

**Vienna Instruments**  
**Solo Download Instruments**  
**Clarinet in Eb**  
**Full Library**

# Contents

<b>Introduction</b> .....	<b>3</b>
<b>'Full' Library</b> .....	<b>3</b>
Data paths and Patch name conventions .....	3
<b>Patch information</b> .....	<b>3</b>
Interval performances .....	4
<b>Matrix information</b> .....	<b>4</b>
<b>Preset information</b> .....	<b>5</b>
<b>Abbreviations</b> .....	<b>5</b>
<b>Articulations</b> .....	<b>6</b>
<b>The orchestra</b> .....	<b>7</b>
<b>Pitch</b> .....	<b>7</b>
<b>39 Clarinet-Eb</b> .....	<b>8</b>
<b>Patches</b> .....	<b>8</b>
01 SHORT + LONG NOTES .....	8
02 DYNAMICS .....	9
03 FLATTER + TRILLS .....	11
10 PERF INTERVAL .....	12
11 PERF INTERVAL FAST .....	12
12 PERF TRILL .....	12
13 PERF REPETITION .....	13
15 GRACE NOTES .....	14
98 RESOURCES .....	16
01 Perf Rep dyn .....	16
02 Long Notes - Single Layer .....	17
03 Perf Speed variation .....	17
99 RELEASE .....	17
<b>Matrices</b> .....	<b>18</b>
Matrix - LEVEL 1 .....	18
Matrix - LEVEL 2 A - Advanced .....	18
Matrix - LEVEL 2 B - Standard .....	19
Matrix - LEVEL 2 C - Repetitions .....	21
Matrix - LEVEL 2 D - Scale+Phrase .....	21
Matrix - LEVEL 2 E - Keyswitch Vel .....	22
<b>Presets</b> .....	<b>24</b>

## Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments Clarinet in Eb. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

## "Full" Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

## Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will be different than those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content. The list of articulations further down which gives a summary of the Library's contents.

Special Patch configurations which sometimes are part of a Standard Download Instrument may be found in a reserved folder called "98 RESOURCES" in the Full Instrument. E.g., Flute 1 Standard contains the Patch "22D FL1 legato-sus"; in Flute 1 Full, this Patch is called "01 FL1\_perf\_leg\_sustain" and is located in the Resources' subfolder "03 Perf Speed variation". (Apart from that, it also contains more samples.) Other articulations that can be found in the Resources folder are isolated dynamics repetitions in the subfolder "01 Perf Rep dyn" – e.g., the five repetitions of a legato crescendo, divided into separate Patches – and extracted velocity layers of sustained notes in the subfolder "02 Long Notes – Single Layer".

## Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

**Major and minor runs** are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109–127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

## Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But of course, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

*Note:* the Vienna Instruments PRO player software also allows you to play polyphonic Interval performances.

Another variety of interval performance you will come across is the “perf-leg\_sus” Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different “e” tones; with sus-legato you won't.

## Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

**A/B switching** normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

**Speed controller switches** naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

## Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

## Abbreviations

Here's a list of abbreviations in Patch names, which will help you to determine a Patch's content even without the help of the Vienna Instruments browser. Please note that not all of the abbreviations may occur in the manual on hand.

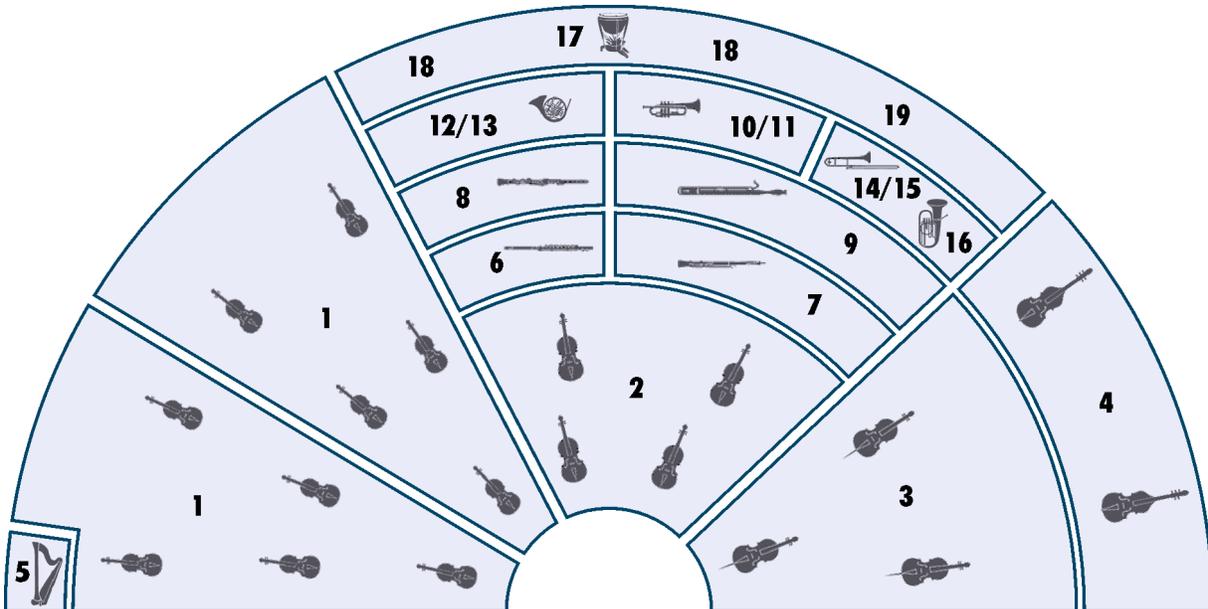
<b>Abbreviation</b>	<b>Meaning</b>	<b>Abbreviation</b>	<b>Meaning</b>
+	faster articulation (runs and arpeggios)	li	light
150, 160, ...	150, 160, ... BPM (beats per minute)	lo	long
1s, 2s, ...	tone length 1 sec., 2 sec., ...	ma	major
acc	accelerando	me	medium
all	combination of all Patches of a category	mi	minor
arp	arpeggio	mord	mordent
cre	crescendo	nA	normal attack
dim	diminuendo	noVib	without vibrato
dm	diminished (arpeggios)	perf-rep	repetition performance
dyn	dynamics (crescendo and diminuendo)	por	portato
dyn5, dyn9	dynamics, 5/9 repetitions	run	octave run
fa	fast	sA	soft attack
faT	fast triplets	sl	slow
fA	fast attack	sta, stac	staccato
fA_auto	attack automation (normal/fast attack)	str	strong
fast-rep	fast repetitions	sus	sustained
flatter	flutter tonguing	T	triplets
fx	effect – flute: tongue-ram staccato	UB	upbeat
hA	hard attack	UB-a1, -a2	1, 2 upbeats
leg	legato	v1, v2 ...	1st, 2nd, ... variation
		Vib	with (medium) vibrato
		Vib-progr	progressive vibrato
		XF	cell crossfade Matrix

<b>Articulations</b>
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<b>39 Clarinet-Eb</b>	
<b>01 SHORT + LONG NOTES</b>	Staccato Portato short and medium Portato long with normal, soft, and hard attack Sustained without vibrato
<b>02 DYNAMICS</b>	Light dynamics, 1.5 and 2 sec. Medium dynamics, 1.5, 2, 3, and 4 sec. Strong dynamics, 2, 3, 4, and 6 sec. pfp, 2, 3, 4, 6, 8 sec. Fortepiano, sforzato, sforzatissimo
<b>03 FLATTER + TRILLS</b>	Flutter tonguing normal and crescendo Trills, minor and major 2nd Trills accelerando, minor and major 2nd Dynamics for all trills
<b>10 PERF INTERVAL</b>	Legato Grace notes Marcato
<b>11 PERF INTERVAL FAST</b>	Legato Marcato
<b>12 PERF TRILL</b>	Trills, legato, minor 2nd to major 3rd
<b>13 PERF REPETITION</b>	Legato, portato, staccato slow and fast Dynamics for all repetitions
<b>14 FAST REPETITION</b>	Staccato, 9 repetitions, 140 to 180 BPM Normal and dynamics
<b>15 GRACE NOTES</b>	Grace notes, minor 2nd to octave, up and down

## 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.



- |   |                         |       |                              |
|---|-------------------------|-------|------------------------------|
| 1 | 1st and 2nd violin      | 9     | Bassoon, contrabassoon       |
| 2 | Viola                   | 10/11 | Trumpet                      |
| 3 | Cello                   | 12/13 | Horn                         |
| 4 | Double bass             | 14/15 | Trombone                     |
| 5 | Harp                    | 16    | Tuba                         |
| 6 | Concert flute, piccolo  | 17    | Timpani                      |
| 7 | Oboe, English horn      | 18    | Drums, cymbals               |
| 8 | Clarinet, bass clarinet | 19    | other percussion instruments |

## Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

# 39 Clarinet-Eb

## Patches

### 01 SHORT + LONG NOTES

Range: F3–C7



#### 01 KLEb\_staccato

Samples: 420

RAM: 26 MB

Staccato  
5 velocity layers  
4 Alternations

#### 02 KLEb\_portato\_short

Samples: 420

RAM: 26 MB

Portato, short  
5 velocity layers  
4 Alternations

#### 03 KLEb\_portato\_medium

Samples: 420

RAM: 26 MB

Portato, medium  
5 velocity layers  
4 Alternations

#### 04 KLEb\_por\_lo\_nA

Samples: 378

RAM: 23 MB

Portato, long, normal attack  
5 velocity layers  
Release samples  
2 Alternations

#### 05 KLEb\_por\_lo\_hA

Samples: 84

RAM: 5 MB

Portato, long, hard attack  
1 velocity layer  
Release samples  
2 Alternations

#### 06 KLEb\_por\_lo\_sA

Samples: 336

RAM: 21 MB

Portato, long, soft attack  
4 velocity layers  
Release samples  
2 Alternations

#### 11 KLEb\_sus\_noVib

Samples: 378

RAM: 23 MB

Sustained, without vibrato  
5 velocity layers  
Release samples

**02 DYNAMICS****Range: F3–C7**

<b>01 KLEb_dyn-li_1'5s</b>	<b>Samples: 252</b>	<b>RAM: 15 MB</b>
Light crescendo and diminuendo, 1.5 sec. 3 velocity layers AB switch: crescendo/diminuendo		
<b>02 KLEb_dyn-li_2s</b>	<b>Samples: 252</b>	<b>RAM: 15 MB</b>
Light crescendo and diminuendo, 2 sec. 3 velocity layers AB switch: crescendo/diminuendo		
<b>03 KLEb_dyn-me_1'5s</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
Medium crescendo and diminuendo, 1.5 sec. 2 velocity layers AB switch: crescendo/diminuendo		
<b>04 KLEb_dyn-me_2s</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
Medium crescendo and diminuendo, 2 sec. 2 velocity layers AB switch: crescendo/diminuendo		
<b>05 KLEb_dyn-me_3s</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
Medium crescendo and diminuendo, 3 sec. 2 velocity layers AB switch: crescendo/diminuendo		
<b>06 KLEb_dyn-me_4s</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
Medium crescendo and diminuendo, 4 sec. 2 velocity layers AB switch: crescendo/diminuendo		
<b>07 KLEb_dyn-str_2s</b>	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 2 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>08 KLEb_dyn-str_3s</b>	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>09 KLEb_dyn-str_4s</b>	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo		

<b>10 KLEb_dyn-str_6s</b>		<b>Samples: 84</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo			
<b>11 KLEb_pfp_2s</b>	<b>Range: F3–B6</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo, 2 sec. 2 velocity layers			
<b>12 KLEb_pfp_3s</b>	<b>Range: F3–B6</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo, 3 sec. 2 velocity layers			
<b>13 KLEb_pfp_4s</b>	<b>Range: F3–B6</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo, 4 sec. 2 velocity layers			
<b>14 KLEb_pfp_6s</b>	<b>Range: F3–B6</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo, 6 sec. 2 velocity layers			
<b>15 KLEb_pfp_8s</b>		<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo, 8 sec. 1 velocity layer			
<b>16 KLEb_fp</b>		<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Fortepiano 1 velocity layer 2 Alternations			
<b>17 KLEb_sfz</b>		<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Sforzato 1 velocity layer 2 Alternations			
<b>18 KLEb_sffz</b>		<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Sforzatissimo 1 velocity layer 2 Alternations			

**03 FLATTER + TRILLS****Range: F3–A6****01 KLEb\_flatter****Range: F3–C7****Samples: 84****RAM: 5 MB**

Flutter tonguing  
1 velocity layer  
Release samples

**02 KLEb\_flatter\_cre****Range: F3–C7****Samples: 42****RAM: 2 MB**

Flutter tonguing, crescendo  
1 velocity layer

**11 KLEb\_trill\_1****Samples: 80****RAM: 5 MB**

Trills, minor 2nd  
2 velocity layers  
Release samples

**12 KLEb\_trill\_2****Samples: 80****RAM: 5 MB**

Trills, major 2nd  
2 velocity layers  
Release samples

**13 KLEb\_trill\_1\_dyn****Samples: 40****RAM: 2 MB**

Trills, crescendo and diminuendo, minor 2nd  
1 velocity layer  
AB switch: crescendo/diminuendo

**14 KLEb\_trill\_2\_dyn****Samples: 40****RAM: 2 MB**

Trills, crescendo and diminuendo, major 2nd  
1 velocity layer  
AB switch: crescendo/diminuendo

**15 KLEb\_trill\_1\_acc****Samples: 80****RAM: 5 MB**

Trills accelerando, minor 2nd  
2 velocity layers  
Release samples

**16 KLEb\_trill\_2\_acc****Samples: 80****RAM: 5 MB**

Trills accelerando, major 2nd  
2 velocity layers  
Release samples

**17 KLEb\_trill\_1\_acc-dyn****Samples: 40****RAM: 2 MB**

Trills accelerando, crescendo and diminuendo, minor 2nd  
1 velocity layer  
AB switch: crescendo/diminuendo

**18 KLEb\_trill\_2\_acc-dyn****Samples: 40****RAM: 2 MB**

Trills accelerando, crescendo and diminuendo, major 2nd  
1 velocity layer  
AB switch: crescendo/diminuendo

**10 PERF INTERVAL**

<b>01 KLEb_perf-legato</b>	<b>Range: F3–A6</b>	<b>Samples: 1032</b>	<b>RAM: 64 MB</b>
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Legato  
2 velocity layers  
Release samples

<b>02 KLEb_perf-legato_grace</b>	<b>Range: F3–A6</b>	<b>Samples: 954</b>	<b>RAM: 59 MB</b>
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Grace notes, legato, minor 2nd to octave  
2 velocity layers  
Release samples

<b>03 KLEb_perf-marcato</b>	<b>Range: F3–A6</b>	<b>Samples: 1030</b>	<b>RAM: 64 MB</b>
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Marcato  
2 velocity layers  
Release samples

**11 PERF INTERVAL FAST****Range: F3–A6**

<b>01 KLEb_perf-legato_fa</b>	<b>Samples: 1068</b>	<b>RAM: 66 MB</b>
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Legato, fast  
2 velocity layers  
Release samples

<b>02 KLEb_perf-marcato_fa</b>	<b>Samples: 1106</b>	<b>RAM: 69 MB</b>
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Marcato, fast  
2 velocity layers  
Release samples

**12 PERF TRILL****Range: F3–A6**

<b>01 KLEb_perf-trill</b>	<b>Samples: 2458</b>	<b>RAM: 153 MB</b>
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Performance trills, legato, minor 2nd to major 3rd  
2 velocity layers  
Release samples

**13 PERF REPETITION****Range: F3–A6**

<b>01 KLEb_perf-rep_leg-sl</b>		<b>Samples: 300</b>	<b>RAM: 18 MB</b>
Legato, slow 3 velocity layers			
<b>02 KLEb_perf-rep_leg-fa</b>		<b>Samples: 300</b>	<b>RAM: 18 MB</b>
Legato, fast 3 velocity layers			
<b>03 KLEb_perf-rep_por-sl</b>		<b>Samples: 300</b>	<b>RAM: 18 MB</b>
Portato, slow 3 velocity layers			
<b>04 KLEb_perf-rep_por-fa</b>		<b>Samples: 540</b>	<b>RAM: 33 MB</b>
Portato, fast 3 velocity layers			
<b>05 KLEb_perf-rep_sta-sl</b>	<b>Range: F3–B6</b>	<b>Samples: 567</b>	<b>RAM: 35 MB</b>
Staccato, slow 3 velocity layers			
<b>06 KLEb_perf-rep_sta-fa</b>		<b>Samples: 540</b>	<b>RAM: 33 MB</b>
Staccato, fast 3 velocity layers			
<b>21 KLEb_perf-rep_dyn5_leg-sl</b>		<b>Samples: 200</b>	<b>RAM: 12 MB</b>
Legato dynamics, slow, 5 repetitions 1 velocity layer AB switch: crescendo/diminuendo			
<b>22 KLEb_perf-rep_dyn5_leg-fa</b>		<b>Samples: 200</b>	<b>RAM: 12 MB</b>
Legato dynamics, fast, 5 repetitions 1 velocity layer AB switch: crescendo/diminuendo			
<b>23 KLEb_perf-rep_dyn5_por-sl</b>		<b>Samples: 200</b>	<b>RAM: 12 MB</b>
Portato dynamics, slow, 5 repetitions 1 velocity layer AB switch: crescendo/diminuendo			
<b>24 KLEb_perf-rep_dyn9_por-fa</b>		<b>Samples: 360</b>	<b>RAM: 22 MB</b>
Portato dynamics, fast, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo			
<b>25 KLEb_perf-rep_dyn9_sta-sl</b>	<b>Range: F3–B6</b>	<b>Samples: 378</b>	<b>RAM: 23 MB</b>
Staccato dynamics, slow, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo			

**26 KLEb\_perf-rep\_dyn9\_sta-fa****Samples: 360 RAM: 22 MB**

Staccato dynamics, fast, 9 repetitions  
 1 velocity layer  
 AB switch: crescendo/diminuendo

**14 FAST REPETITION****Range: F3–B6****01 KLEb\_fast-rep\_140 (150/160/170/180)****Samples: 126 RAM: 7 MB**

Staccato, 9 repetitions, 140–180 BPM  
 3 velocity layers  
 Release samples

**11 KLEb\_fast-rep\_140\_dyn (150/160/170/180)****Samples: 42 RAM: 2 MB**

Staccato, 9 repetitions, 140–180 BPM, crescendo and diminuendo  
 1 velocity layer  
 AB switch: crescendo/diminuendo

**15 GRACE NOTES**

The samples are mapped to their target note.

**01 KLEb\_grace-1****Range: F3–G#6****Samples: 160 RAM: 10 MB**

Grace notes, minor 2nd  
 2 velocity layers  
 Release samples  
 AB switch: up/down

**02 KLEb\_grace-2****Range: F3–A6****Samples: 160 RAM: 10 MB**

Grace notes, major 2nd  
 2 velocity layers  
 Release samples  
 AB switch: up/down

**03 KLEb\_grace-3****Range: F3–G#6****Samples: 156 RAM: 9 MB**

Grace notes, minor 3rd  
 2 velocity layers  
 Release samples  
 AB switch: up/down

**04 KLEb\_grace-4****Range: F3–A6****Samples: 156 RAM: 9 MB**

Grace notes, major 3rd  
 2 velocity layers  
 Release samples  
 AB switch: up/down

<b>05 KLEb_grace-5</b>	<b>Range: F3–G#6</b>	<b>Samples: 152</b>	<b>RAM: 9 MB</b>
Grace notes, 4th 2 velocity layers Release samples AB switch: up/down			
<b>06 KLEb_grace-6</b>	<b>Range: F3–A6</b>	<b>Samples: 152</b>	<b>RAM: 9 MB</b>
Grace notes, diminished 5th 2 velocity layers Release samples AB switch: up/down			
<b>07 KLEb_grace-7</b>	<b>Range: F3–G#6</b>	<b>Samples: 148</b>	<b>RAM: 9 MB</b>
Grace notes, 5th 2 velocity layers Release samples AB switch: up/down			
<b>08 KLEb_grace-8</b>	<b>Range: F3–A6</b>	<b>Samples: 148</b>	<b>RAM: 9 MB</b>
Grace notes, minor 6th 2 velocity layers Release samples AB switch: up/down			
<b>09 KLEb_grace-9</b>	<b>Range: F3–G#6</b>	<b>Samples: 144</b>	<b>RAM: 9 MB</b>
Grace notes, major 6th 2 velocity layers Release samples AB switch: up/down			
<b>10 KLEb_grace-10</b>	<b>Range: F3–A6</b>	<b>Samples: 144</b>	<b>RAM: 9 MB</b>
Grace notes, minor 7th 2 velocity layers Release samples AB switch: up/down			
<b>11 KLEb_grace-11</b>	<b>Range: F3–G#6</b>	<b>Samples: 140</b>	<b>RAM: 8 MB</b>
Grace notes, major 7th 2 velocity layers Release samples AB switch: up/down			
<b>12 KLEb_grace-12</b>	<b>Range: F3–A6</b>	<b>Samples: 140</b>	<b>RAM: 8 MB</b>
Grace notes, octave 2 velocity layers Release samples AB switch: up/down			

**98 RESOURCES**

Isolated dynamics repetitions: Legato slow and fast, portato, staccato  
 Single layer long notes  
 Performance Legato with sustain crossfading

**01 Perf Rep dyn****Range: F3–A6****01 KLEb\_rep\_cre5\_leg-sl-1 (2/3/4/5)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Legato slow, cres, 1st to 5th note  
 1 velocity layer

**01 KLEb\_rep\_dim5\_leg-sl-1 (2/3/4/5)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Legato slow, dim, 1st to 5th note  
 1 velocity layer

**02 KLEb\_rep\_cre5\_leg-fa-1 (2/3/4/5)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Legato fast, cres, 1st to 5th note  
 1 velocity layer

**02 KLEb\_rep\_dim5\_leg-fa-1 (2/3/4/5)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Legato fast, dim, 1st to 5th note  
 1 velocity layer

**03 KLEb\_rep\_cre9\_por-1 (2/3/4/5/6/7/8/9)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Portato, cres, 1st to 9th note  
 1 velocity layer

**03 KLEb\_rep\_dim9\_por-1 (2/3/4/5/6/7/8/9)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Portato, dim, 1st to 9th note  
 1 velocity layer

**04 KLEb\_rep\_cre9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Staccato, cres, 1st to 9th note  
 1 velocity layer

**04 KLEb\_rep\_dim9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 20****RAM: 1 MB**

Extracted repetition  
 Staccato, dim, 1st to 9th note  
 1 velocity layer

**02 Long Notes - Single Layer****Range: F3–C7****01 KLEb\_sus\_pp****Samples: 84****RAM: 5 MB**

Sustained, pianissimo  
 1 velocity layer  
 Release samples

**02 KLEb\_sus\_mp****Samples: 84****RAM: 5 MB**

Sustained, mezzopiano  
 1 velocity layer  
 Release samples

**03 KLEb\_sus\_mf****Samples: 84****RAM: 5 MB**

Sustained, mezzoforte  
 1 velocity layer  
 Release samples

**04 KLEb\_sus\_f****Samples: 84****RAM: 5 MB**

Sustained, forte  
 1 velocity layer  
 Release samples

**05 KLEb\_sus\_ff****Samples: 84****RAM: 5 MB**

Sustained, fortissimo  
 1 velocity layer  
 Release samples

**03 Perf Speed variation****Range: F3–A6****01 KLEb\_perf-leg\_sustain****Samples: 1071****RAM: 66 MB**

Legato with sustain crossfading  
 2 velocity layers  
 Release samples

**99 RELEASE**

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

# Matrices

## Matrix - LEVEL 1

### L1 KLEb Articulation Combi

Samples: 1714 RAM: 107 MB

Single note articulations

Staccato, portato short, sustained without vibrato, portato long with hard attack, crescendo-diminuendo 2 and 4 sec., fortepiano and sforzato, flutter tonguing normal and crescendo, trills half and whole tone

**Matrix switches:** Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 2 zones

	H1	H2	H3	H4	H5	H6
V1	stac	sus no vib.	pfp 2s.	fp	flutter	trill half
V2	port. short	port.long hard attack	pfp 4s.	sfz	flutter cres.	trill whole

### L1 KLEb Perf-Legato Speed

Samples: 1337 RAM: 83 MB

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Monophonic, Speed controller

**Matrix switches:** Horizontal: Speed, 3 zones

	H1	H2	H3
Legato	sustain XF	normal	fast

### L1 KLEb Perf-Repetitions Combi

Samples: 1380 RAM: 86 MB

Repetition performances

Legato slow

Portato fast

Staccato fast

**Matrix switches:** Vertical: Modwheel, 3 zones

	repetitions
V1	legato slow
V2	portato fast
V3	staccato fast

## Matrix - LEVEL 2 A - Advanced

### O1 KLEb Perf-Universal

Samples: 2587 RAM: 161 MB

Interval performances

Legato with sustain crossfading, normal without vibrato, and fast

Marcato normal and fast

Monophonic, Speed controller

**Matrix switches:** Horizontal: Speed, 3 zones Vertical: Modwheel, 2 zones

	H1	H2	H3
legato	sustain	normal	fast
marcato	normal	normal	fast

**02 KLEb Perf-Trill Speed****Samples: 2871 RAM: 179 MB**

Multi interval performances  
 Legato and trills  
 Monophonic, Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones

	H1	H2
V1	legato	trills

**03 KLEb Short+Long notes - All****Samples: 1848 RAM: 115 MB**

Single notes  
 Staccato, portato short and medium  
 Sustained without vibrato, portato long with hard and soft attack

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1
V1	staccato	portato short	port. medium	sus. no vib.
V2	%	%	%	port.long hard attack
V3	%	%	%	port.long soft attack

**Matrix - LEVEL 2 B - Standard****11 KLEb Perf-Legato Speed****Samples: 1337 RAM: 83 MB**

Interval performances  
 Legato with sustain crossfading, normal without vibrato, and fast  
 Monophonic, Speed controller

**Matrix switches:** Horizontal: Speed, 3 zones

	H1	H2	H3
Legato	sustain XF	normal	fast

**12 KLEb Perf-Marcato Speed****Samples: 1412 RAM: 88 MB**

Interval performances^mMarcato normal and fast  
 Monophonic, Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones

	H1	H2
Marcato	normal	fast

**13 KLEb Short notes - All****Samples: 1848 RAM: 115 MB**

Single notes  
 Staccato, portato short and medium, portato long with normal, hard, and soft attack

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	staccato	port. short	port. medium	port.long norm. attack	port.long hard attack	port.long soft attack

**14 KLEb Dynamics - Small****Samples: 630 RAM: 39 MB**

Dynamics

Medium crescendo and diminuendo, 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatissimo

**Matrix switches:** Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 4 zones

	C1	C#1	D1
dynamics	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

**15 KLEb Dynamics - Large****Samples: 1512 RAM: 94 MB**

Dynamics

Crescendo and diminuendo light, medium, and strong

Crescendo-diminuendo with vibrato 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatissimo

**Matrix switches:** Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 5 zones

	C1	C#1	D1
V1	dyn.light 1.5 sec.	dyn.light 2 sec.	dyn.light 2 sec.
V2	dyn.med. 2 sec.	dyn.med. 3 sec.	dyn.med. 4 sec.
V3	dyn.str. 2 sec.	dyn.str. 3 sec.	dyn.str. 4 sec.
V4	pfp 2 sec.	pfp 3 sec.	pfp 4 sec.
V5	fp	sfz	sffz

**16 KLEb Flutter****Samples: 126 RAM: 7 MB**

Flutter tonguing

Normal, crescendo, and normal/crescendo with Cell crossfading

**Matrix switches:** Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
flutter	normal	crescendo	Cell XF

**17 KLEb Trills - normal****Samples: 240 RAM: 15 MB**

Trills

Normal and dynamics

Half and whole tone

**Matrix switches:** Horizontal: Keyswitches, C1–C#1 Vertical: Modwheel, 2 zones

	C1	C#1
half tone	normal	dynamics
whole tone	normal	dynamics

**18 KLEb Trills - accelerando****Samples: 240 RAM: 15 MB**

Trills accelerando

Normal and dynamics

Half and whole tone

**Matrix switches:** Horizontal: Keyswitches, C1–C#1 Vertical: Modwheel, 2 zones

	C1	C#1
half tone	normal	dynamics
whole tone	normal	dynamics

**19 KLEb Trills - All****Samples: 480 RAM: 30 MB**

Trills constant speed and accelerando

Normal and dynamics

Half and whole tone

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
half tone	normal	dynamics	accelerando	acc. dynamics
whole tone	normal	dynamics	accelerando	acc. dynamics

**Matrix - LEVEL 2 C - Repetitions****31 KLEb Perf-Repetitions - Combi****Samples: 2247 RAM: 140 MB**

Repetition performances

Slow and fast legato, fast portato, slow and fast staccato

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	legato slow	legato fast	portato fast	staccato slow	staccato fast

**32 KLEb Perf-Repetitions - Speed****Samples: 1947 RAM: 121 MB**

Repetition performances

Slow legato, fast portato, slow and fast staccato

Speed controller

	H1	H2	H3	H4
V1	legato slow	portato fast	staccato slow	staccato fast

**33 KLEb Fast-Repetitions****Samples: 378 RAM: 23 MB**

Fast repetitions

140, 150, 160, 170, 180 BPM

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1
speed/BPM	140	150	160	170	180

**Matrix - LEVEL 2 D - Scale+Phrase****51 KLEb Grace notes - All****Samples: 876 RAM: 54 MB**

Grace notes, minor 2nd to octave

AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
interval	min. 2nd	maj. 2nd	min. 3rd	maj. 3rd	4th	dim. 5th	5th	min. 6th	maj. 6th	min. 7th	maj. 7th	octave

**Matrix - LEVEL 2 E - Keyswitch Vel****71 KLEb Legato slow - cre5****Samples: 100 RAM: 6 MB**

Slow legato notes: Crescendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**72 KLEb Legato fast - cre5****Samples: 100 RAM: 6 MB**

Fast legato notes: Crescendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**73 KLEb Portato - cre9****Samples: 180 RAM: 11 MB**

Portato notes: Crescendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

**74 KLEb Staccato - cre9****Samples: 180 RAM: 11 MB**

Staccato notes: Crescendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

**75 KLEb Combi - cre5****Samples: 200 RAM: 12 MB**

Slow and fast legato: Crescendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1      Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
legato slow	1st	2nd	3rd	4th	5th
legato fast	1st	%	%	%	%

**76 KLEb Combi - cre9****Samples: 360 RAM: 22 MB**

Portato and staccato: Crescendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1      Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

**77 KLEb Legato slow - dim5****Samples: 100 RAM: 6 MB**

Slow legato notes: Diminuendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**78 KLEb Legato fast - dim5****Samples: 100 RAM: 6 MB**

Fast legato notes: Diminuendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**79 KLEb Portato - dim9****Samples: 180 RAM: 11 MB**

Portato notes: Diminuendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

**80 KLEb Staccato - dim9****Samples: 180 RAM: 11 MB**

Staccato notes: Diminuendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

**81 KLEb Combi - dim5****Samples: 200 RAM: 12 MB**

Slow and fast legato: Diminuendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
legato slow	1st	2nd	3rd	4th	5th
legato fast	1st	%	%	%	%

**82 KLEb Combi - dim9****Samples: 360 RAM: 22 MB**

Portato and staccato: Diminuendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

**Presets****KLEb VSL Preset Level 1****Samples: 4269 RAM: 266 MB**

L1 KLEb Perf-Legato Speed  
L1 KLEb Articulation Combi  
L1 KLEb Perf-Repetitions Combi  
Preset keyswitches: C2–D2

**KLEb VSL Preset Level 2****Samples: 8546 RAM: 534 MB**

01 KLEb Perf-Universal  
02 KLEb Perf-Trill Speed  
L1 KLEb Articulation Combi  
31 KLEb Perf-Repetitions - Combi  
76 KLEb Combi - cre9  
Preset keyswitches: C2–E2