

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

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## 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 Bb. 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.

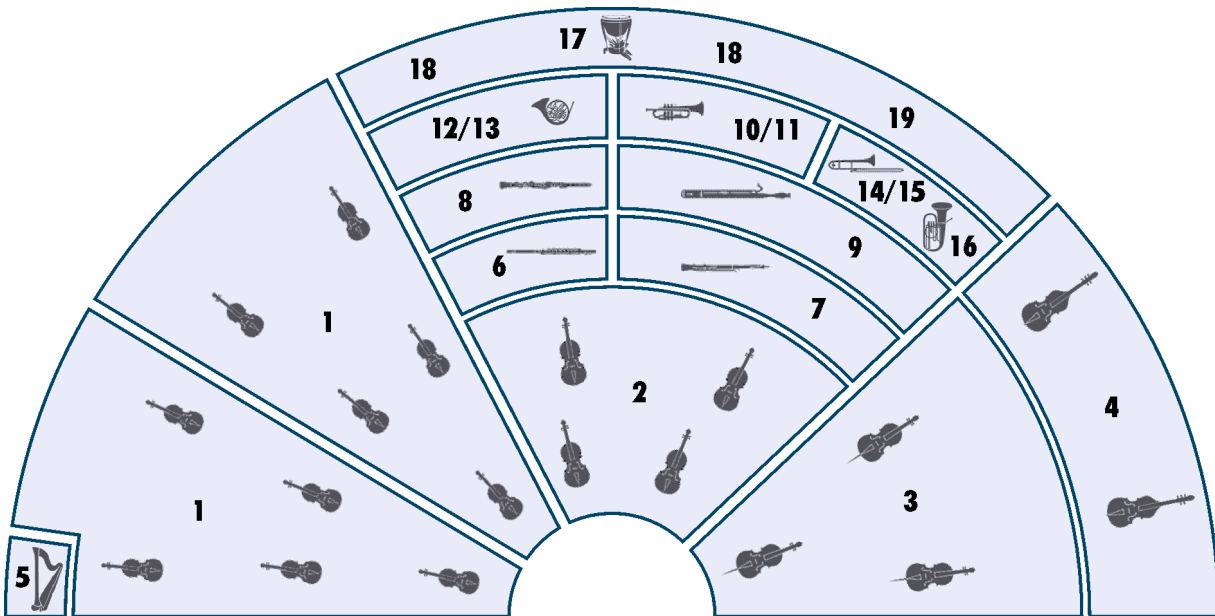
Abbreviation	Meaning	Abbreviation	Meaning
+	faster articulation (runs and arpeggios)	li	light
150, 160, ...	150, 160, ... BPM (beats per minute)	lo	long
1s, 2s, ...	tone length 1 sec., 2 sec., ...	ma	major
acc	accelerando	me	medium
all	combination of all Patches of a category	mi	minor
arp	arpeggio	mord	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

## Articulations

40 Clarinet-Bb	Full Content
<b>01 SHORT + LONG NOTES</b>	Staccato Portato short Portato long with normal, hard and soft attack Sustained without vibrato
<b>02 DYNAMICS</b>	Light crescendo and diminuendo, 1.5, 2, 3 and 4 sec. Medium crescendo and diminuendo 2, 3, 4 and 6 sec. Strong crescendo and diminuendo, 2, 3, 4 and 6 sec. pfp, 2, 3, 4, 5, 8 and 10 sec. fpf, 4 and 6 sec. Fortepiano, sforzato, sforzatissimo
<b>03 FLATTER + TRILLS</b>	Flutter tonguing normal and crescendo Trills, minor 2nd to major 3rd Trills accelerando, minor and major 2nd Dynamics for all trills
<b>10 PERF INTERVAL</b>	Legato Marcato Grace notes, minor 2nd to octave
<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 PERF UPBEAT REPETITION</b>	1 and 2 upbeats, slow and fast, normal and dynamics
<b>15 FAST REPETITION</b>	Staccato, 9 repetitions, 140 to 170 BPM Normal and dynamics
<b>16 GRACE NOTES</b>	Grace notes, minor 2nd to octave, up and down
<b>17 GLISSANDI</b>	Glissando performances, minor 2nd to octave, slow and fast Fixed glissandos, minor 2nd to octave, up and down, slow and fast
<b>18 SCALE RUNS</b>	Octave runs, legato, up and down major (2 speeds) and minor from C to B key, chromatic and whole tone
<b>19 ARPEGGIOS</b>	Arpeggios, legato and staccato, up and down diminished, major and minor from C to B key 2 speeds for all

## 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.

# 40 Clarinet-Bb

## The Instrument

### Description

The clarinet in Bb, a soprano woodwind instrument, is the main member of the big clarinet family. Due to its modulatory capabilities it became the most important wind instrument in the Romantic orchestra in the 19th century along with the horn. Since the classical period it has been customary to use two clarinets, the modern orchestra additionally uses a small clarinet (or a bass clarinet).

### Range and notation

The clarinet in Bb has a range from D3–Bb6 (to G6 in orchestral playing).

The written compass of all clarinets ranges from E3 to C7. The Bb clarinet sounds a major second lower than notated.

### Sound characteristics

Rich, mellow, warm, gentle, melodic, vocal, round, lustrous, brilliant, bright, throaty, penetrating, dark, menacing, dramatic, explosive, incisive, expressive, shrill, reedy, caressing, pale, lively.

The clarinet's ability to play smooth and expressive legatos makes it the ideal instrument for the performance of evocative cantilenas.

The notes within the compass from A4–F6 (clarinet register) are used most often. They sound brilliant, lustrous, bright and compact. Due to their vocal character they have frequently been compared to the human soprano voice. They express a range of emotions from tender sentiment to bursts of passion, from seductive sensuality to desperate longing, or from cat-like cunning to demonic malevolence.

Lower notes have a dark, full, mellow and warm timbre, especially in piano. Higher notes than A6 are seldom required because they no longer have the clarinet's typically velvety sound.


### Combination with other instruments

Like all the woodwinds the clarinet is very well suited for combinations with other instruments. Its sound is adaptable enough to produce an excellent tonal blend with all instrument groups. A particularly good blend is achieved with the horn.

Especially in opera the clarinet is often used in combination with the soprano or alto voices.



## Patches

01 SHORT + LONG NOTES		Range: C3–G6		
<b>01 KLB_staccato</b>			<b>Samples: 374</b>	<b>RAM: 23 MB</b>
Staccato 5 velocity layers				
<b>02 KLB_portato_short</b>			<b>Samples: 504</b>	<b>RAM: 31 MB</b>
Portato, short 6 velocity layers				
<b>03 KLB_portato_medium</b>			<b>Samples: 504</b>	<b>RAM: 31 MB</b>
Portato, medium 6 velocity layers				
<b>04 KLB_por_lo_nA</b>			<b>Samples: 378</b>	<b>RAM: 23 MB</b>
Portato, long, normal attack 6 velocity layers Release samples				
<b>05 KLB_por_lo_hA</b>			<b>Samples: 84</b>	<b>RAM: 5 MB</b>
Portato, long, hard attack 1 velocity layer Release samples				
<b>06 KLB_por_lo_sA</b>			<b>Samples: 252</b>	<b>RAM: 15 MB</b>
Portato, long, soft attack 4 velocity layers Release samples				
<b>11 KLB_sus_noVib</b>			<b>Samples: 378</b>	<b>RAM: 23 MB</b>
Sustained, without vibrato 6 velocity layers Release samples				

**02 DYNAMICS****Range: C3–G6****01 KLB\_dyn-li\_1'5s****Samples: 335****RAM: 20 MB**

Light crescendo and diminuendo, 1.5 sec.  
 4 velocity layers  
 AB switch crescendo/diminuendo

**02 KLB\_dyn-li\_2s****Samples: 335****RAM: 20 MB**

Light crescendo and diminuendo, 2 sec.  
 4 velocity layers  
 AB switch crescendo/diminuendo

**03 KLB\_dyn-li\_3s****Samples: 252****RAM: 15 MB**

Light crescendo and diminuendo, 3 sec.  
 4 velocity layers  
 AB switch crescendo/diminuendo

**04 KLB\_dyn-li\_4s****Samples: 252****RAM: 15 MB**

Light crescendo and diminuendo, 4 sec.  
 4 velocity layers  
 AB switch crescendo/diminuendo

**05 KLB\_dyn-me\_2s****Samples: 168****RAM: 10 MB**

Medium crescendo and diminuendo, 2 sec.  
 2 velocity layers  
 AB switch crescendo/diminuendo

**06 KLB\_dyn-me\_3s****Samples: 168****RAM: 10 MB**

Medium crescendo and diminuendo, 3 sec.  
 2 velocity layers  
 AB switch crescendo/diminuendo

**07 KLB\_dyn-me\_4s****Samples: 168****RAM: 10 MB**

Medium crescendo and diminuendo, 4 sec.  
 2 velocity layers  
 AB switch crescendo/diminuendo

**08 KLB\_dyn-me\_6s****Samples: 167****RAM: 10 MB**

Medium crescendo and diminuendo, 6 sec.  
 2 velocity layers  
 AB switch crescendo/diminuendo

**09 KLB\_dyn-str\_2s****Samples: 83****RAM: 5 MB**


Strong crescendo and diminuendo, 2 sec.  
 1 velocity layer  
 AB switch crescendo/diminuendo

<b>10 KLB_dyn-str_3s</b> Strong crescendo and diminuendo, 3 sec. 1 velocity layer AB switch crescendo/diminuendo	<b>Samples: 83</b>	<b>RAM: 5 MB</b>
<b>11 KLB_dyn-str_4s</b> Strong crescendo and diminuendo, 4 sec. 1 velocity layer AB switch crescendo/diminuendo	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>12 KLB_dyn-str_6s</b> Strong crescendo and diminuendo, 6 sec. 1 velocity layer AB switch crescendo/diminuendo	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>13 KLB_pfp_2s</b> Crescendo-diminuendo, 2 sec. 2 velocity layers	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>14 KLB_pfp_3s</b> Crescendo-diminuendo, 3 sec. 2 velocity layers	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>15 KLB_pfp_4s</b> Crescendo-diminuendo, 4 sec. 2 velocity layers	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>16 KLB_pfp_6s</b> Crescendo-diminuendo, 6 sec. 2 velocity layers	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>17 KLB_pfp_8s</b> Crescendo-diminuendo, 8 sec. 1 velocity layer	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
<b>18 KLB_pfp_10s</b> Crescendo-diminuendo, 10 sec. 1 velocity layer	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
<b>19 KLB_fpf_4s</b> Diminuendo-crescendo, 4 sec. 2 velocity layers	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>20 KLB_fpf_6s</b> Diminuendo-crescendo, 6 sec. 2 velocity layers	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
<b>21 KLB_fp</b> Fortepiano 1 velocity layer	<b>Samples: 42</b>	<b>RAM: 2 MB</b>

<b>22 KLB_sfz</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Sforzato 1 velocity layer		
<b>23 KLB_sffz</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Sforzatissimo 1 velocity layer		

**03 FLATTER + TRILLS**

<b>01 KLB_flutter</b>	<b>Range: C3–C6</b>	<b>Samples: 70</b>	<b>RAM: 4 MB</b>
Flutter tonguing 1 velocity layer Release samples			
<b>02 KLB_flutter_cre</b>	<b>Range: C3–C6</b>	<b>Samples: 35</b>	<b>RAM: 2 MB</b>
Flutter tonguing, crescendo and diminuendo 1 velocity layer			
<b>11 KLB_trill_1</b>	<b>Range: C3–F#6</b>	<b>Samples: 164</b>	<b>RAM: 10 MB</b>
Trills, minor 2nd 2 velocity layers Release samples			
<b>12 KLB_trill_2</b>	<b>Range: C3–F6</b>	<b>Samples: 160</b>	<b>RAM: 10 MB</b>
Trills, major 2nd 2 velocity layers Release samples			
<b>13 KLB_trill_3</b>	<b>Range: C3–E6</b>	<b>Samples: 84</b>	<b>RAM: 5 MB</b>
Trills, minor 3rd 2 velocity layers Release samples			
<b>14 KLB_trill_4</b>	<b>Range: C3–D6</b>	<b>Samples: 86</b>	<b>RAM: 5 MB</b>
Trills, major 3rd 2 velocity layers Release samples			
<b>15 KLB_trill_1_dyn</b>	<b>Range: C3–F#6</b>	<b>Samples: 82</b>	<b>RAM: 5 MB</b>
Trills, crescendo and diminuendo, minor 2nd 1 velocity layer AB switch crescendo/diminuendo			
<b>16 KLB_trill_2_dyn</b>	<b>Range: C3–F6</b>	<b>Samples: 78</b>	<b>RAM: 4 MB</b>
Trills, crescendo and diminuendo, major 2nd 1 velocity layer AB switch crescendo/diminuendo			

<b>17 KLB_trill_3_dyn</b>	<b>Range: C3–E6</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Trills, crescendo and diminuendo, minor 3rd 1 velocity layer AB switch crescendo/diminuendo			
<b>18 KLB_trill_4_dyn</b>	<b>Range: C3–D6</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Trills, crescendo and diminuendo, major 3rd 1 velocity layer AB switch crescendo/diminuendo			
<b>19 KLB_trill_1_acc</b>	<b>Range: C3–F6</b>	<b>Samples: 159</b>	<b>RAM: 9 MB</b>
Trills accelerando, minor 2nd 2 velocity layers Release samples			
<b>20 KLB_trill_2_acc</b>	<b>Range: C3–F6</b>	<b>Samples: 160</b>	<b>RAM: 10 MB</b>
Trills accelerando, major 2nd 2 velocity layers Release samples			
<b>21 KLB_trill_1_acc-dyn</b>	<b>Range: C3–F6</b>	<b>Samples: 80</b>	<b>RAM: 5 MB</b>
Trills accelerando, crescendo and diminuendo, minor 2nd 1 velocity layer AB switch crescendo/diminuendo			
<b>22 KLB_trill_2_acc-dyn</b>	<b>Range: C3–G6</b>	<b>Samples: 80</b>	<b>RAM: 5 MB</b>
Trills accelerando, crescendo and diminuendo, major 2nd 1 velocity layer AB switch crescendo/diminuendo			
<b>10 PERF INTERVAL</b>	<b>Range: C3–E6</b>		
<b>01 KLB_perf-legato</b>		<b>Samples: 1429</b>	<b>RAM: 89 MB</b>
Legato 3 velocity layers Release samples			
<b>02 KLB_perf-legato_grace</b>	<b>Range: C3–F#6</b>	<b>Samples: 1534</b>	<b>RAM: 95 MB</b>
Grace notes, legato, minor 2nd to octave 3 velocity layers Release samples			
<b>03 KLB_perf-marcato</b>		<b>Samples: 1032</b>	<b>RAM: 64 MB</b>
Marcato 2 velocity layers Release samples			

**11 PERF INTERVAL FAST****Range: C3–E6****01 KLB\_perf-legato\_fa****Samples: 1264 RAM: 79 MB**

Legato, fast  
2 velocity layers  
Release samples

**02 KLB\_perf-marcato\_fa****Samples: 1506 RAM: 94 MB**

Marcato, fast  
2 velocity layers  
Release samples

**12 PERF TRILL****Range: C3–E6****01 KLB\_perf-trill****Samples: 2482 RAM: 155 MB**

Performance trills, legato, minor 2nd to major 3rd  
2 velocity layers  
Release samples

**13 PERF REPETITION****Range: C3–F#6****01 KLB\_perf-rep\_leg-sl****Samples: 315 RAM: 19 MB**

Repetition performances: Legato, slow  
3 velocity layers

**02 KLB\_perf-rep\_leg-fa****Samples: 315 RAM: 19 MB**

Legato, fast  
3 velocity layers

**04 KLB\_perf-rep\_por-sl****Samples: 315 RAM: 19 MB**

Portato, slow  
3 velocity layers

**05 KLB\_perf-rep\_por-fa****Samples: 567 RAM: 35 MB**

Portato, fast  
3 velocity layers


**06 KLB\_perf-rep\_sta-sl****Samples: 567 RAM: 35 MB**

Staccato, slow  
3 velocity layers

**07 KLB\_perf-rep\_sta-fa****Samples: 567 RAM: 35 MB**

Staccato, fast  
3 velocity layers

<b>21 KLB_perf-rep_dyn5_leg-sl</b>	<b>Samples: 210</b>	<b>RAM: 13 MB</b>
Legato dynamics, slow, 5 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>22 KLB_perf-rep_dyn5_leg-me</b>	<b>Samples: 220</b>	<b>RAM: 13 MB</b>
Legato dynamics, medium, 5 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>23 KLB_perf-rep_dyn5_leg-fa</b>	<b>Samples: 210</b>	<b>RAM: 13 MB</b>
Legato dynamics, fast, 5 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>24 KLB_perf-rep_dyn5_por-sl</b>	<b>Samples: 210</b>	<b>RAM: 13 MB</b>
Portato dynamics, slow, 5 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>25 KLB_perf-rep_dyn9_por-fa</b>	<b>Samples: 378</b>	<b>RAM: 23 MB</b>
Portato dynamics, fast, 9 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>26 KLB_perf-rep_dyn9_sta-sl</b>	<b>Samples: 378</b>	<b>RAM: 23 MB</b>
Staccato dynamics, slow, 9 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>27 KLB_perf-rep_dyn9_sta-fa</b>	<b>Samples: 378</b>	<b>RAM: 23 MB</b>
Staccato dynamics, fast, 9 repetitions 1 velocity layer AB switch crescendo/diminuendo		

<b>14 PERF UPBEAT REPETITION</b>	<b>Range: C3–F#6</b>	
<b>01 KLB_perf-rep_UB-a1_sl</b>	<b>Samples: 252</b>	<b>RAM: 15 MB</b>
1 upbeat, slow 3 velocity layers		
<b>02 KLB_perf-rep_UB-a2_sl</b>	<b>Samples: 252</b>	<b>RAM: 15 MB</b>
2 upbeats, slow 3 velocity layers		
<b>03 KLB_perf-rep_UB-a1_fa</b>	<b>Samples: 252</b>	<b>RAM: 15 MB</b>
1 upbeat, fast 3 velocity layers		

<b>04 KLB_perf-rep_UB-a2_fa</b>	<b>Samples: 252</b>	<b>RAM: 15 MB</b>
2 upbeats, fast 3 velocity layers		
<b>11 KLB_perf-rep_dyn4_UB-a1_sl</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
1 upbeat, slow, dynamics 4 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>12 KLB_perf-rep_dyn4_UB-a2_sl</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
2 upbeats, slow, dynamics 4 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>13 KLB_perf-rep_dyn4_UB-a1_fa</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
1 upbeat, fast, dynamics 4 repetitions 1 velocity layer AB switch crescendo/diminuendo		
<b>14 KLB_perf-rep_dyn4_UB-a2_fa</b>	<b>Samples: 168</b>	<b>RAM: 10 MB</b>
2 upbeats, fast, dynamics 4 repetitions 1 velocity layer AB switch crescendo/diminuendo		

**15 FAST REPETITION****Range: C3–F#6**

<b>01 KLB_fast-rep_140 (150/160/170)</b>	<b>Samples: 126</b>	<b>RAM: 7 MB</b>
Staccato, 9 repetitions, 140, 150, 160, 170 BPM 3 velocity layers Release samples		
<b>11 KLB_fast-rep_140_dyn (150/160/170)</b>	<b>Samples: 42</b>	<b>RAM: 2 MB</b>
Staccato dynamics, 9 repetitions, 140, 150, 160, 170 BPM 1 velocity layer AB switch crescendo/diminuendo		



**16 GRACE NOTES****Range: C3–F#6**

<b>01 KLB_grace-1</b>	<b>Samples: 250</b>	<b>RAM: 15 MB</b>
Grace notes, minor 2nd 3 velocity layers Release samples AB switch up/down		
<b>02 KLB_grace-2</b>	<b>Samples: 250</b>	<b>RAM: 15 MB</b>
Grace notes, major 2nd 3 velocity layers Release samples AB switch up/down		
<b>03 KLB_grace-3</b>	<b>Samples: 240</b>	<b>RAM: 15 MB</b>
Grace notes, minor 3rd 3 velocity layers Release samples AB switch up/down		
<b>04 KLB_grace-4</b>	<b>Samples: 240</b>	<b>RAM: 15 MB</b>
Grace notes, major 3rd 3 velocity layers Release samples AB switch up/down		
<b>05 KLB_grace-5</b>	<b>Samples: 234</b>	<b>RAM: 14 MB</b>
Grace notes, 4th 3 velocity layers Release samples AB switch up/down		
<b>06 KLB_grace-6</b>	<b>Samples: 234</b>	<b>RAM: 14 MB</b>
Grace notes, diminished 5th 3 velocity layers Release samples AB switch up/down		
<b>07 KLB_grace-7</b>	<b>Samples: 228</b>	<b>RAM: 14 MB</b>
Grace notes, 5th 3 velocity layers Release samples AB switch up/down		
<b>08 KLB_grace-8</b>	<b>Samples: 228</b>	<b>RAM: 14 MB</b>
Grace notes, minor 6th 3 velocity layers Release samples AB switch up/down		

<b>09 KLB_grace-9</b>		<b>Samples: 222</b>	<b>RAM: 13 MB</b>
Grace notes, major 6th 3 velocity layers Release samples AB switch up/down			
<b>10 KLB_grace-10</b>		<b>Samples: 222</b>	<b>RAM: 13 MB</b>
Grace notes, minor 7th 3 velocity layers Release samples AB switch up/down			
<b>11 KLB_grace-11</b>		<b>Samples: 216</b>	<b>RAM: 13 MB</b>
Grace notes, major 7th 3 velocity layers Release samples AB switch up/down			
<b>12 KLB_grace-12</b>		<b>Samples: 216</b>	<b>RAM: 13 MB</b>
Grace notes, octave 3 velocity layers Release samples AB switch up/down			
<b>17 GLISSANDI</b>			
<b>01 KLB_perf-gliss_sl</b>	<b>Range: C5–E6</b>	<b>Samples: 400</b>	<b>RAM: 25 MB</b>
Interval performances: Glissando, slow 2 velocity layers Release samples			
<b>02 KLB_perf-gliss_fa</b>	<b>Range: C5–E6</b>	<b>Samples: 400</b>	<b>RAM: 25 MB</b>
Interval performances: Glissando, fast 2 velocity layers Release samples			
<b>11 KLB_gliss-sl-1</b>	<b>Range: B4–D6</b>	<b>Samples: 32</b>	<b>RAM: 2 MB</b>
Glissando, slow, minor 2nd 2 velocity layers AB switch up/down			
<b>12 KLB_gliss-sl-2</b>	<b>Range: B4–E6</b>	<b>Samples: 32</b>	<b>RAM: 2 MB</b>
Glissando, slow, major 2nd 2 velocity layers AB switch up/down			



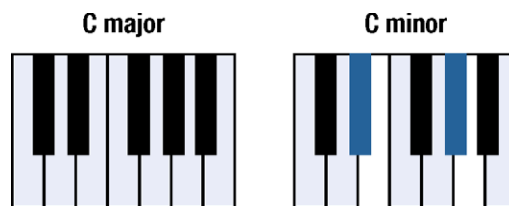
<b>13 KLB_gliss-sl-3</b> Glissando, slow, minor 3rd 2 velocity layers AB switch up/down	<b>Range: B4–D#6</b>	<b>Samples: 28</b>	<b>RAM: 1 MB</b>
<b>14 KLB_gliss-sl-4</b> Glissando, slow, major 3rd 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 28</b>	<b>RAM: 1 MB</b>
<b>15 KLB_gliss-sl-5</b> Glissando, slow, 4th 2 velocity layers AB switch up/down	<b>Range: B4–D#6</b>	<b>Samples: 24</b>	<b>RAM: 1 MB</b>
<b>16 KLB_gliss-sl-6</b> Glissando, slow, diminished 5th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 24</b>	<b>RAM: 1 MB</b>
<b>17 KLB_gliss-sl-7</b> Glissando, slow, 5th 2 velocity layers AB switch up/down	<b>Range: B4–D#6</b>	<b>Samples: 20</b>	<b>RAM: 1 MB</b>
<b>18 KLB_gliss-sl-8</b> Glissando, slow, minor 6th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 20</b>	<b>RAM: 1 MB</b>
<b>19 KLB_gliss-sl-9</b> Glissando, slow, major 6th 2 velocity layers AB switch up/down	<b>Range: B4–D#6</b>	<b>Samples: 18</b>	<b>RAM: 1 MB</b>
<b>20 KLB_gliss-sl-10</b> Glissando, slow, minor 7th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 16</b>	<b>RAM: 1 MB</b>
<b>21 KLB_gliss-sl-11</b> Glissando, slow, major 7th 2 velocity layers AB switch up/down	<b>Range: B4–D#6</b>	<b>Samples: 12</b>	<b>RAM: 1 MB</b>
<b>22 KLB_gliss-sl-12</b> Glissando, slow, octave 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 12</b>	<b>RAM: 1 MB</b>

<b>31 KLB_gliss-fa-1</b> Glissando, fast, minor 2nd 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 32</b>	<b>RAM: 2 MB</b>
<b>32 KLB_gliss-fa-2</b> Glissando, fast, major 2nd 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 32</b>	<b>RAM: 2 MB</b>
<b>33 KLB_gliss-fa-3</b> Glissando, fast, minor 3rd 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 28</b>	<b>RAM: 1 MB</b>
<b>34 KLB_gliss-fa-4</b> Glissando, fast, major 3rd 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 28</b>	<b>RAM: 1 MB</b>
<b>35 KLB_gliss-fa-5</b> Glissando, fast, 4th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 24</b>	<b>RAM: 1 MB</b>
<b>36 KLB_gliss-fa-6</b> Glissando, fast, diminished 5th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 24</b>	<b>RAM: 1 MB</b>
<b>37 KLB_gliss-fa-7</b> Glissando, fast, 5th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 20</b>	<b>RAM: 1 MB</b>
<b>38 KLB_gliss-fa-8</b> Glissando, fast, minor 6th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 20</b>	<b>RAM: 1 MB</b>
<b>39 KLB_gliss-fa-9</b> Glissando, fast, major 6th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 16</b>	<b>RAM: 1 MB</b>
<b>40 KLB_gliss-fa-10</b> Glissando, fast, minor 7th 2 velocity layers AB switch up/down	<b>Range: B4–E6</b>	<b>Samples: 16</b>	<b>RAM: 1 MB</b>

<b>41 KLB_gliss-fa-11</b>	<b>Range: B4–E6</b>	<b>Samples: 12</b>	<b>RAM: 1 MB</b>
Glissando, fast, major 7th 2 velocity layers AB switch up/down			
<b>42 KLB_gliss-fa-12</b>	<b>Range: B4–E6</b>	<b>Samples: 12</b>	<b>RAM: 1 MB</b>
Glissando, fast, octave 2 velocity layers AB switch up/down			

## 18 SCALE RUNS

Please note that upward runs can be played only to an octave below the upper play range, downward runs to an octave above the lower play range. The octave runs are mapped diatonically according to their scale. For the playing ranges and mappings of individual scales, please see the appendix.



### Legato major

**Range: C#3–A#6**



#### 01 KLB\_run-leg\_C-ma (through to B-ma)

**Samples: 72**

**RAM: 4 MB**

Octave runs, legato, C to B major  
2 velocity layers  
AB switch up/down

### Legato major faster

**Range: C#3–G6**



#### 01 KLB\_run-leg+\_C-ma (through to B-ma)

**Samples: 72**

**RAM: 4 MB**

Octave runs, legato, fast, C to B major  
2 velocity layers  
AB switch up/down

### Legato minor

**Range: C#3–G6**



#### 01 KLB\_run-leg\_C-mi (through to B-mi)

**Samples: 72**

**RAM: 4 MB**

Octave runs, legato, C to B minor  
2 velocity layers  
AB switch up/down

**Legato special****Range: C3–G6****01 KLB\_run-leg\_chromatic****Samples: 60****RAM: 3 MB**

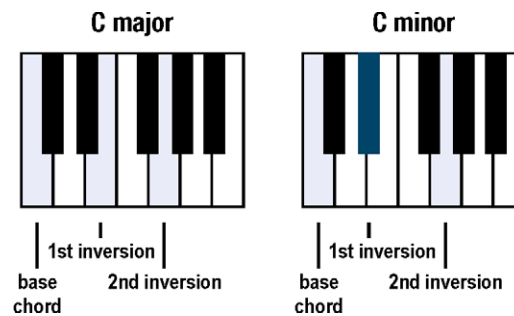
Octave runs, legato, chromatic  
2 velocity layers  
AB switch up/down

**02 KLB\_run-leg\_whole****Samples: 60****RAM: 3 MB**

Octave runs, legato, whole tone  
2 velocity layers  
AB switch up/down

**19 ARPEGGIOS**

Please note that the playing ranges vary with the key of the Patch used.  
For the playing ranges and mappings for each major and minor key, please see the appendix.

**Legato diminished****Range: C3–G6****01 KLB\_arp-leg\_dm****Samples: 88****RAM: 5 MB**

Arpeggios, legato  
Diminished  
2 velocity layers  
AB switch up/down

**Legato diminished fast****Range: C3–G#6****01 KLB\_arp-leg+\_dm****Samples: 92****RAM: 5 MB**

Arpeggios, legato, fast  
Diminished  
2 velocity layers  
AB switch up/down

**Legato major****Range: E3–G6****01\_KLB\_arp-leg\_C-ma (through to B-ma)****Samples: 32****RAM: 2 MB**

Arpeggios, legato

C to B major

Mapping (according to key, here for C major): C – base, E – 1st inversion, G – 2nd inversion

2 velocity layers

AB switch up/down

**Legato major fast****Range: E3–G6****01\_KLB\_arp-leg+\_C-ma (through to B-ma)****Samples: 32****RAM: 2 MB**

Arpeggios, legato, fast

C to B major

Mapping (according to key, here for C major): C – base, E – 1st inversion, G – 2nd inversion

2 velocity layers

AB switch up/down

**Legato minor****Range: D#3–G6****01\_KLB\_arp-leg\_C-mi (through to B-mi)****Samples: 32****RAM: 2 MB**

Arpeggios, legato

C to B minor

Mapping (according to key, here for C minor): C – base, D# – 1st inversion, G – 2nd inversion

2 velocity layers

AB switch up/down

**Legato minor fast****Range: D#3–G6****01\_KLB\_arp-leg\_C-mi+ (through to B-mi+)****Samples: 32****RAM: 2 MB**

Arpeggios, legato, fast

C to B minor

Mapping (according to key, here for C minor): C – base, D# – 1st inversion, G – 2nd inversion

2 velocity layers

AB switch up/down

**Staccato diminished****Range: C3–G#6****01\_KLB\_arp-sta\_dm****Samples: 92****RAM: 5 MB**

Arpeggios, staccato  
Diminished  
2 velocity layers  
AB switch up/down

**Staccato diminished fast****Range: C3–G#6****01\_KLB\_arp-sta+\_dm****Samples: 92****RAM: 5 MB**

Arpeggios, staccato, fast  
Diminished  
2 velocity layers  
AB switch up/down

**Staccato major****Range: E3–G6****01\_KLB\_arp-sta\_C-ma (through to B-ma)****Samples: 32****RAM: 2 MB**

Arpeggios, staccato  
C to B major  
Mapping (according to key, here for C major): C – base, E – 1st inversion, G – 2nd inversion  
2 velocity layers  
AB switch up/down

**Staccato major fast****Range: E3–G6****01\_KLB\_arp-sta+\_C-ma (through to B-ma)****Samples: 32****RAM: 2 MB**

Arpeggios, staccato, fast  
C to B major  
Mapping (according to key, here for C major): C – base, E – 1st inversion, G – 2nd inversion  
2 velocity layers  
AB switch up/down

**Staccato minor****Range: D#3–G6****01\_KLB\_arp-sta\_C-mi (through to B-mi)****Samples: 32****RAM: 2 MB**

Arpeggios, staccato  
C to B minor  
Mapping (according to key, here for C minor): C – base, D# – 1st inversion, G – 2nd inversion  
2 velocity layers  
AB switch up/down



**Staccato minor fast****Range: D#3–G6****01\_KLB\_arp-sta\_C-mi+ (through to B-mi+)****Samples: 32****RAM: 2 MB**

Arpeggios, staccato, fast

C to B minor

Mapping (according to key, here for C minor): C – base, D# – 1st inversion, G – 2nd inversion

2 velocity layers

AB switch up/down

**98 RESOURCES**

Isolated dynamics repetitions, single layer long notes, interval performance variations.

**01 Perf Rep dyn****Range: C3–G6****01\_KLB\_rep\_cre5\_leg-sl-1 (2/3/4/5)****Samples: 21****RAM: 1 MB**

Extracted repetitions: Legato slow, crescendo, 1st to 5th note

1 velocity layer

**01\_KLB\_rep\_dim5\_leg-sl-1 (2/3/4/5)****Samples: 21****RAM: 1 MB**

Extracted repetitions: Legato slow, diminuendo, 1st to 5th note

1 velocity layer

**02\_KLB\_rep\_cre5\_leg-fa-1 (2/3/4/5)****Samples: 22****RAM: 1 MB**

Extracted repetitions: Legato fast, crescendo, 1st to 5th note

1 velocity layer

**02\_KLB\_rep\_dim5\_leg-fa-1 (2/3/4/5)****Samples: 22****RAM: 1 MB**

Extracted repetitions: Legato fast, diminuendo, 1st to 5th note

1 velocity layer

**03\_KLB\_rep\_cre9\_por-1 (2/3/4/5/6/7/8/9)****Samples: 21****RAM: 1 MB**

Extracted repetitions: Portato, crescendo, 1st to 9th note

1 velocity layer

**03\_KLB\_rep\_dim9\_por-1 (2/3/4/5/6/7/8/9)****Samples: 21****RAM: 1 MB**

Extracted repetitions: Portato, diminuendo, 1st to 9th note

1 velocity layer

**04\_KLB\_rep\_cre9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 21****RAM: 1 MB**

Extracted repetitions: Staccato, crescendo, 1st to 9th note

1 velocity layer

**04\_KLB\_rep\_dim9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 21****RAM: 1 MB**

Extracted repetitions: Staccato, diminuendo, 1st to 9th note

1 velocity layer

**02 Long Notes - Single Layer****Range: C3–A6****01 KLB\_sus\_pp****Samples: 84****RAM: 5 MB**

Sustained, pianissimo  
1 velocity layer  
Release samples

**02 KLB\_sus\_p****Samples: 84****RAM: 5 MB**

Sustained, piano  
1 velocity layer  
Release samples

**03 KLB\_sus\_mp****Samples: 84****RAM: 5 MB**

Sustained, mezzopiano  
1 velocity layer  
Release samples

**04 KLB\_sus\_mf****Samples: 84****RAM: 5 MB**

Sustained, mezzoforte  
1 velocity layer  
Release samples

**05 KLB\_sus\_f****Samples: 84****RAM: 5 MB**

Sustained, forte  
1 velocity layer  
Release samples

**06 KLB\_sus\_ff****Samples: 84****RAM: 5 MB**

Sustained, fortissimo  
1 velocity layer  
Release samples

**03 Perf Speed variation****Range: C3–E6****01 KLB\_perf-leg\_sustain****Samples: 1468****RAM: 91 MB**

Interval performance: 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 KLB Articulation Combi

**Samples: 1978   RAM: 123 MB**

Single note articulations

Staccato, portato short and long, sustained, crescendo-diminuendo 2 and 4 sec., fortepiano and sforzato, flutter tonguing normal and dynamics, trills half and whole tone

AB switch crescendo/diminuendo

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

	C1	C#1	D1	D#1	E1	F1
V1	stac	sus vib.	pfp 2s.	fp	flutter	trill half
V2	port. short	port. long	pfp 4s.	sfz	flutter dyn.	trill whole

### L1 KLB Perf-Legato Speed

**Samples: 1930   RAM: 120 MB**

Interval performances

Legato with sustain crossfading, normal, and fast

Monophonic, Speed controller

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

	H1	H2	H3
Legato	sustain XF	normal	fast

### L1 KLB Perf-Repetitions Combi

**Samples: 1449   RAM: 90 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 KLB Perf-Universal

**Samples: 3582   RAM: 223 MB**

Interval performances

Legato with sustain crossfading, normal, 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 KLB Perf-Trill Speed****Samples: 3253 RAM: 203 MB**

Multi interval performances

Legato and trills

Monophonic, Speed controller

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

	H1	H2
V1	legato	trills

**03 KLB Short+Long notes - All****Samples: 1970 RAM: 123 MB**

Single notes

Staccato, portato short and medium

Sustained, 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	portato med.	sustained
V2	%	%	%	portato hard
V3	%	%	%	portato soft

**Matrix - LEVEL 2 B - Standard****11 KLB Perf-Legato Speed****Samples: 1930 RAM: 120 MB**

Interval performances

Legato with sustain crossfading, normal, and fast

Monophonic, Speed controller

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

	H1	H2	H3
Legato	sustain XF	normal	fast

**12 KLB Perf-Marcato Speed****Samples: 1736 RAM: 108 MB**

Interval performances: Marcato normal and fast

Monophonic, Speed controller

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

	H1	H2
Marcato	normal	fast

**13 KLB Perf-Glissando - All****Samples: 664 RAM: 41 MB**

Glissando performances

Slow and fast, minor 2nd to octave

Monophonic

**Matrix switches:** Vertical: Modwheel, 2 zones

	perf. glissando
V1	slow
V2	fast

**14 KLB Short notes - All****Samples: 1970 RAM: 123 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. med.	port.long norm.	port.long hard	port.long soft

**15 KLB 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
medium dyn.	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

**16 KLB Dynamics - Large****Samples: 2474 RAM: 154 MB**

Dynamics

Crescendo and diminuendo, light 1.5, 2, 3, and 4 sec., medium and strong 2, 3, 4, and 6 sec.

Crescendo-diminuendo 2, 3, 4, and 6 sec.

Fortepiano, sforzato, sforzatissimo

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

	C1	C#1	D1	D#1
light dyn.	1.5 sec.	2 sec.	3 sec.	4 sec.
medium dyn.	2 sec.	3 sec.	4 sec.	6 sec.
strong dyn.	2 sec.	3 sec.	4 sec.	6 sec.
cresc-dim	2 sec.	3 sec.	4 sec.	6 sec.
special dyn.	fp	sfz	sffz	sffz

**17 KLB Flutter****Samples: 105 RAM: 6 MB**

Flutter tonguing

Normal, dynamics, and normal/dynamics with Cell crossfading

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

	C1	C#1	D1
flutter	normal.	dynamics	Cell XF

**18 KLB Trills - normal****Samples: 738 RAM: 46 MB**

Trills

Normal and dynamics

Minor 2nd to major 3rd

**Matrix switches:** Horizontal: Keyswitches, C1–C#1 Vertical: Modwheel, 4 zones

	C1	C#1
minor 2nd	normal	dynamics
major 2nd	normal	dynamics
minor 3rd	normal	dynamics
major 3rd	normal	dynamics

**19 KLB Trills - accelerando****Samples: 479    RAM: 29 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

**20 KLB Trills - All****Samples: 1217    RAM: 76 MB**

Trills constant speed and accelerando  
Normal and dynamics  
Minor 2nd to major 3rd (normal) / 2nd (accelerando)

**Matrix switches:** Horizontal: Keyswitches, C1–D#1    Vertical: Modwheel, 4 zones

	normal	norm.dyn.	accelerando	accel.dyn.
V1	min. 2nd	min. 2nd	min. 2nd	min. 2nd
V2	maj. 2nd	maj. 2nd	maj. 2nd	maj. 2nd
V3	min. 3rd	min. 3rd	maj. 2nd	maj. 2nd
V4	maj. 3rd	maj. 3rd	maj. 2nd	maj. 2nd

**21 KLB Glissando - All****Samples: 528    RAM: 33 MB**

Glissandos, slow and fast, minor 2nd to octave  
AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1    Vertical: Modwheel, 2 zones

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

**Matrix - LEVEL 2 C - Repetitions****31 KLB Perf-Repetitions - Combi****Samples: 2331    RAM: 145 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	
V1	legato slow	legato fast	portato fast	staccato slow	staccato fast

**32 KLB Perf-Repetitions - Speed****Samples: 2016    RAM: 126 MB**

Repetition performances  
Slow legato, fast portato, slow and fast staccato  
Speed controller

**Matrix switches:** Horizontal: Speed, 4 zones

	legato	portato	staccato	staccato
speed	slow	fast	slow	fast

**33 KLB Fast-Repetitions****Samples: 315 RAM: 19 MB**

Fast repetitions

140, 150, 160, 170 BPM

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

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

**34 KLB Perf Upbeat Repetitions****Samples: 1008 RAM: 63 MB**

Repetition performances

1 and 2 upbeats, slow and fast

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

	C1	C#1
1 upbeat	slow	fast
2 upbeats	slow	fast

**Matrix - LEVEL 2 D - Scale+Phrase****41 KLB Scale runs-legato - Major****Samples: 420 RAM: 26 MB**

Octave runs, legato, C to B major

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
legato maj.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**42 KLB Scale runs-legato - Major+****Samples: 420 RAM: 26 MB**

Octave runs, legato fast, C to B major

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
legato maj. fast	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**43 KLB Scale runs-legato - Minor****Samples: 420 RAM: 26 MB**

Octave runs, legato, C to B minor

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
legato min.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**44 KLB Scale runs-legato - Special****Samples: 120 RAM: 7 MB**

Octave runs, legato, chromatic and whole tone

AB switch up/down

**Matrix switches:** Vertical: Modwheel, 2 zones

	legato
V1	chromatic
V2	whole tone

**45 KLB Scale runs-legato - all****Samples: 960 RAM: 60 MB**

Octave runs, legato, C to B major and minor, chromatic and whole tone  
AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1 Vertical: Modwheel, 4 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
minor	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
chromatic	%	%	%	%	%	%	%	%	%	%	%	%
whole tone	%	%	%	%	%	%	%	%	%	%	%	%

**51 KLB Arpeggios-legato - Major****Samples: 188 RAM: 11 MB**

Arpeggios, legato, C to B major  
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
legato maj.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**52 KLB Arpeggios-legato - Major+****Samples: 184 RAM: 11 MB**

Arpeggios, legato fast, C to B major  
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
legato maj. fast	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**53 KLB Arpeggios-legato - Minor****Samples: 184 RAM: 11 MB**

Arpeggios, legato, C to B minor  
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
legato min.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**54 KLB Arpeggios-legato - Minor+****Samples: 184 RAM: 11 MB**

Arpeggios, legato fast, C to B minor  
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
legato min. fast	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**55 KLB Arpeggios-legato - All****Samples: 460 RAM: 28 MB**

Arpeggios, legato, C to B major and minor, diminished  
AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
minor	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
diminished	%	%	%	%	%	%	%	%	%	%	%	%



**56 KLB Arpeggios-legato - All+****Samples: 460 RAM: 28 MB**

Arpeggios, legato fast, C to B major and minor, diminished  
AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
minor	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
diminished	%	%	%	%	%	%	%	%	%	%	%	%

**57 KLB Arpeggios-staccato - Major****Samples: 188 RAM: 11 MB**

Arpeggios, staccato, C to B major  
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
staccato maj.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**58 KLB Arpeggios-staccato - Major+****Samples: 188 RAM: 11 MB**

Arpeggios, staccato fast, C to B major  
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
staccato maj. fast	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**59 KLB Arpeggios-staccato - Minor****Samples: 184 RAM: 11 MB**

Arpeggios, staccato, C to B minor  
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
staccato min.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**60 KLB Arpeggios-staccato - Minor+****Samples: 184 RAM: 11 MB**

Arpeggios, staccato fast, C to B minor  
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
staccato min. fast	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

**61 KLB Arpeggios-staccato - All****Samples: 464 RAM: 29 MB**

Arpeggios, staccato, C to B major and minor, diminished  
AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
minor	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
diminished	%	%	%	%	%	%	%	%	%	%	%	%

**62 KLB Arpeggios-staccato - All+****Samples: 464 RAM: 29 MB**

Arpeggios, staccato fast, C to B major and minor, diminished  
AB switch up/down

**Matrix switches:** Horizontal: Keyswitches, C1–B1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
minor	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
diminished	%	%	%	%	%	%	%	%	%	%	%	%

**63 KLB Grace notes - All****Samples: 1389 RAM: 86 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 KLB Legato slow - cre5****Samples: 105 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 KLB Legato fast - cre5****Samples: 110 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 KLB Portato - cre9****Samples: 189 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 KLB Staccato - cre9****Samples: 189 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 KLB Combi - cre5****Samples: 215    RAM: 13 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 KLB Combi - cre9****Samples: 378    RAM: 23 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 KLB Legato slow - dim5****Samples: 105    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 KLB Legato fast - dim5****Samples: 110    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 KLB Portato - dim9****Samples: 189    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 KLB Staccato - dim9****Samples: 189    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 KLB Combi - dim5****Samples: 215    RAM: 13 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 KLB Combi - dim9****Samples: 378    RAM: 23 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

### KLB VSL Preset Level 1

Samples: 4955 RAM: 309 MB

L1 KLB Perf-Legato Speed  
 L1 KLB Articulation Combi  
 L1 KLB Perf-Repetitions Combi

**Keyswitches: C2-D2**

### KLB VSL Preset Level 2

Samples: 10331 RAM: 645 MB

01 KLB Perf-Universal  
 02 KLB Perf-Trill Speed  
 L1 KLB Articulation Combi  
 31 KLB Perf-Repetitions - Combi  
 76 KLB Combi - cre9  
 45 KLB Scale runs-legato - all

**Keyswitches: C2-F2**

## Appendix

In the following, you will find notations and keyboard layout graphics for major and minor scale runs and arpeggios, as well as a list of playing ranges for the individual scale and arpeggio Patches.

### Scale runs - major

C major



C#/Db major



D major



D#/Eb major



E major



F major



F#/Gb major



G major



G#/Ab major



A major



A#/Bb major



B major



## Scale runs - minor

C minor



C#/Db minor



D minor



D#/Eb minor



E minor



F minor



F#/Gb minor



G minor



G#/Ab minor



A minor



A#/Bb minor

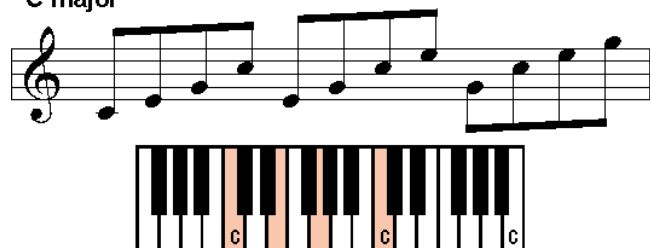


B minor

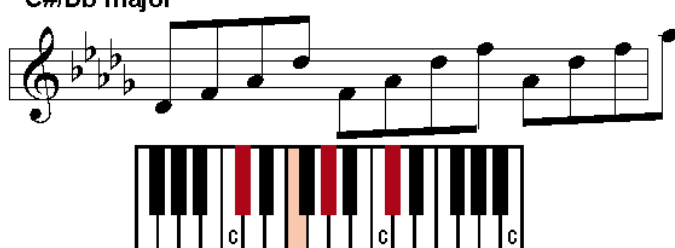


# Arpeggios – major

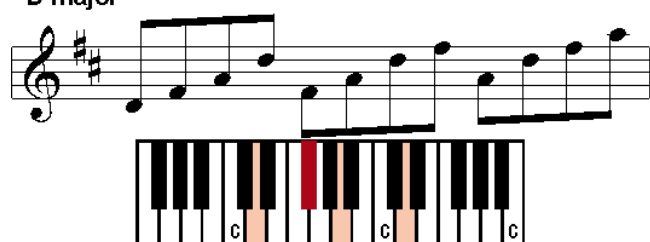
C major



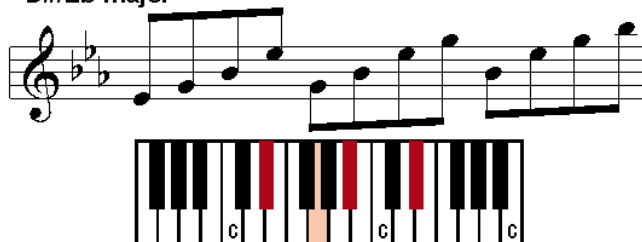
C#/Db major



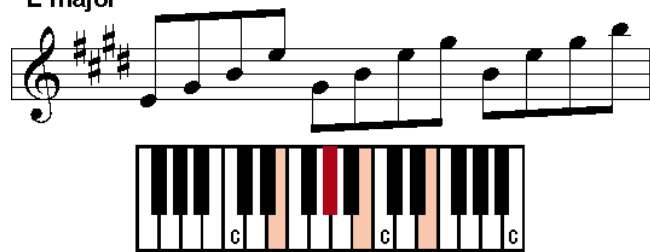
D major



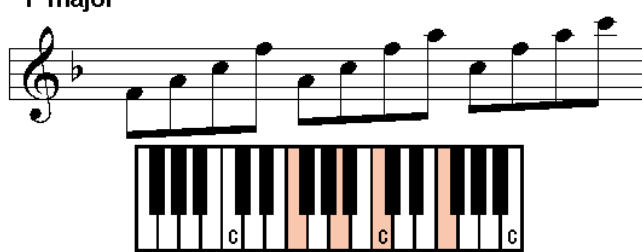
D#/Eb major



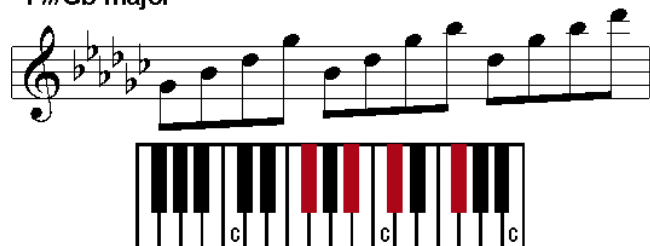
E major



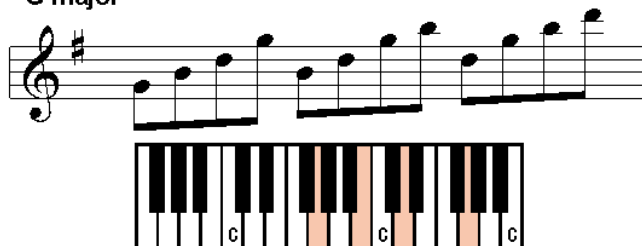
F major



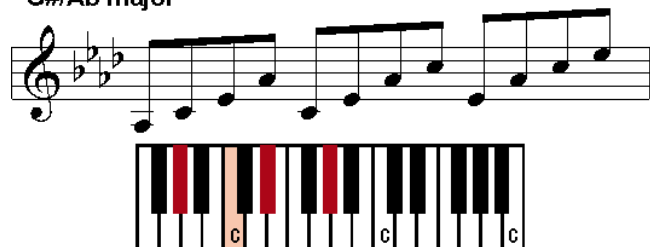
F#/Gb major



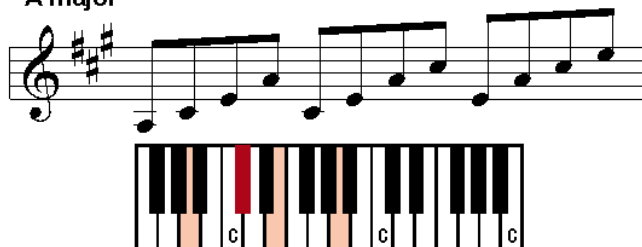
G major



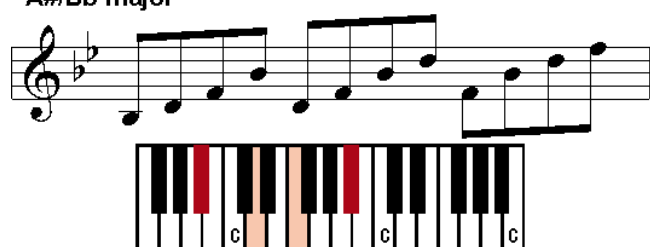
G#/Ab major



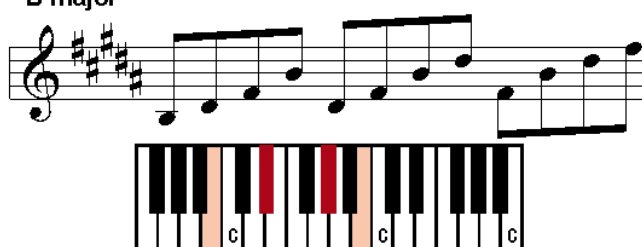
A major



A#/Bb major



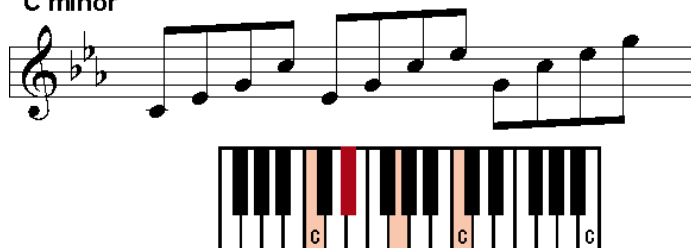
B major



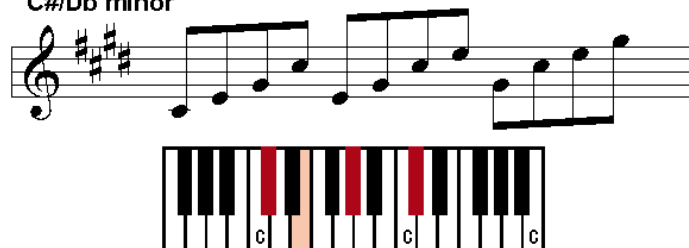


# Arpeggios – minor

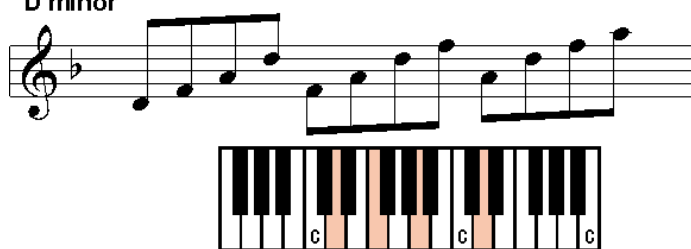
C minor



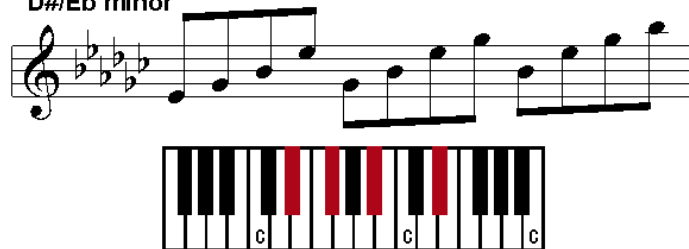
C#/Db minor



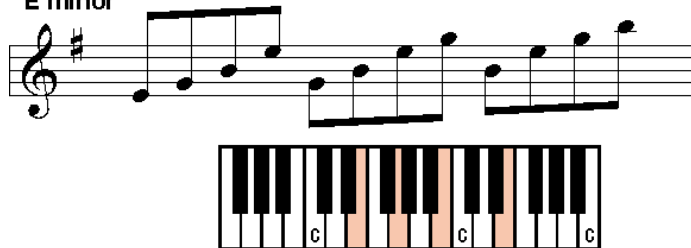
D minor



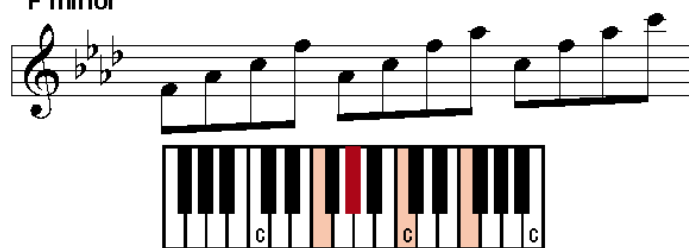
D#/Eb minor



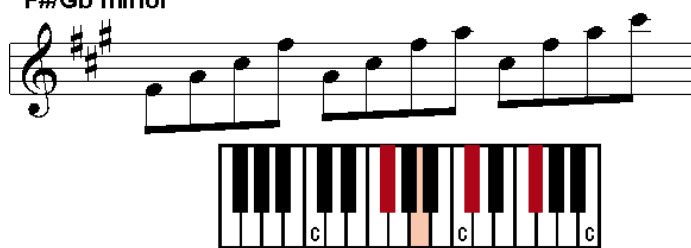
E minor



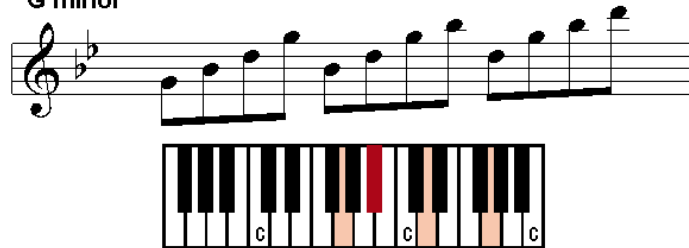
F minor



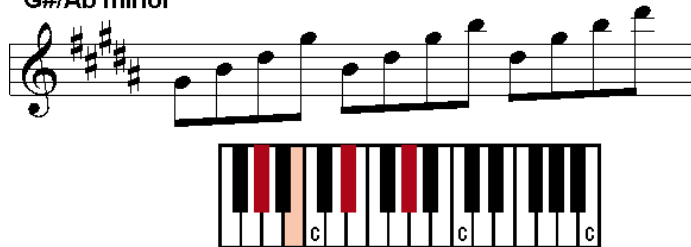
F#/Gb minor



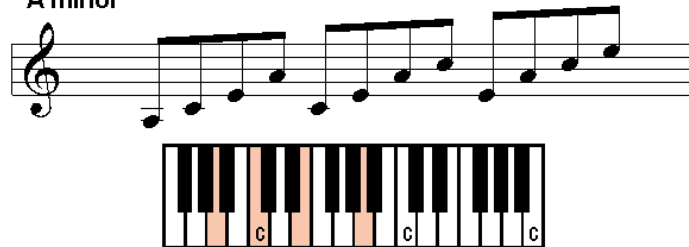
G minor



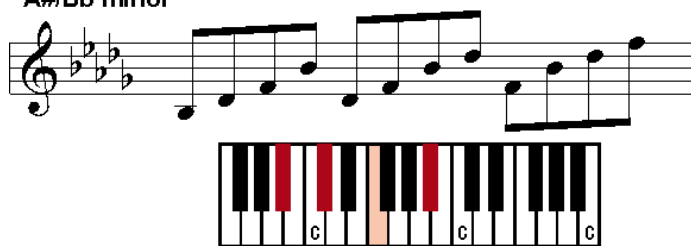
G#/Ab minor



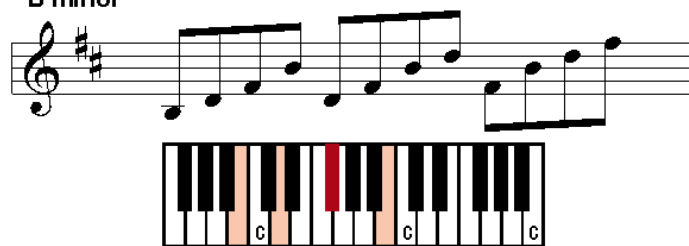
A minor



A#/Bb minor



B minor



## Scale and arpeggio ranges

### Octave runs

#### Legato major

	play range
01 KLB_run-leg_C-ma	D3–G6
02 KLB_run-leg_C#-ma	C#3–A#6
03 KLB_run-leg_D-ma	D3–A6
04 KLB_run-leg_D#-ma	D3–G#6
05 KLB_run-leg_E-ma	D#3–F#6
06 KLB_run-leg_F-ma	D3–F6
07 KLB_run-leg_F#-ma	D#3–F#6
08 KLB_run-leg_G-ma	D3–G6
09 KLB_run-leg_G#-ma	D#3–G6
10 KLB_run-leg_A-ma	E3–G#6
11 KLB_run-leg_A#-ma	D3–G6
12 KLB_run-leg_B-ma	C#3–F#6

#### Legato minor

	play range
01 KLB_run-leg_C-mi	D3–G6
02 KLB_run-leg_C#-mi	D#3–F#6
03 KLB_run-leg_D-mi	D3–G6
04 KLB_run-leg_D#-mi	D3–F#6
05 KLB_run-leg_E-mi	D#3–G6
06 KLB_run-leg_F-mi	C#3–F6
07 KLB_run-leg_F#-mi	D3–F#6
08 KLB_run-leg_G-mi	D3–F#6
09 KLB_run-leg_G#-mi	D#3–G6
10 KLB_run-leg_A-mi	D3–F6
11 KLB_run-leg_A#-mi	D#3–F#6
12 KLB_run-leg_B-mi	C#3–F#6

#### Legato major faster

	play range
01 KLB_run-leg+_C-ma	D3–G6
02 KLB_run-leg+_C#-ma	C#3–F#6
03 KLB_run-leg+_D-ma	D3–G6
04 KLB_run-leg+_D#-ma	D3–F6
05 KLB_run-leg+_E-ma	D#3–F#6
06 KLB_run-leg+_F-ma	D3–F6
07 KLB_run-leg+_F#-ma	D#3–F#6
08 KLB_run-leg+_G-ma	D3–F#6
09 KLB_run-leg+_G#-ma	D#3–G6
10 KLB_run-leg+_A-ma	C#3–F#6
11 KLB_run-leg+_A#-ma	D3–G6
12 KLB_run-leg+_B-ma	C#3–F#6

### Arpeggios

#### Legato major

	play range
01_KLB_arp-leg_C-ma	E3–G6
02_KLB_arp-leg_C#-ma	C#3–F6
03_KLB_arp-leg_D-ma	D3–F#6
04_KLB_arp-leg_D#-ma	D#3–G6
05_KLB_arp-leg_E-ma	E3–G#6
06_KLB_arp-leg_F-ma	F3–F6
07_KLB_arp-leg_F#-ma	F#3–F#6
08_KLB_arp-leg_G-ma	D3–G6
09_KLB_arp-leg_G#-ma	D#3–G#6
10_KLB_arp-leg_A-ma	C#3–E6
11_KLB_arp-leg_A#-ma	D3–F6
12_KLB_arp-leg_B-ma	D#3–F#6

#### Legato major fast

	play range
01_KLB_arp-leg+_C-ma	E3–G6
02_KLB_arp-leg+_C#-ma	C#3–F6
03_KLB_arp-leg+_D-ma	D3–F#6
04_KLB_arp-leg+_D#-ma	D#3–D#6
05_KLB_arp-leg+_E-ma	E3–E6
06_KLB_arp-leg+_F-ma	F3–F6
07_KLB_arp-leg+_F#-ma	F#3–F#6
08_KLB_arp-leg+_G-ma	D3–G6
09_KLB_arp-leg+_G#-ma	D#3–G#6
10_KLB_arp-leg+_A-ma	C#3–E6
11_KLB_arp-leg+_A#-ma	D3–F6
12_KLB_arp-leg+_B-ma	D#3–F#6

**Legato minor**

	<b>play range</b>
01_KLB_arp-leg_C-mi	D#3–G6
02_KLB_arp-leg_C#-mi	C#3–E6
03_KLB_arp-leg_D-mi	D3–F6
04_KLB_arp-leg_D#-mi	D#3–F#6
05_KLB_arp-leg_E-mi	E3–G6
06_KLB_arp-leg_F-mi	F3–F6
07_KLB_arp-leg_F#-mi	F#3–F#6
08_KLB_arp-leg_G-mi	D3–G6
09_KLB_arp-leg_G#-mi	D#3–G#6
10_KLB_arp-leg_A-mi	E3–E6
11_KLB_arp-leg_A#-mi	F3–F6
12_KLB_arp-leg_B-mi	D3–F#6

**Legato minor fast**

	<b>play range</b>
01_KLB_arp-leg_C-mi+	D#3–G6
02_KLB_arp-leg_C#-mi+	C#3–E6
03_KLB_arp-leg_D-mi+	D3–F6
04_KLB_arp-leg_D#-mi+	D#3–F#6
05_KLB_arp-leg_E-mi+	E3–G6
06_KLB_arp-leg_F-mi+	F3–F6
07_KLB_arp-leg_F#-mi+	F#3–F#6
08_KLB_arp-leg_G-mi+	D3–G6
09_KLB_arp-leg_G#-mi+	D#3–G#6
10_KLB_arp-leg_A-mi+	E3–E6
11_KLB_arp-leg_A#-mi+	F3–F6
12_KLB_arp-leg_B-mi+	D3–F#6

**Staccato major**

	<b>play range</b>
01_KLB_arp-sta_C-ma	E3–G6
02_KLB_arp-sta_C#-ma	C#3–F6
03_KLB_arp-sta_D-ma	D3–F#6
04_KLB_arp-sta_D#-ma	D#3–G6
05_KLB_arp-sta_E-ma	E3–G#6
06_KLB_arp-sta_F-ma	F3–F6
07_KLB_arp-sta_F#-ma	F#3–F#6
08_KLB_arp-sta_G-ma	D3–G6
09_KLB_arp-sta_G#-ma	D#3–G#6
10_KLB_arp-sta_A-ma	C#3–E6
11_KLB_arp-sta_A#-ma	D3–F6
12_KLB_arp-sta_B-ma	D#3–F#6

**Staccato major fast**

	<b>play range</b>
01_KLB_arp-sta+_C-ma	E3–G6
02_KLB_arp-sta+_C#-ma	C#3–F6
03_KLB_arp-sta+_D-ma	D3–F#6
04_KLB_arp-sta+_D#-ma	D#3–G6
05_KLB_arp-sta+_E-ma	E3–G#6
06_KLB_arp-sta+_F-ma	F3–F6
07_KLB_arp-sta+_F#-ma	F#3–F#6
08_KLB_arp-sta+_G-ma	D3–G6
09_KLB_arp-sta+_G#-ma	D#3–G#6
10_KLB_arp-sta+_A-ma	C#3–E6
11_KLB_arp-sta+_A#-ma	D3–F6
12_KLB_arp-sta+_B-ma	D#3–F#6

**Staccato minor**

	<b>play range</b>
01_KLB_arp-sta_C-mi	D#3–G6
02_KLB_arp-sta_C#-mi	C#3–E6
03_KLB_arp-sta_D-mi	D3–F6
04_KLB_arp-sta_D#-mi	D#3–F#6
05_KLB_arp-sta_E-mi	E3–G6
06_KLB_arp-sta_F-mi	F3–F6
07_KLB_arp-sta_F#-mi	F#3–F#6
08_KLB_arp-sta_G-mi	D3–G6
09_KLB_arp-sta_G#-mi	D#3–G#6
10_KLB_arp-sta_A-mi	E3–E6
11_KLB_arp-sta_A#-mi	F3–F6
12_KLB_arp-sta_B-mi	D3–F#6

**Staccato minor fast**

	<b>play range</b>
01_KLB_arp-sta_C-mi+	D#3–G6
02_KLB_arp-sta_C#-mi+	C#3–E6
03_KLB_arp-sta_D-mi+	D3–F6
04_KLB_arp-sta_D#-mi+	D#3–F#6
05_KLB_arp-sta_E-mi+	E3–G6
06_KLB_arp-sta_F-mi+	F3–F6
07_KLB_arp-sta_F#-mi+	F#3–F#6
08_KLB_arp-sta_G-mi+	D3–G6
09_KLB_arp-sta_G#-mi+	D#3–G#6
10_KLB_arp-sta_A-mi+	E3–E6
11_KLB_arp-sta_A#-mi+	F3–F6
12_KLB_arp-sta_B-mi+	D3–F#6