorded with round robin variations, which help avoid artificial sounding repetition.



The Round Robin Display

The round robin system has two modes of operation, which are selected via the buttons below the round robin display on the Performance Page:

- **Cont:** Continuous Mode – the round robin selection will cycle sequentially in order.

- **Rand:** Random Mode – the round robin selection will be random with each key hit.

Drum Head Resonance Simulation

As well as Round Robin samples, some Instruments have Drum Head Resonance Simulation (DHRS). This system takes previous notes into account and triggers a sample with the appropriate “drum head ringing” level.

Instruments with DHRS can be identified in the [Performance](#) view showing 10 Round Robin states with different dot sizes.



The Round Robin Display of a DHRS Articulation

Instruments with DHRS are:

- Field Drum
- Field Drum Off
- Snare 1
- Snare 1 Off
- Snare 2
- Snare 2 Off
- Timpani
- Tom 1
- Tom 2
- Tom 3

If any of these instruments are part of the Orchestral Percussion Kit, they will still include their DHRS feature.

3.4 Articulations and Variations

Many of the included instruments have multiple articulations – for example: regular hits, crescendos, and flams – which are mapped to different MIDI keys.

Some instruments have variations – for example: center hits or edge hits – which will effect certain articulations.

Variations are selected by either:

- ▶ Pressing MIDI key-switches in the octave below the main playable key range.
- ▶ Clicking on the representation of the key-switches on the Instrument interface.



Articulations that are affected by the variation selection are marked with diagonal lines in the Mapping view.



The Mapping View Displaying Articulations Affected by Variation Selection

In the Orchestral Percussion Kit, any articulation that is affected by the variation selection is denoted by some diagonal lines to the top right of the articulation controls.



Variation Identification in Kit Instruments

4 KONTAKT Snapshots

Snapshots, introduced as part of the **KONTAKT 5.4.1** update, offer a way of saving variations of any KONTAKT Instrument for easy recall.

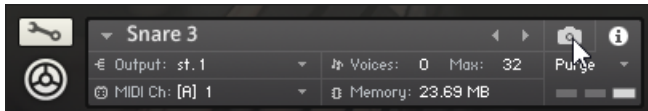
PERCUSSION, for example, allows you to apply effects like [EQ](#), [REVERB](#), [COMP](#) and [FILTER](#).

With KONTAKT Snapshots, you can create any number of different mixes for the same Instrument, save them in the new [.nksn](#) file format and re-use them in your next project or share these Snapshots across your computers. You can even share them with other users who own the same KONTAKT Library.



PERCUSSION doesn't come with Snapshots, so in order to demonstrate the full feature set, we'll save a Snapshot first.

- ▶ Access the Snapshot View by clicking the camera icon in the Instrument Header
- ▶ Switch back to the familiar Info View with its [Input](#) / [Output](#) configuration options by clicking the [i](#) icon.



Accessing the Snapshot View

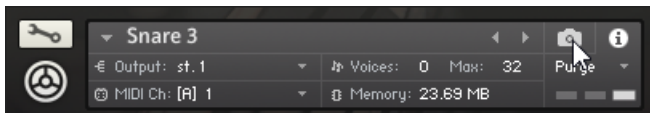
4.1 Saving a User Snapshot

Let's start exploring Snapshots with saving your own. By loading one of the supplied Instruments and adjusting some of its parameters, you will end up with a sound which is distinct enough for you to want to keep it.

Saving a Snapshot

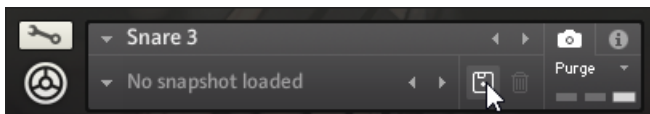
After making adjustments to an instrument's parameters, you can save these settings as a Snapshot for convenience. To save a Snapshot:

1. Click the camera icon in the Instrument Header. This will switch the Header to the Snapshot View.



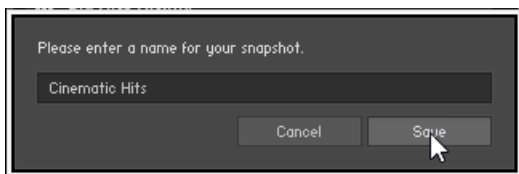
Accessing the Snapshot View

2. Here, click the floppy disk icon to open the [Snapshot Saving](#) dialog.



Saving a Snapshot

3. Enter a Snapshot name (e.g. *Cinematic Hits*) and click [Save](#).



Snapshot Saving Dialog

→ The Snapshot is saved and added to the Snapshot Menu.

All User Snapshots are automatically stored in the default User Content folder. This is where the SYMPHONY ESSENTIALS PERCUSSION Snapshot you just created will be stored:

- **On Mac OS X:** *Macintosh HD/Users/<Your Name>/Documents/Native Instruments/User Content/Symphony Essentials Percussion/<Instrument Name>/Cinematic Hits.nksn*
- **On Windows:** *C:\Users\<Your Name>\My Documents\Native Instruments\User Content\Symphony Essentials Percussion\<Instrument Name>\Cinematic Hits.nksn*



You can transfer any of your Snapshots to another computer by copying the respective Snapshot files.



Please make sure you include your Documents / My Documents folder in your regular data backups.

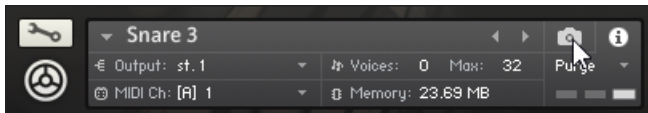
4.2 Loading a Snapshot from the Snapshot Menu

If you need to recall a specific sound for recurring use in the studio or for live playing, Snapshots give you an easy way of doing just that.

Let's get to know this feature by loading a Snapshot from the Instrument Header's Snapshot Menu. We assume here that you saved the [Cinematic Hits](#) Snapshot as described in the [4.1, Saving a User Snapshot](#) section.

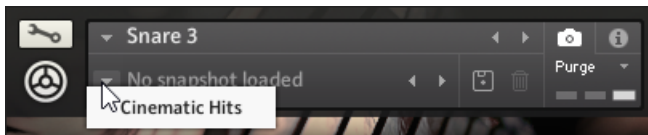
Load a User Snapshot

1. Click the camera icon in the Instrument Header to switch the Header to the Snapshot View. By default no Snapshot is loaded.



Accessing the Snapshot View

2. Open the drop-down menu and select the [Cinematic Hits](#) Snapshot.



Loading a Snapshot

→ The [Cinematic Hits](#) Snapshot is loaded.



Alternatively, when no Snapshot is loaded, click the Next Button after loading the Instrument to achieve the same result.

4.3 Loading Snapshots from the File System

KONTAKT supports two ways of loading Snapshot files (.nksn):

- Dragging and dropping a Snapshot file from the Finder / Explorer onto the Rack
- Loading via double-click in Finder (Mac OS X) or Explorer (Windows)

This allows you to take your favorite Snapshots to the studio on a flash drive or send them attached to an e-mail and load them from your Desktop without altering the installation on the studio computer.

Drag and Drop

In order to load a Snapshot from any disk, use Filer / Explorer to drag an .nksn file from its current location onto an empty area of the Rack. KONTAKT will load a new instance of the corresponding Instrument with that Snapshot.

If you drag a Snapshot onto an active Instrument in the Rack instead, that Instrument will be replaced by the Instrument loaded from the Snapshot.

Snapshots you open are not automatically saved to the default location.



Please note, the Next/Previous buttons can only skip through Snapshots located in the Factory Snapshots and the User Content folder.

Double-click

Double-clicking a Snapshot file in Finder (Mac OS X) or Windows Explorer inserts a new Instrument instance in KONTAKT.

4.4 Deleting a User Snapshot

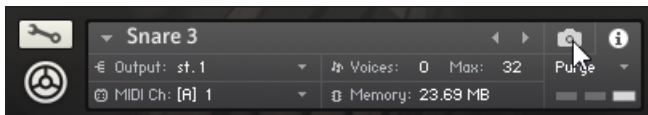
In order to keep things tidy in the Snapshot Menu, you can delete any Snapshots you saved when you feel you don't need them anymore. Keep in mind that Snapshots are saved on a per-Instrument basis. So in order to delete a Snapshot in KONTAKT, you have to load it first.



Please note, you can only delete User Snapshots. All KOMPLETE Factory Snapshots are read-only. In order to follow the steps described here, you have to have saved a Snapshot first as detailed in the [↑4.1, Saving a User Snapshot](#) section

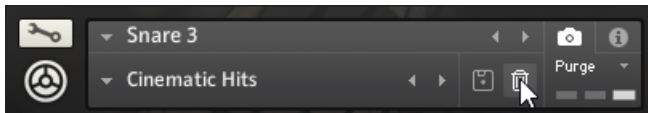
To demonstrate how deletion of Snapshots works, we'll delete the [Cinematic Hits](#) Snapshot saved in that section.

1. Click the camera icon to access the Snapshot View.



Accessing the Snapshot View

2. Open the [Cinematic Hits](#) Snapshot.
3. Click the trash bin icon in the Instrument Header.



Deleting a Snapshot

4. Confirm deletion of the Snapshot in the dialog which pops up.
- The Snapshot file is now erased from the folder on your hard disk as well as removed from the Snapshot Menu.

5 Audio Mix-down

5.1 Applying Master Effects

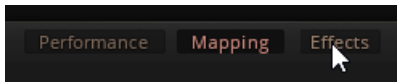
The instrument output can be processed with a number of integrated effects to help it blend better with the other instruments in your virtual orchestra.

Since the recordings have a very refined and production-ready sound, these effects aren't intended as corrective tools, but rather meant to put the finishing touches on an otherwise great mix.

5.1.1 Applying EQ

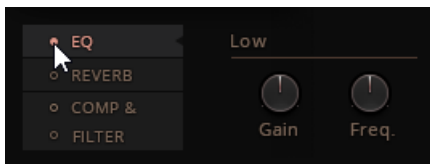
In a busy composition, instruments from different groups often overlap, resulting in a muddy, crowded mix lacking definition and transparency. Attenuating the non-essential frequencies and boosting the characteristic frequencies per instrument section helps clean up the mix.

1. Click the [Effects](#) label to open the Effects view.



Opening the Effects view

2. Click the [EQ](#) label to select the Equalizer panel.
3. Click the small indicator dot next to the label to activate / bypass the Equalizer. A thin ring shows it's inactive, a solid dot means it's active.



Activating the EQ

4. Adjust the [Low](#), [Mid](#) and [High](#) controls as needed.

The EQ Controls

The EQ offers an identical parametric **Low** and **High** bands with **Gain** and **Freq** controls. The **Mid** band is fully parametric with **Gain** and **Freq** controls plus adjustable bandwidth (**BW**).

Gain: Boost or attenuate the **Low** EQ band. The EQ is a bell curve type with 18 dB of boost or cut.

Freq: Set the center frequency of the **Low** EQ band anywhere between 20 Hz and 20 kHz.

BW: Set the **Mid** band's bandwidth between 1/3 octave and 3 octaves.



These controls affect the frequency balance of your KONTAKT Instrument's Master Mix. If you need to adjust EQ per instrument, load the Single Instruments instead of the Orchestral Percussion Kit Instrument.

5.1.2 Applying Reverb

PERCUSSION includes 100 Impulse Responses in 10 categories. Impulse responses in the REVERB are actual audio recordings that capture the way sounds naturally reflect and decay in different environments.

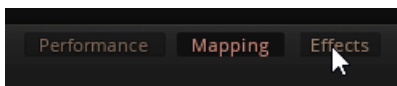
Most of these Impulse Responses were recorded in a variety of unique real-world locations, such as cathedrals, churches, classrooms, halls, garages, military bunkers, tunnels, studios and more. However, some Impulses are custom sound-designed sound effects used purely for creating unique special effects.



Use caution when using these Effects Impulses, as they can create strong resonant effects and feedback when mixed at high volumes in some cases.

Activating the Reverb

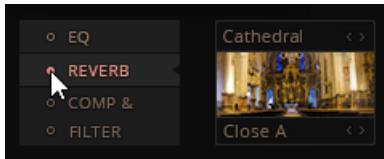
1. Click the **Effects** label to open the Effects view.



Opening the Effects view

2. Click the **REVERB** label to select the **REVERB** panel.

- Click the small dot next to the label to activate / bypass the **REVERB**.

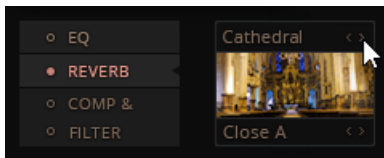


Activating the Reverb

- The **REVERB** is activated. A thin ring shows its inactive state, a solid dot means it's active.

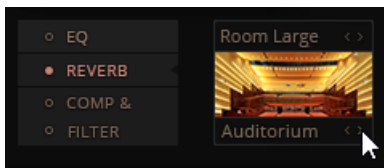
Selecting an Impulse Response

- Click the right arrow next to the **category name** above the preview image to cycle through the available categories.



Selecting a Reverb Category

- Select **Room Large**.
- Click the right arrow next to the **Impulse Response name** below the preview image to select the actual Impulse Response.



Selecting an Impulse Response

- Select **Classroom**.

- The Classroom Impulse Response is applied to the Master Mix.

The REVERB Controls



Reverb parameters should not be automated. Otherwise, audio drop-outs may occur.

Size: Stretches or compresses the impulse response audio file. This creates the illusion of the room size changing.

Delay: Introduces a pre-delay before the reverberation.

- ▶ Decrease the pre-delay to embed instruments in the reverb, creating a distant, “roomy” sound.
- ▶ Increase the pre-delay to separate instruments from reverb, creating a close, “direct” sound.

Filter HiPass: Removes low frequencies from the reverb signal to avoid boominess.

- ▶ Click and drag up to raise the frequency below which signal is attenuated.

Filter LoPass: Removes high frequencies from the reverb signal to avoid excessive brightness and to help it blend in naturally.

- ▶ Click and drag down to lower the frequency above which signal is attenuated.

Mix Amount: Blends anywhere between no reverb at all and just the reverb.

- ▶ Click and drag down to mix in less reverb, drag up to add more reverb.

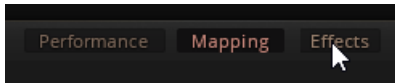
5.1.3 Applying Comp & Filter

The Compressor is helpful to reduce the dynamic range of an Instrument, or can be used creatively to shape the envelope of a sound.

The Filter can add resonance which makes the sound more aggressive and cut through the mix better, or it can reduce the brightness of an Instrument for special effect.

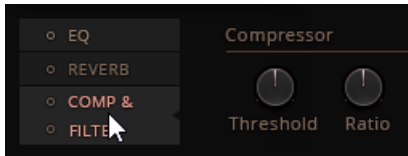
Activating the COMP and FILTER

1. Click the [Effects](#) label to open the Effects view.



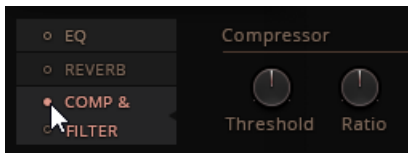
Opening the Effects view

- Click the **COMP & FILTER** label to select the combined **Compressor** and **Filter** panel.



Opening the COMP & FILTER panel

- Click the small dot next to the **COMP** label to activate the Compressor.
- Click the small dot next to the **FILTER** label to activate the Filter.



Activating the Compressor

→ The Compressor and Filter are activated. A thin ring to the left of each label shows their inactive state, a solid dot means they are active

The COMP Controls

Threshold: Sets the level above which compression occurs.

Ratio: Determines how strong the compression is. At a **Ratio** of **2:1**, a signal which exceeds the **Threshold** by **6dB** is reduced to **3dB** above the **Threshold**.

Attack: Determines how quickly the compressor starts reducing the signal after the level exceeds the **Threshold**.

Release: Determines how quickly the compressor stops reducing the signal after the level falls below the **Threshold**.

The FILTER Controls

Cutoff: Sets the frequency above which signals are gradually attenuated.

Resonance: Determines the intensity of the resonance peak at the Cutoff frequency. High values cause aggressive, piercing sounds, whereas at low values, the Filter only reduces high frequency signals.

5.2 Balancing Section Volumes

The Orchestral Percussion Kit, which is a collection of different drums and percussion instruments, offers controls for balancing these different instruments, allowing you to fine tune the mix in the Instrument.

These controls are found on the Performance Page.



The Drum/Articulation Controls

Each Drum/Articulation has the following controls:

- **Volume:** Adjusts the volume level of the currently selected Drum/Articulation.
- **Pan:** Adjusts the stereo pan of the currently selected Drum/Articulation.
- **Tune:** Adjusts the tuning of the currently selected Drum/Articulation.

Above these mix controls are some additional information displays and controls:

- The main part of the display shows the selected Drum/Articulation name, and the MIDI notes that trigger the sound.
- If a box of diagonal lines is present, this indicates that the Drum/Articulation is affected by the Variation selection (see Articulations and Variations for more information).
- To the far right is a button that looks like a small keyboard. This toggles whether the Drum/Articulation selection should follow the MIDI input or not.

6 Credits

Product Concept and Design: Tilman Sillescu, Pierre Langer, Frank Elting, Steffen Brinkmann

Content Creation: Tilman Sillescu, Steffen Brinkmann

KONTAKT Scripting: Frank Elting, Stefan Kemler

User Interface Design: Fabian Ruf

Recording Studio: Studio 22 Budapest

Percussion Section: Budapest Scoring Orchestra

Session Management: Christian Wirtz

Score Preparation: Steffen Brinkmann

Samples Editing: Sebastian Breiter, Christian Wirtz, Steffen Brinkmann, Matthias Wolf, Stefan Kemler

Documentation: Adam Hanley

Quality Assurance: Bymski

Artwork: Yvonne Hartmann

Finalization and Encoding: Carlos Ruiz

Project Management: Christian Wachsmuth, Frank Elting, Felix Nölken