

Vienna Instruments
Solo Download Instruments
Bass Clarinet
Full Library

Contents

Introduction	3
'Full' Library	3
Data paths and Patch name conventions	3
Patch information	3
Interval performances	4
Matrix information	4
Preset information	5
Abbreviations	5
Articulations	6
The orchestra	7
Pitch	7
41 Bass Clarinet	8
The Instrument	8
Patches	9
01 SHORT + LONG NOTES	9
02 DYNAMICS	9
03 FLATTER + TRILLS	11
10 PERF INTERVAL	12
11 PERF INTERVAL FAST	12
12 PERF TRILL	12
13 PERF REPETITION	12
14 SCALE RUNS	13
98 RESOURCES	14
01 Perf Rep dyn	14
02 Long Notes - Single Layer	15
03 Perf Speed variation	15
99 RELEASE	15
Matrices	16
Matrix - LEVEL 1	16
Matrix - LEVEL 2 A - Advanced	16
Matrix - LEVEL 2 B - Standard	17
Matrix - LEVEL 2 C - Repetitions	18
Matrix - LEVEL 2 D - Scale+Phrase	19
Matrix - LEVEL 2 E - Keyswitch Vel	20
Presets	22
Appendix	23
Scale runs - major	23
Scale runs - minor	24
Scale ranges	25
Octave runs	25

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 Bass Clarinet. 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

41 Bass Clarinet	
01 SHORT + LONG NOTES	Staccato Portato short and medium Sustained with and without vibrato
02 DYNAMICS	Medium dynamics 1.5, 2, 3, and 4 sec. Strong dynamics, 3, 4, and 6 sec. pfp, 2, 3, 4, 6, 8, 10 sec. Fortepiano, sforzato, sforzatissimo
03 FLATTER + TRILLS	Flutter tonguing Trills, minor and major 2nd, normal and dynamics
10 PERF INTERVAL	Legato Marcato
11 PERF INTERVAL FAST	Legato Marcato
12 PERF TRILL	Trills, legato, minor 2nd to major 3rd
13 PERF REPETITION	Legato, portato, staccato Dynamics for all repetitions
14 SCALE RUNS	Octave runs, legato, up and down major and minor from C to B key, chromatic and whole tone

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.

41 Bass Clarinet

The Instrument

Description

The bass clarinet is the bass instrument of the clarinet family.

It has been used to provide the bass voice in the orchestra woodwind section since the middle of the 19th century, a role it shares with the bassoon. The bass clarinet is appreciated for its expressive timbre, which is often poetically described as "dark velvet". Generally one bass clarinet is used in the orchestra, only rarely two are found.

Range and notation

Modern bass clarinets in Bb have a range of Bb1–B5. Nowadays music for the bass clarinet is written in treble clef. The sound is a major ninth lower than written.

Sound characteristics

Mellow, gentle, soft, dark, velvety, round, substantial, sonorous, forceful, plain, lively, warm, mild, sighing, earthy, somber, shadowy, melancholy, pale, weak, reedy, hollow.

The bass clarinet sounds much softer than the bassoon, especially at piano levels.

Its dynamic spectrum is impressive: as on the clarinet, a ppp can be played, which fades away to nothing.

The low register sounds dark, mellow, sonorous and insistent and is favored particularly for serene and solemn passages.

The lowest notes up to A2 have an especially dark and somber timbre. The bright, powerful, full-sounding and brilliant notes of the upper register are often used as a middle voice in the orchestra.

Combination with other instruments

The bass clarinet performs bass tasks in the orchestra and is combined with all the other bass instruments to fulfill this role. The characteristics of the low notes mean they are also used to play eloquent, solemn and emotive solos at moderate tempos. The full-sounding upper register is very well suited to thematic tasks.

Patches

01 SHORT + LONG NOTES

Range: A#1–B5



01 BKL_staccato

Samples: 400

RAM: 25 MB

Staccato
4 velocity layers
4 Alternations

02 BKL_portato_short

Samples: 400

RAM: 25 MB

Portato, short
4 velocity layers
4 Alternations

03 BKL_portato_medium

Samples: 400

RAM: 25 MB

Portato, medium
4 velocity layers
4 Alternations

04 BKL_por_lo_noVib

Samples: 400

RAM: 25 MB

Portato, long, without vibrato
4 velocity layers
Release samples
2 Alternations

11 BKL_sus_noVib

Samples: 400

RAM: 25 MB

Sustained, without vibrato
4 velocity layers
Release samples

02 DYNAMICS

Range: A#1–B5



01 BKL_dyn-me_1'5s

Samples: 200

RAM: 12 MB

Medium crescendo and diminuendo, 1.5 sec.
2 velocity layers
AB switch: crescendo/diminuendo

02 BKL_dyn-me_2s

Samples: 200

RAM: 12 MB

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

03 BKL_dyn-me_3s

Samples: 200

RAM: 12 MB

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

04 BKL_dyn-me_4s		Samples: 200	RAM: 12 MB
Medium crescendo and diminuendo, 4 sec. 2 velocity layers AB switch: crescendo/diminuendo			
05 BKL_dyn-str_3s		Samples: 100	RAM: 6 MB
Strong crescendo and diminuendo, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo			
06 BKL_dyn-str_4s		Samples: 100	RAM: 6 MB
Strong crescendo and diminuendo, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo			
07 BKL_dyn-str_6s		Samples: 100	RAM: 6 MB
Strong crescendo and diminuendo, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo			
08 BKL_pfp_2s	Range: A#1–A#5	Samples: 50	RAM: 3 MB
Crescendo-diminuendo, 2 sec. 2 velocity layers			
09 BKL_pfp_3s	Range: A#1–A#5	Samples: 50	RAM: 3 MB
Crescendo-diminuendo, 3 sec. 2 velocity layers			
10 BKL_pfp_4s	Range: A#1–A#5	Samples: 50	RAM: 3 MB
Crescendo-diminuendo, 4 sec. 2 velocity layers			
11 BKL_pfp_6s	Range: A#1–A#5	Samples: 50	RAM: 3 MB
Crescendo-diminuendo, 6 sec. 2 velocity layers			
12 BKL_pfp_8s	Range: A#1–A#5	Samples: 50	RAM: 3 MB
Crescendo-diminuendo, 8 sec. 2 velocity layers			
13 BKL_pfp_10s	Range: A#1–A#5	Samples: 50	RAM: 3 MB
Crescendo-diminuendo, 10 sec. 2 velocity layers			
14 BKL_fp		Samples: 50	RAM: 3 MB
Fortepiano 1 velocity layer 2 Alternations			

15 BKL_sfz		Samples: 50	RAM: 3 MB
Sforzato 1 velocity layer 2 Alternations			
16 BKL_sffz		Samples: 50	RAM: 3 MB
Sforzatissimo 1 velocity layer 2 Alternations			
03 FLATTER + TRILLS			
01 BKL_flutter	Range: A#1–A#4	Samples: 72	RAM: 4 MB
Flutter tonguing 1 velocity layer Release samples			
11 BKL_trill_1	Range: A#1–A#5	Samples: 196	RAM: 12 MB
Trills, minor 2nd 2 velocity layers Release samples			
12 BKL_trill_2	Range: A#1–A5	Samples: 192	RAM: 12 MB
Trills, major 2nd 2 velocity layers Release samples			
13 BKL_trill_1_dyn	Range: A#1–A#5	Samples: 98	RAM: 6 MB
Trills, crescendo and diminuendo, minor 2nd 1 velocity layer AB switch: crescendo/diminuendo			
14 BKL_trill_2_dyn	Range: A#1–A5	Samples: 96	RAM: 6 MB
Trills, crescendo and diminuendo, major 2nd 1 velocity layer AB switch: crescendo/diminuendo			



10 PERF INTERVAL**Range: A#1–F#5****01 BKL_perf-legato****Samples: 1126 RAM: 70 MB**

Legato
2 velocity layers
Release samples

02 BKL_perf-marcato**Samples: 1216 RAM: 76 MB**

Marcato
2 velocity layers
Release samples

11 PERF INTERVAL FAST**Range: A#1–F#5****01 BKL_perf-legato_fa****Samples: 1294 RAM: 80 MB**

Legato, fast
2 velocity layers
Release samples

02 BKL_perf-marcato_fa**Samples: 1294 RAM: 80 MB**

Marcato, fast
2 velocity layers
Release samples

12 PERF TRILL**Range: A#1–F#5****01 BKL_perf-trill****Samples: 2894 RAM: 180 MB**

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

13 PERF REPETITION**Range: A#1–A#5****01 BKL_perf-rep_leg****Samples: 250 RAM: 15 MB**

Legato
2 velocity layers

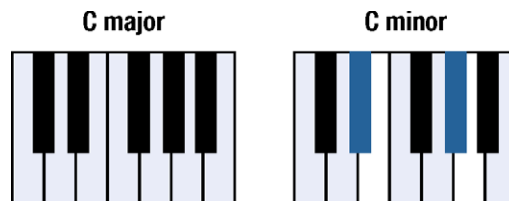
02 BKL_perf-rep_por**Samples: 450 RAM: 28 MB**

Portato
2 velocity layers

03 BKL_perf-rep_sta	Samples: 450	RAM: 28 MB
Staccato 2 velocity layers		
21 BKL_perf-rep_dyn5_leg	Samples: 250	RAM: 15 MB
Legato dynamics, 5 repetitions 1 velocity layer AB switch: crescendo/diminuendo		
22 BKL_perf-rep_dyn9_por	Samples: 450	RAM: 28 MB
Portato dynamics, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo		
23 BKL_perf-rep_dyn9_sta	Samples: 450	RAM: 28 MB
Staccato dynamics, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo		

14 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



01 BKL_run-leg_C-ma (through to B-ma)	Samples: 76	RAM: 4 MB
Octave runs, legato C to B major 2 velocity layers AB switch: up/down		

Legato minor



01 BKL_run-leg_C-mi (through to B-mi)	Samples: 76	RAM: 4 MB
Octave runs, legato C to B minor 2 velocity layers AB switch: up/down		



Special

01 BKL_run-leg_chromatic	Range: A#1–F#5	Samples: 68	RAM: 4 MB
Octave runs, legato Chromatic 2 velocity layers AB switch: up/down			
02 BKL_run-leg_whole	Range: A#1–F#5	Samples: 68	RAM: 4 MB
Octave runs, legato Whole tone 2 velocity layers AB switch: up/down			

98 RESOURCES

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

01 Perf Rep dyn	Range: A#1–A#5		
01 BKL_rep_cre5_leg-1 (2/3/4/5)		Samples: 25	RAM: 1 MB
Extracted repetition Legato, cres, 1st to 5th note 1 velocity layer			
01 BKL_rep_dim5_leg-1 (2/3/4/5)		Samples: 25	RAM: 1 MB
Extracted repetition Legato, dim, 1st to 5th note 1 velocity layer			
02 BKL_rep_cre9_por-1 (2/3/4/5/6/7/8/9)		Samples: 25	RAM: 1 MB
Extracted repetition Portato, cres, 1st to 9th note 1 velocity layer			
02 BKL_rep_dim9_por-1 (2/3/4/5/6/7/8/9)		Samples: 25	RAM: 1 MB
Extracted repetition Portato, dim, 1st to 9th note 1 velocity layer			
03 BKL_rep_cre9_sta-1 (2/3/4/5/6/7/8/9)		Samples: 25	RAM: 1 MB
Extracted repetition Staccato, cres, 1st to 9th note 1 velocity layer			

03 BKL_rep_dim9_sta-1 (2/3/4/5/6/7/8/9)**Samples: 25****RAM: 1 MB**

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

02 Long Notes - Single Layer**Range: A#1–B5****01 BKL_sus_pp****Samples: 100****RAM: 6 MB**

Sustained, pianissimo
 1 velocity layer
 Release samples

02 BKL_sus_mp**Samples: 100****RAM: 6 MB**

Sustained, mezzopiano
 1 velocity layer
 Release samples

03 BKL_sus_mf**Samples: 100****RAM: 6 MB**

Sustained, mezzoforte
 1 velocity layer
 Release samples

04 BKL_sus_f**Samples: 100****RAM: 6 MB**

Sustained, forte
 1 velocity layer
 Release samples

03 Perf Speed variation**Range: A#1–F#5****01 BKL_perf-leg_sustain****Samples: 1126****RAM: 70 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 BKL Articulation Combi

Samples: 2060 RAM: 128 MB

Single note articulations

Staccato, portato short, sustained without vibrato, portato long without vibrato, crescendo-diminuendo 2 and 4 sec., fortepiano and sforzato, flutter tonguing, 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 2 sec.	fp	flutter	trill half
V2	port. short	port.long no vib.	pfp 4 sec.	sfz	flutter	trill whole

L1 BKL Perf-Legato Speed

Samples: 1470 RAM: 91 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 BKL Perf-Repetitions Combi

Samples: 1150 RAM: 71 MB

Repetition performances

Legato

Portato

Staccato

Matrix switches: Vertical: Modwheel, 3 zones

	repetitions
V1	legato
V2	portato
V3	staccato

Matrix - LEVEL 2 A - Advanced

O1 BKL Perf-Universal

Samples: 2930 RAM: 183 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 BKL Perf-Trill Speed**Samples: 3238 RAM: 202 MB**

Multi interval performances
 Legato and trills
 Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
V1	legato	trills

03 BKL Short+Long notes - All**Samples: 1800 RAM: 112 MB**

Single notes
 Staccato, portato short and medium
 Sustained and long portato without vibrato

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

	C1	C#1	D1	D#1
V1	staccato	portato short	port. medium	sus. no vibrato
V2	%	%	%	port.long no vib.

Matrix - LEVEL 2 B - Standard**11 BKL Perf-Legato Speed****Samples: 1470 RAM: 91 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 BKL Perf-Marcato Speed**Samples: 1650 RAM: 103 MB**

Interval performances^mMarcato normal and fast
 Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
Marcato	normal	fast

13 BKL Short notes - All**Samples: 1600 RAM: 100 MB**

Single notes
 Staccato, portato short and medium, and portato long without vibrato

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

	C1	C#1	D1	D#1	E1
V1	staccato	port. short	port. medium	port.long no vib.	

14 BKL Dynamics - Small**Samples: 750 RAM: 46 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 BKL Dynamics - Large**Samples: 1200 RAM: 75 MB**

Dynamics

Crescendo and diminuendo, medium and strong

Crescendo-diminuendo 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatissimo

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

	C1	C#1	D1
V1	dyn.med. 2 sec.	dyn.med. 3 sec.	dyn.med. 4 sec.
V2	dyn.str. 2 sec.	dyn.str. 4 sec.	dyn.str. 6 sec.
V3	pfp 2 sec.	pfp 3 sec.	pfp 4 sec.
V4	fp	sfz	sffz

16 BKL Flatter**Samples: 72 RAM: 4 MB**

Flutter tonguing

17 BKL Trills - normal**Samples: 582 RAM: 36 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

Matrix - LEVEL 2 C - Repetitions**31 BKL Perf-Repetitions - Combi****Samples: 1150 RAM: 71 MB**

Repetition performances

Legato, portato, and staccato

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	legato	portato	staccato

32 BKL Perf-Repetitions - Speed**Samples: 1150 RAM: 71 MB**

Repetition performances
 Legato, portato, and staccato
 Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
V1	legato	portato	staccato

Matrix - LEVEL 2 D - Scale+Phrase**41 BKL Scale runs-legato - Major****Samples: 456 RAM: 28 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 BKL Scale runs-legato - Minor**Samples: 456 RAM: 28 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

43 BKL Scale runs-legato - Special**Samples: 136 RAM: 8 MB**

Octave runs, legato, chromatic and whole tone
 AB switch up/down

Matrix switches: Vertical: Modwheel, 2 zones

	legato
V1	chromatic
V2	whole tone

44 BKL Scale runs-legato - All**Samples: 1048 RAM: 65 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	%	%	%	%	%	%	%	%	%	%	%	%

Matrix - LEVEL 2 E - Keyswitch Vel**71 BKL Legato - cre5****Samples: 125****RAM: 7 MB**

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 BKL Portato - cre9**Samples: 225****RAM: 14 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

73 BKL Staccato - cre9**Samples: 225****RAM: 14 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

74 BKL Combi - cre9**Samples: 450****RAM: 28 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	%	%	%	%	%	%	%	%

75 BKL Legato - dim5**Samples: 125****RAM: 7 MB**

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

76 BKL Portato - dim9**Samples: 225****RAM: 14 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

77 BKL Staccato - dim9**Samples: 225 RAM: 14 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

78 BKL Combi - dim9**Samples: 450 RAM: 28 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

BKL VSL Preset Level 1

Samples: 4490 RAM: 280 MB

L1 BKL Perf-Legato Speed
 L1 BKL Articulation Combi
 L1 BKL Perf-Repetitions Combi
 Preset keyswitches: C6–D6

BKL VSL Preset Level 2

Samples: 9560 RAM: 597 MB

01 BKL Perf-Universal
 02 BKL Perf-Trill Speed
 L1 BKL Articulation Combi
 31 BKL Perf-Repetitions - Combi
 74 BKL Combi - cre9
 44 BKL Scale runs-legato - all
 Preset keyswitches: C6–F6

Appendix

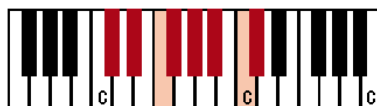
In the following, you will find notations and keyboard layout graphics for major and minor scale runs and arpeggios, as well as a list of playing ranges for the individual scale and arpeggio Patches.

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



Scale ranges

Octave runs

Legato major

	play range
01 BKL_run-leg_C-ma	B1–F5
02 BKL_run-leg_C#-ma	A#1–F5
03 BKL_run-leg_D-ma	B1–F#5
04 BKL_run-leg_D#-ma	A#1–F5
05 BKL_run-leg_E-ma	B1–F#5
06 BKL_run-leg_F-ma	A#1–F5
07 BKL_run-leg_F#-ma	B1–F#5
08 BKL_run-leg_G-ma	A1–E5
09 BKL_run-leg_G#-ma	A#1–F5
10 BKL_run-leg_A-ma	A1–E5
11 BKL_run-leg_A#-ma	A#1–F5
12 BKL_run-leg_B-ma	A#1–E5

Legato minor

	play range
01 BKL_run-leg_C-mi	B1–F5
02 BKL_run-leg_C#-mi	A1–E5
03 BKL_run-leg_D-mi	A#1–F5
04 BKL_run-leg_D#-mi	A#1–F5
05 BKL_run-leg_E-mi	B1–F#5
06 BKL_run-leg_F-mi	A#1–F5
07 BKL_run-leg_F#-mi	B1–F#5
08 BKL_run-leg_G-mi	A#1–D#5
09 BKL_run-leg_G#-mi	B1–E5
10 BKL_run-leg_A-mi	A1–F5
11 BKL_run-leg_A#-mi	A#1–F#5
12 BKL_run-leg_B-mi	A#1–E5