Vienna Instruments
Solo Download Instruments
Horn ensemble
Full Library

Contents

Introduction 4

'Full' Library. 4

Data paths and Patch name conventions 4

Patch information 4

Interval performances 5

Matrix information. 5

Preset information. 6

Abbreviations. 6

Articulations 7

The orchestra 8

Pitch 8

64 Horns - a4 9

The instrument 9

Patches 10

01 SHORT + LONG NOTES. 10

02 DYNAMICS 11

03 FLATTER 12

10 PERF INTERVAL 12

11 PERF INTERVAL FAST 13

12 PERF TRILL 13

13 PERF REPETITION. 13

14 PERF UPBEAT REPETITION 14

15 FAST REPETITION. 15

16 UPBEAT REPETITION. 15

17 ARPEGGIOS 16

18 GLISSANDI. 17

98 RESOURCES 18

01 Perf Rep dyn 18

02 Long Notes - Single Layer 19

03 Perf Speed variation. 20

99 RELEASE 20

Matrices 21

Matrix - LEVEL 1 21

Matrix - LEVEL 2 A - Advanced. 21

Matrix - LEVEL 2 B - Standard 22

Matrix - LEVEL 2 C - Repetitions. 23

Matrix - LEVEL 2 D - Scale+Phrase 25

Matrix - LEVEL 2 E - Keyswitch Vel. 26

Presets 28

64 Horns - a4 stopped 29

Patches 29

01 SHORT + LONG NOTES. 29

02 DYNAMICS 29

10 PERF INTERVAL 30

11 PERF REPETITION. 30

12 FAST REPETITION 31
13 UPBEAT REPETITION 31
98 RESOURCES 31
01 Perf Rep dyn 31
02 Long Notes - Single Layer 32
99 RELEASE 32
Matrices 33
Matrix - LEVEL 2 B - Standard 33
Matrix - LEVEL 2 C - Repetitions 33
Matrix - LEVEL 2 E - Keyswitch Vel 34
Presets 36
Appendix 37
Arpeggios - major 37
Arpeggios - minor 38
Arpeggio ranges 39

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 Horn ensemble. 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
+	faster articulation (runs and arpeggios)
150, 160, …	150, 160, … BPM (beats per minute)
1s, 2s, …	tone length 1 sec., 2 sec., …
acc	accelerando
all	combination of all Patches of a category
arp	arpeggio
blare	"blared" tones (horn)
cre	crescendo
dim	diminuendo
dm	diminished (arpeggios)
dyn	dynamics (crescendo and diminuendo)
dyn5, dyn9	dynamics, 5/9 repetitions
fa	fast
faT	fast triplets
fA	fast attack
fA_auto	attack automation (normal/fast attack)
fast-rep	fast repetitions
flatter	flutter tonguing
fx	effect sound
gliss	glissando
hA	hard attack
leg	legato
li	light

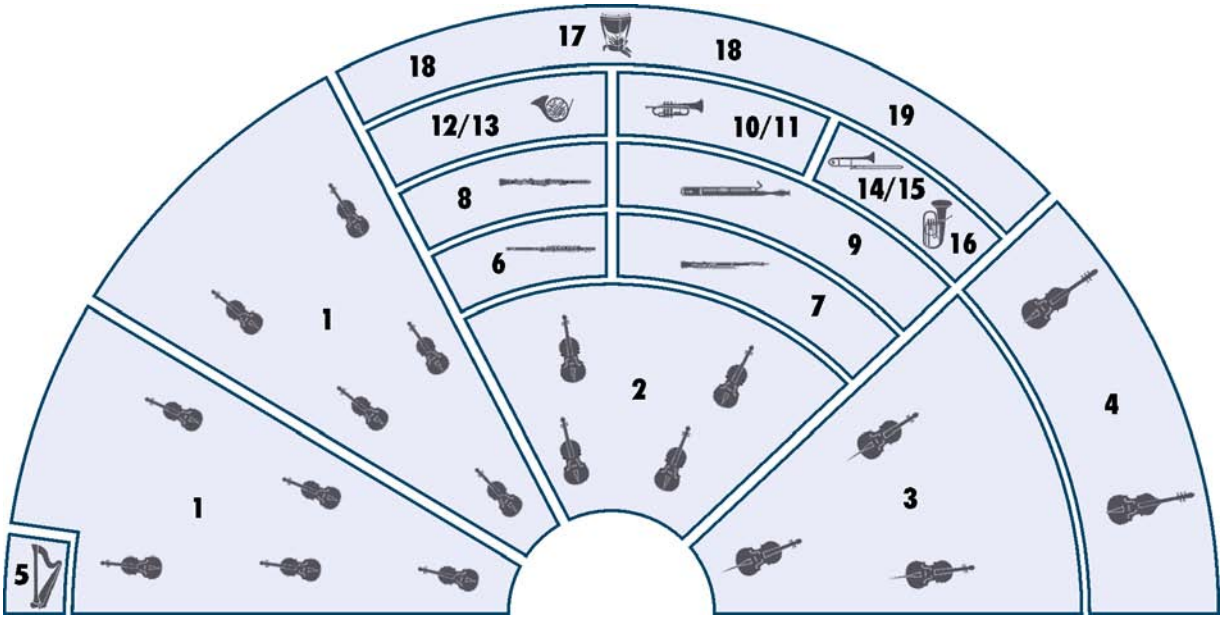
Abbreviation	Meaning
lo	long
ma	major
marc	marcato
me	medium
mi	minor
mord	mordent
mu	muted
muA, muB	muted, variation A/B
nA	normal attack
noVib	without vibrato
perf-rep	repetition performance
por	portato
run	octave run
sA	soft attack
sl	slow
sta, stac	staccato
sto	stopped (horns)
str	strong
sus	sustained
T	triplets
tune	"tuning in" articulation
UB	upbeat
UB-a1, -a2	1, 2 upbeats
v1, v2 …	1st, 2nd, … variation
Vib	with (medium) vibrato
Vib-progr	progressive vibrato
XF	cell crossfade Matrix

Articulations

64 Horns - a4	
01 SHORT + LONG NOTES	Staccato Portato short, medium and long Sustained, normal, marcato, and blared
02 DYNAMICS	Medium crescendo and diminuendo, 1.5, 2, 3, 4, and 6 sec. Strong crescendo and diminuendo, 3, 4, and 6 sec. pfp, 4 and 6 sec. Fortepiano, sforzato, sforzatissimo
03 FLATTER	Flutter tonguing normal and crescendo
10 PERF INTERVAL	Legato, normal and with sustain crossfading Marcato
11 PERF INTERVAL FAST	Legato Marcato
12 PERF TRILL	Trills, legato, minor to major 2nd
13 PERF REPETITION	Legato, portato, staccato Slow and fast Dynamics for all repetitions
14 PERF UPBEAT REPETITION	1 and 2 upbeats, slow and fast, normal and dynamics
15 FAST REPETITION	Staccato, 9 repetitions, 150 to 190 BPM Normal and dynamics
16 UPBEAT REPETITION	1 upbeat, 80–130 BPM 2–3 upbeats, 80–140, 160, and 180 BPM
17 ARPEGGIOS	Arpeggios, staccato Diminished, major and minor from C to B key Up and down, 2 speeds for all
18 GLISSANDI	Performance glissandos, minor 3rd to octave Fixed glissandos, 4th to octave, up and down

The orchestra

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



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

64 Horns - a4

The instrument

Description

The French horn in F is a brass wind instrument with a funnel-shaped mouthpiece.

In the 19th century it became the most important wind instrument in the Romantic orchestra. The brass section of the modern orchestra usually uses four horns, especially large sections may even have six or eight horns.

Range and notation

The horn in F has a range from B1–F5.

It is notated in F; in bass clef and treble clef it is written a fifth higher than it sounds.

Sound characteristics

Full, warm, velvety, clear, bright, intense, heroic, distant, mellow, metallic, powerful, expressive, resounding, sonorous.

Low notes are most effective played *piano*, when forced they take on a slightly rough tone. Ideal for the performance of thematic tasks.

The notes in the middle register sound mellow, full and resounding.

The high notes are soft as velvet, bright and very intense, brilliant. This characteristic horn sound develops best around C5.

Combination with other instruments

The horn blends with all the instrument groups in the orchestra better than any other instrument.

Played together with other brass instruments the horn loses its mellow euphony, for cup and funnel-shaped mouthpieces mutually cancel out their characteristic sounds.

Of the woodwinds, the clarinet and bassoon blend very well with the horn.

Strings combined with horns blend into a homogeneous overall sound.

Patches

01 SHORT + LONG NOTES — Range: G2–E5

01 HO-4_staccato — **Samples: 159** — **RAM: 9 MB**

Staccato
3 velocity layers
4 Alternations

02 HO-4_portato_short — **Samples: 162** — **RAM: 10 MB**

Portato, short
3 velocity layers
4 Alternations

03 HO-4_portato_medium — **Samples: 215** — **RAM: 13 MB**

Portato, medium
4 velocity layers
4 Alternations

04 HO-4_portato_long — **Samples: 162** — **RAM: 10 MB**

Portato, long
3 velocity layers
Release samples
2 Alternations

11 HO-4_sus — **Samples: 162** — **RAM: 10 MB**

Sustained
3 velocity layers
Release samples

12 HO-4_sus_marcato — **Samples: 54** — **RAM: 3 MB**

Sustained, marcato
1 velocity layer
Release samples
2 Alternations

13 HO-4_sus_blare — **Samples: 54** — **RAM: 3 MB**

Sustained, blared
1 velocity layer
Release samples
2 Alternations

02 DYNAMICS Range: G2–E5

01 HO-4_dyn-me_1'5s **Samples: 108** **RAM: 6 MB**

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

02 HO-4_dyn-me_2s **Samples: 108** **RAM: 6 MB**

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

03 HO-4_dyn-me_3s **Samples: 108** **RAM: 6 MB**

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

04 HO-4_dyn-me_4s **Samples: 108** **RAM: 6 MB**

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

05 HO-4_dyn-me_6s **Samples: 108** **RAM: 6 MB**

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

11 HO-4_dyn-str_3s **Samples: 54** **RAM: 3 MB**

Strong crescendo and diminuendo, 3 sec.
1 velocity layer
AB switch: crescendo/diminuendo

12 HO-4_dyn-str_4s **Samples: 54** **RAM: 3 MB**

Strong crescendo and diminuendo, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

13 HO-4_dyn-str_6s **Samples: 54** **RAM: 3 MB**

Strong crescendo and diminuendo, 6 sec.
1 velocity layer
AB switch: crescendo/diminuendo

21 HO-4_pfp_4s **Samples: 14** **RAM: 1 MB**

Crescendo-diminuendo, 4 sec.
1 velocity layer

22 HO-4_pfp_6s **Samples: 14** **RAM: 1 MB**

Crescendo-diminuendo, 6 sec.
1 velocity layer

31 HO-4_fp **Samples: 27** **RAM: 1 MB**

Fortepiano
1 velocity layer
2 Alternations

32 HO-4_sfz **Samples: 27** **RAM: 1 MB**

Sforzato
1 velocity layer
2 Alternations

33 HO-4_sffz **Samples: 27** **RAM: 1 MB**

Sforzatissimo
1 velocity layer
2 Alternations

03 FLATTER Range: G2–E5

01 HO-4_flatter **Samples: 54** **RAM: 3 MB**

Flutter tonguing
1 velocity layer
Release samples

02 HO-4_flatter_cre **Samples: 27** **RAM: 1 MB**

Flutter tonguing, crescendo
1 velocity layer

10 PERF INTERVAL Range: G2–D5

01 HO-4_perf-legato **Samples: 512** **RAM: 32 MB**

Legato
2 velocity layers
Release samples

02 HO-4_perf-legato_sus **Samples: 570** **RAM: 35 MB**

Legato
Sustain crossfading
4 velocity layers
Release samples

03 HO-4_perf-marcato **Samples: 664** **RAM: 41 MB**

Marcato
2 velocity layers
Release samples

11 PERF INTERVAL FAST — Range: G2–D5

01 HO-4_perf-legato_fa — **Samples: 632** — **RAM: 39 MB**

Legato, fast
2 velocity layers
Release samples

02 HO-4_perf-marcato_fa — **Samples: 760** — **RAM: 47 MB**

Marcato, fast
2 velocity layers
Release samples

12 PERF TRILL — Range: G2–D5

01 HO-4_perf-trill — **Samples: 1140** — **RAM: 71 MB**

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

13 PERF REPETITION — Range: G2–E5

01 HO-4_perf-rep_leg-sl — **Samples: 210** — **RAM: 13 MB**

Legato, slow
3 velocity layers

02 HO-4_perf-rep_leg-fa — **Samples: 210** — **RAM: 13 MB**

Legato, fast
3 velocity layers

03 HO-4_perf-rep_por-sl — **Samples: 378** — **RAM: 23 MB**

Portato, slow
3 velocity layers

04 HO-4_perf-rep_por-fa — **Samples: 378** — **RAM: 23 MB**

Portato, fast
3 velocity layers

05 HO-4_perf-rep_sta-sl — **Samples: 378** — **RAM: 23 MB**

Staccato, slow
3 velocity layers

06 HO-4_perf-rep_sta-fa — **Samples: 378** — **RAM: 23 MB**

Staccato, fast
3 velocity layers

21 HO-4_perf-rep_dyn5_leg-sl **Samples: 140** **RAM: 8 MB**

Legato dynamics, slow, 5 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

22 HO-4_perf-rep_dyn5_leg-fa **Samples: 140** **RAM: 8 MB**

Legato dynamics, fast, 5 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

23 HO-4_perf-rep_dyn9_por-sl **Samples: 252** **RAM: 15 MB**

Portato dynamics, slow, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

24 HO-4_perf-rep_dyn9_por-fa **Samples: 252** **RAM: 15 MB**

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

25 HO-4_perf-rep_dyn9_sta-sl **Samples: 252** **RAM: 15 MB**

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

26 HO-4_perf-rep_dyn9_sta-fa **Samples: 252** **RAM: 15 MB**

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

14 PERF UPBEAT REPETITION Range: G2–E5

01 HO-4_perf-rep_UB-a1_sl **Samples: 112** **RAM: 7 MB**

1 upbeat, slow
2 velocity layers

02 HO-4_perf-rep_UB-a2_sl **Samples: 112** **RAM: 7 MB**

2 upbeats, slow
2 velocity layers

03 HO-4_perf-rep_UB-a1_fa **Samples: 112** **RAM: 7 MB**

1 upbeat, fast
2 velocity layers

04 HO-4_perf-rep_UB-a2_fa **Samples: 112** **RAM: 7 MB**

2 upbeats, fast
2 velocity layers

11 HO-4_perf-rep_dyn4_UB-a1_sl **Samples: 112** **RAM: 7 MB**

1 upbeat, slow, dynamics
4 repetitions
1 velocity layer
AB switch crescendo/diminuendo

12 HO-4_perf-rep_dyn4_UB-a2_sl **Samples: 112** **RAM: 7 MB**

2 upbeats, slow, dynamics
4 repetitions
1 velocity layer
AB switch crescendo/diminuendo

13 HO-4_perf-rep_dyn4_UB-a1_fa **Samples: 112** **RAM: 7 MB**

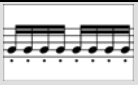
1 upbeat, fast, dynamics
4 repetitions
1 velocity layer
AB switch crescendo/diminuendo

14 HO-4_perf-rep_dyn4_UB-a2_fa **Samples: 112** **RAM: 7 MB**

2 upbeats, fast, dynamics
4 repetitions
1 velocity layer
AB switch crescendo/diminuendo

15 FAST REPETITION

Range: G2–E5



01 HO-4_fast-rep_150 (160/170/180/190) **Samples: 56** **RAM: 3 MB**

Fast repetitions: 150–190 BPM
2 velocity layers
Release samples

11 HO-4_fast-rep_150_dyn (160/170/180/190) **Samples: 28** **RAM: 1 MB**

Fast repetitions
Dynamics, 150–190 BPM
1 velocity layer
AB switch: crescendo/diminuendo

16 UPBEAT REPETITION

A Single Upbeat

Range: G2–E5

01 HO-4_UB-a1_80 (90/100/110/120/130) **Samples: 81** **RAM: 5 MB**

1 upbeat, 80–130 BPM
3 velocity layers

B Double Upbeats

Range: G2–E5

01 HO-4_UB-a2_80 (90/100/110/120/130/140/160/180) **Samples: 81** **RAM: 5 MB**

2 upbeats, 80–140, 160, and 180 BPM
3 velocity layers

C Triple Upbeats

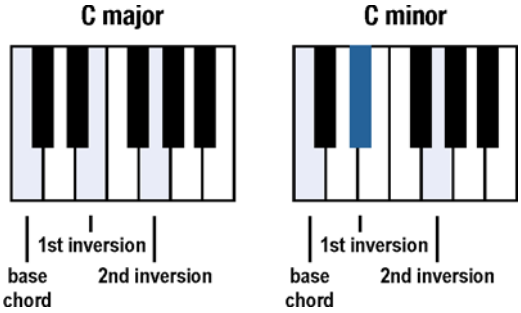
Range: G2–E5

01 HO-4_UB-a3_80 (90/100/110/120/130/140/160/180) **Samples: 81** **RAM: 5 MB**

3 upbeats, 80–140, 160, and 180 BPM
3 velocity layers

17 ARPEGGIOS

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



Staccato diminished

01 HO-4_arp-sta_dm **Range: A2–E5** **Samples: 56** **RAM: 3 MB**

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

Staccato diminished fast

01 HO-4_arp-sta+_dm **Range: A2–E5** **Samples: 56** **RAM: 3 MB**

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

Staccato major

01 HO-4_arp-sta_C-ma (through to B-ma) **Samples: 20** **RAM: 1 MB**

Arpeggios, staccato
C to B major
2 velocity layers
AB switch: up/down

Staccato major fast

01 HO-4_arp-sta+_C-ma (through to B-ma) **Samples: 20** **RAM: 1 MB**

Arpeggios, staccato, fast
C to B major
2 velocity layers
AB switch: up/down

Staccato minor

01 HO-4_arp-sta_C-mi (through to B-mi) **Samples: 20** **RAM: 1 MB**

Arpeggios, staccato
C to B minor
2 velocity layers
AB switch: up/down

Staccato minor fast

01 HO-4_arp-sta_C-mi+ (through to B-mi) **Samples: 20** **RAM: 1 MB**

Arpeggios, staccato, fast
C to B minor
2 velocity layers
AB switch: up/down

18 GLISSANDI **Range: G2–D5**

Please note that fixed glissandos have different up and down ranges.

01 HO-4_perf-gliss **Samples: 244** **RAM: 15 MB**

Glissando, minor 3rd to octave
2 velocity layers
Release samples

11 HO-4_gliss-5 **Samples: 22** **RAM: 1 MB**

Glissando, 4th
1 velocity layer
AB switch: up/down

12 HO-4_gliss-6 **Samples: 20** **RAM: 1 MB**

Glissando, diminished 5th
1 velocity layer
AB switch: up/down

13 HO-4_gliss-7 **Samples: 20** **RAM: 1 MB**

Glissando, 5th
1 velocity layer
AB switch: up/down

14 HO-4_gliss-8 **Samples: 18** **RAM: 1 MB**

Glissando, minor 6th
1 velocity layer
AB switch: up/down

15 HO-4_gliss-9 **Samples: 18** **RAM: 1 MB**

Glissando, major 6th
1 velocity layer
AB switch: up/down

16 HO-4_gliss-10 **Samples: 16** **RAM: 1 MB**

Glissando, minor 7th
1 velocity layer
AB switch: up/down

17 HO-4_gliss-11 **Samples: 16** **RAM: 1 MB**

Glissando, major 7th
1 velocity layer
AB switch: up/down

18 HO-4_gliss-12 **Samples: 16** **RAM: 1 MB**

Glissando, octave
1 velocity layer
AB switch: up/down

98 RESOURCES

Slow legato Interval Performance
Isolated dynamics repetitions: Legato slow and fast, portato, staccato
Single layer long notes

01 Perf Rep dyn Range: G2–E5

01 HO-4_rep_cre5_leg-sl-1 (2/3/4/5) **Samples: 14** **RAM: 1 MB**

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

01 HO-4_rep_dim5_leg-sl-1 (2/3/4/5) **Samples: 14** **RAM: 1 MB**

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

02 HO-4_rep_cre5_leg-fa-1 (2/3/4/5) **Samples: 14** **RAM: 1 MB**

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

02 HO-4_rep_dim5_leg-fa-1 (2/3/4/5) **Samples: 14** **RAM: 1 MB**

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

03 HO-4_rep_cre9_por-1 (2/3/4/5/6/7/8/9) **Samples: 14** **RAM: 1 MB**

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

03 HO-4_rep_dim9_por-1 (2/3/4/5/6/7/8/9) **Samples: 14** **RAM: 1 MB**

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

04 HO-4_rep_cre9_sta-1 (2/3/4/5/6/7/8/9) **Samples: 14** **RAM: 1 MB**

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

04 HO-4_rep_dim9_sta-1 (2/3/4/5/6/7/8/9) **Samples: 14** **RAM: 1 MB**

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

02 Long Notes - Single Layer Range: G2–E5

01 HO-4_sus-p **Samples: 54** **RAM: 3 MB**

Sustained, piano
1 velocity layer
Release samples

02 HO-4_sus-mf **Samples: 54** **RAM: 3 MB**

Sustained, mezzoforte
1 velocity layer
Release samples

03 HO-4_sus-f **Samples: 54** **RAM: 3 MB**

Sustained, forte
1 velocity layer
Release samples

03 Perf Speed variation Range: G2–D5

01 HO-4_perf-legato_slow Samples: 543 RAM: 33 MB

Interval performances
Legato, slow
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 HO-4 Articulation Combi — Samples: 673 RAM: 42 MB

Single note articulations
Staccato, portato short, sustained, marcato crescendo-diminuendo 4 and 6 sec., fortepiano and sforzato, flutter tonguing normal and crescendo

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

	C1	C#1	D1	D#1	E1
V1	staccato	sustained	pfp 4s.	fp	flutter
V2	port. short	marcato	pfp 6s.	sfz	flutter cres.

L1 HO-4 Perf-Legato Speed — Samples: 747 RAM: 46 MB

Interval performances
Legato slow, normal, and fast
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal	fast

L1 HO-4 Perf-Repetitions Combi — Samples: 966 RAM: 60 MB

Repetition performances
Legato slow
Portato slow
Staccato slow

Matrix switches: Vertical: Modwheel, 3 zones

	repetitions
V1	legato slow
V2	portato slow
V3	staccato slow

Matrix - LEVEL 2 A - Advanced

01 HO-4 Perf-Universal — Samples: 1557 RAM: 97 MB

Interval performances
Legato slow, normal, and fast
Marcato normal and fast
Monophonic, Speed controller

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

	H1	H2	H3
legato	slow	normal	fast
marcato	normal	normal	fast

02 HO-4 Perf-Trill Speed — Samples: 1140 RAM: 71 MB

Multi interval performances
Legato and trills
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
V1	legato	trills

03 HO-4 Short+Long notes — Samples: 752 RAM: 47 MB

Single notes
Staccato, portato short and medium
Sustained normal, marcato, and blared

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

	C1	C#1	D1	D#1
V1	staccato	port. short	port.med.	sustained
V2	%	%	%	marcato
V3	%	%	%	blared

Matrix - LEVEL 2 B - Standard

11 HO-4 Perf-Legato Speed — Samples: 747 RAM: 46 MB

Interval performances
Legato slow, normal, and fast
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal	fast

12 HO-4 Perf-Marcato Speed — Samples: 864 RAM: 54 MB

Interval performances^mMarcato normal and fast
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
marcato	normal	fast

13 HO-4 Short notes — Samples: 698 RAM: 43 MB

Single notes
Staccato, portato short, medium, and long

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

	C1	C#1	D1	D#1
V1	staccato	port.short	port.medium	port.long

14 HO-4 Long notes - All — Samples: 216 RAM: 13 MB

Single notes
Sustained normal, marcato, and blared

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
sustained	normal	marcato	blared

15 HO-4 Dynamics - Small — Samples: 405 RAM: 25 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
dyn.medium	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

16 HO-4 Dynamics - Large — Samples: 541 RAM: 33 MB

Dynamics
Medium crescendo and diminuendo, 2, 3, and 4 sec.
Strong crescendo and diminuendo, 3 and 4 sec.
Crescendo-diminuendo, 4 and 6 sec.
Fortepiano, sforzato, sforzatissimo

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

	C1	C#1	D1
dyn.medium	2 sec.	3 sec.	4 sec.
dyn.strong	3 sec.	3 sec.	4 sec.
pfp	4 sec.	4 sec.	6 sec.
fp/sfz/sffz	fp	sfz	sffz

17 HO-4 Flatter — Samples: 81 RAM: 5 MB

Flutter tonguing
Normal, crescendo, and normal/crescendo with Cell crossfading

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
flutter	normal	crescendo	Cell XF

Matrix - LEVEL 2 C - Repetitions

31 HO-4 Perf-Repetitions - Combi — Samples: 1722 RAM: 107 MB

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

Matrix switches: Horizontal: Keyswitches, C1–E1

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

32 HO-4 Perf-Repetitions - Speed — Samples: 1344 RAM: 84 MB

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

Matrix switches: Horizontal: Speed, 4 zones

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

33 HO-4 Fast-Repetitions — Samples: 168 RAM: 10 MB

Fast repetitions: Staccato, 150–190 BPM

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
speed/BPM	150	160	170	180	190

34 HO-4 Perf Upbeat Repetitions — Samples: 448 RAM: 28 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

35 HO-4 Upbeats a1 — Samples: 486 RAM: 30 MB

Repetitions: 1 upbeat, 80–130 BPM

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
speed/BPM	80	90	100	110	120	130

36 HO-4 Upbeats a2 — Samples: 729 RAM: 45 MB

Repetitions: 2 upbeats, 80–140, 160, and 180 BPM

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

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
speed/BPM	80	90	100	110	120	130	140	160	180

37 HO-4 Upbeats a3 — Samples: 729 RAM: 45 MB

Repetitions: 3 upbeats, 80–140, 160, and 180 BPM

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

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
speed/BPM	90	100	110	120	130	140	160	180	200

38 HO-4 Upbeats all — Samples: 1944 RAM: 121 MB

Repetitions: 1–3 upbeats, 80–140, 160, and 180 BPM

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

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
1 upbeat	80	90	100	110	120	130	130	130	130
2 upbeats	80	90	100	110	120	130	140	160	180
3 upbeats	80	90	100	110	120	130	140	160	180

Matrix - LEVEL 2 D - Scale+Phrase

51 HO-4 Arpeggios-staccato - Major — Samples: 112 RAM: 7 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

52 HO-4 Arpeggios-staccato - Major+ — Samples: 112 RAM: 7 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

53 HO-4 Arpeggios-staccato - Minor — Samples: 104 RAM: 6 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

54 HO-4 Arpeggios-staccato - Minor+ — Samples: 104 RAM: 6 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

55 HO-4 Arpeggios-staccato - All — Samples: 272 RAM: 17 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	%	%	%	%	%	%	%	%	%	%	%	%

56 HO-4 Arpeggios-staccato - All+ — Samples: 272 RAM: 17 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	%	%	%	%	%	%	%	%	%	%	%	%

Matrix - LEVEL 2 E - Keyswitch Vel

71 HO-4 Legato slow - cre5 — Samples: 70 — RAM: 4 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 HO-4 Legato fast - cre5 — Samples: 70 — RAM: 4 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 HO-4 Portato - cre9 — Samples: 126 — RAM: 7 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 HO-4 Staccato - cre9 — Samples: 126 — RAM: 7 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 HO-4 Combi - cre5 — Samples: 140 — RAM: 8 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 HO-4 Combi - cre9 — Samples: 252 — RAM: 15 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 HO-4 Legato slow - dim5 — Samples: 70 — RAM: 4 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 HO-4 Legato fast - dim5 — Samples: 70 — RAM: 4 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 HO-4 Portato - dim9 — Samples: 126 — RAM: 7 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 HO-4 Staccato - dim9 — Samples: 126 — RAM: 7 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 HO-4 Combi - dim5 — Samples: 140 — RAM: 8 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 HO-4 Combi - dim9 — Samples: 252 — RAM: 15 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

HO-4 VSL Preset Level 1 **Samples: 2251** **RAM: 140 MB**

L1 HO-4 Perf-Legato Speed
L1 HO-4 Articulation Combi
L1 HO-4 Perf-Repetitions Combi
Preset keyswitches: C6–D6

HO-4 VSL Preset Level 2 **Samples: 4639** **RAM: 289 MB**

01 HO-4 Perf-Universal
02 HO-4 Perf-Trill Speed
L1 HO-4 Articulation Combi
31 HO-4 Perf-Repetitions - Combi
76 HO-4 Combi - cre9
Preset keyswitches: C6–E6

64 Horns - a4 stopped

Patches

01 SHORT + LONG NOTES — Range: A#1–D5

01 HO-4_sto_staccato — **Samples: 114** — **RAM: 7 MB**

Staccato
3 velocity layers
2 Alternations

11 HO-4_sto_sus — **Samples: 114** — **RAM: 7 MB**

Sustained
3 velocity layers
Release samples

02 DYNAMICS — Range: A#1–D5

01 HO-4_sto_dyn-me_1'5s — **Samples: 76** — **RAM: 4 MB**

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

02 HO-4_sto_dyn-me_2s — **Samples: 76** — **RAM: 4 MB**

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

11 HO-4_sto_dyn-str_3s — **Samples: 38** — **RAM: 2 MB**

Strong crescendo and diminuendo, 3 sec.
1 velocity layer
AB switch: crescendo/diminuendo

12 HO-4_sto_dyn-str_4s — **Samples: 38** — **RAM: 2 MB**

Strong crescendo and diminuendo, 4 sec.
1 velocity layer
AB switch: crescendo/diminuendo

21 HO-4_sto_fp — **Samples: 19** — **RAM: 1 MB**

Fortepiano
1 velocity layer

22 HO-4_sto_sfz — **Samples: 19** — **RAM: 1 MB**

Sforzato

1 velocity layer

23 HO-4_sto_sffz **Samples: 19** **RAM: 1 MB**

Sforzatissimo
1 velocity layer

10 PERF INTERVAL Range: A#1–D5

01 HO-4_sto_perf-legato **Samples: 465** **RAM: 29 MB**

Legato
1 velocity layer
Release samples

02 HO-4_sto_perf-legato_sus **Samples: 486** **RAM: 30 MB**

Legato
Sustain crossfading
3 velocity layers
Release samples

11 PERF REPETITION Range: A#1–D5

01 HO-4_sto_perf-rep_leg **Samples: 190** **RAM: 11 MB**

Legato
2 velocity layers

02 HO-4_sto_perf-rep_por **Samples: 342** **RAM: 21 MB**

Portato
2 velocity layers

03 HO-4_sto_perf-rep_sta **Samples: 342** **RAM: 21 MB**

Staccato
2 velocity layers

21 HO-4_sto_perf-rep_dyn5_leg **Samples: 190** **RAM: 11 MB**

Legato dynamics, 5 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

22 HO-4_sto_perf-rep_dyn9_por **Samples: 342** **RAM: 21 MB**

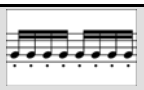
Portato dynamics, 9 repetitions
1 velocity layer
AB switch: crescendo/diminuendo

23 HO-4_sto_perf-rep_dyn9_sta **Samples: 342** **RAM: 21 MB**

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

12 FAST REPETITION

Range: A#1–D5



01 HO-4_sto_fast-rep_140 (150/160/170/180/190) **Samples: 76** **RAM: 4 MB**

Fast repetitions: 140–190 BPM
2 velocity layers
Release samples

06 HO-4_sto_fast-rep_140_dyn (150/160/170/180/190) **Samples: 38** **RAM: 2 MB**

Fast repetitions: Dynamics, 140–190 BPM
1 velocity layer

13 UPBEAT REPETITION

A Single Upbeat

Range: A#1–D5

01 HO-4_sto_UB-a1_90 (100/110/120/130/140) **Samples: 38** **RAM: 2 MB**

1 upbeat, 90–140 BPM
2 velocity layers

B Double Upbeats

Range: A#1–D5

01 HO-4_sto_UB-a2_90 (100/110/120/130/140) **Samples: 38** **RAM: 2 MB**

2 upbeats, 90–140 BPM
2 velocity layers

C Triple Upbeats

Range: A#1–D5

01 HO-4_sto_UB-a3_90 (100/110/120/130/140) **Samples: 38** **RAM: 2 MB**

3 upbeats, 90–140 BPM
2 velocity layers

98 RESOURCES

Isolated dynamics repetitions: Legato, portato, and staccato
Single layer long notes

01 Perf Rep dyn

Range: A#1–D5

01 HO-4_sto_rep_cre5_leg-1 (2/3/4/5) **Samples: 19** **RAM: 1 MB**

Extracted repetitions
Legato, crescendo, 1st to 5th note
1 velocity layer

01 HO-4_sto_rep_dim5_leg-1 (2/3/4/5) **Samples: 19** **RAM: 1 MB**

Extracted repetitions
Legato, diminuendo, 1st to 5th note
1 velocity layer

02 HO-4_sto_rep_cre9_por-1 (2/3/4/5/6/7/8/9) **Samples: 19** **RAM: 1 MB**

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

02 HO-4_sto_rep_dim9_por-1 (2/3/4/5/6/7/8/9) **Samples: 19** **RAM: 1 MB**

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

03 HO-4_sto_rep_cre9_sta-1 (2/3/4/5/6/7/8/9) **Samples: 19** **RAM: 1 MB**

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

03 HO-4_sto_rep_dim9_sta-1 (2/3/4/5/6/7/8/9) **Samples: 19** **RAM: 1 MB**

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

02 Long Notes - Single Layer Range: A#1–D5

01 HO-4_sto_sus-p **Samples: 38** **RAM: 2 MB**

Sustained, piano
1 velocity layer
Release samples

02 HO-4_sto_sus-mf **Samples: 38** **RAM: 2 MB**

Sustained, mezzoforte
1 velocity layer
Release samples

03 HO-4_sto_sus-f **Samples: 38** **RAM: 2 MB**

Sustained, forte
1 velocity layer
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 2 B - Standard

11 HO-4_sto Perf-Legato — Samples: 560 RAM: 35 MB

Interval performances
Legato normal and with sustain crossfading
Monophonic

Matrix switches: Keyswitches, C1–C#1

	C1	C#1
legato	normal	sus-XF

12 HO-4_sto Short + Long notes — Samples: 228 RAM: 14 MB

Single notes: Staccato and sustained

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	staccato	sustained

13 HO-4_sto Dynamics — Samples: 209 RAM: 13 MB

Dynamics
Medium crescendo and diminuendo 2 sec., strong crescendo and diminuendo 3 and 4 sec.
Fortepiano, sforzato, sforzatissimo

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

	C1	C#1	D1
cres/dim	med. 2 sec.	str. 3 sec.	str. 4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

Matrix - LEVEL 2 C - Repetitions

31 HO-4_sto Perf-Repetitions - Combi — Samples: 874 RAM: 54 MB

Repetition performances
Legato, portato, and staccato

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	legato	portato	staccato

32 HO-4_sto Perf-Repetitions - Speed — Samples: 874 RAM: 54 MB

Repetition performances
Legato, portato, and staccato
Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
V1	legato	portato	staccato

33 HO-4_sto Fast-Repetitions — Samples: 266 RAM: 16 MB

Fast repetitions: Staccato, 140–190 BPM

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
speed/BPM	140	150	160	170	180	190

35 HO-4_sto Upbeats a1 — Samples: 228 RAM: 14 MB

Repetitions: 1 upbeat, 90–140 BPM

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
speed/BPM	90	100	110	120	130	140

36 HO-4_sto Upbeats a2 — Samples: 228 RAM: 14 MB

Repetitions: 2 upbeats, 90–140 BPM

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
speed/BPM	90	100	110	120	130	140

37 HO-4_sto Upbeats a3 — Samples: 228 RAM: 14 MB

Repetitions: 3 upbeats, 90–140 BPM

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
speed/BPM	90	100	110	120	130	140

38 HO-4_sto Upbeats all — Samples: 612 RAM: 38 MB

Repetitions: 1–3 upbeats, 90–140 BPM

Matrix switches: Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1
1 upbeat	90	100	110	120	130	140
2 upbeats	90	100	110	120	130	140
3 upbeats	90	100	110	120	130	140

Matrix - LEVEL 2 E - Keyswitch Vel

71 HO-4_sto Legato - cre5 — Samples: 95 RAM: 5 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 HO-4_sto Portato - cre9 — Samples: 171 RAM: 10 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 HO-4_sto Staccato - cre9 — Samples: 171 RAM: 10 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 HO-4_sto Combi - cre9 — Samples: 342 RAM: 21 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 HO-4_sto Legato - dim5 — Samples: 95 RAM: 5 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 HO-4_sto Portato - dim9 — Samples: 171 RAM: 10 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 HO-4_sto Staccato - dim9 — Samples: 171 RAM: 10 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 HO-4_sto Combi - dim9 — Samples: 342 RAM: 21 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

HO-4_sto VSL Preset Level 2 **Samples: 1890** **RAM: 118 MB**

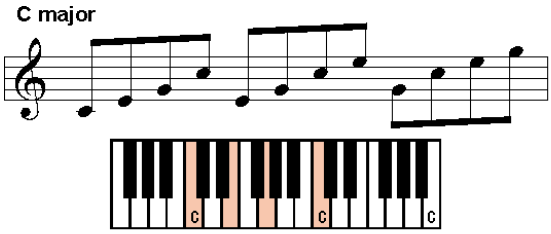
11 HO-4_sto Perf-Legato
11 HO-4_sto Perf-Legato
12 HO-4_sto Short + Long notes
31 HO-4_sto Perf-Repetitions - Combi
74 HO-4_sto Combi - cre9
Preset keyswitches: C6–E6

Appendix

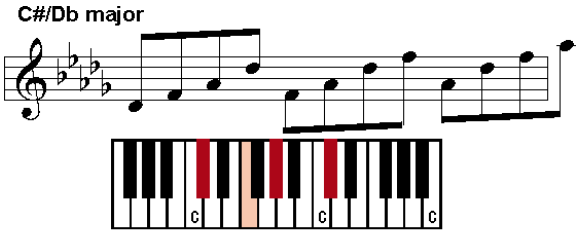
In the following, you will find notations and keyboard layout graphics for major and minor arpeggios, as well as a list of playing ranges for the individual arpeggio Patches.

Arpeggios – major

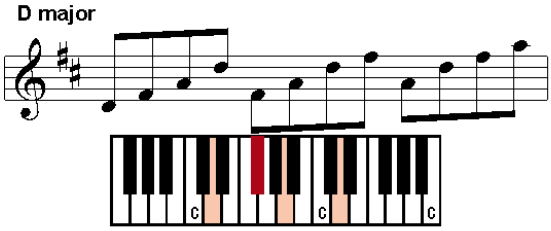
C major



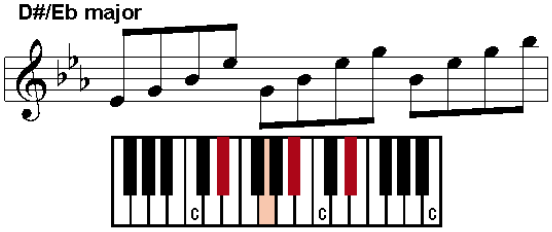
C#/Db major



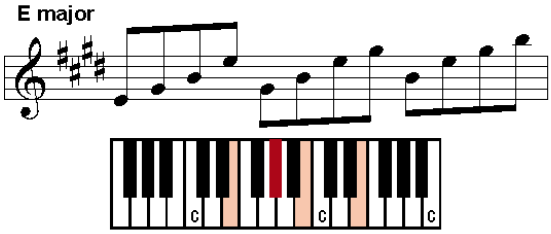
D major



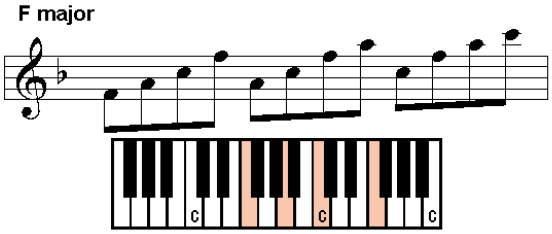
D#/Eb major



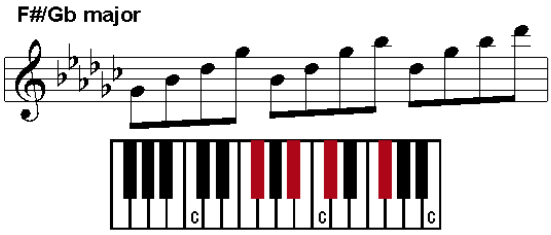
E major



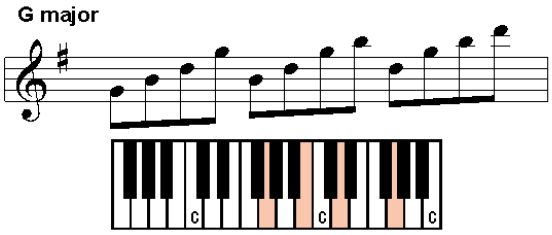
F major



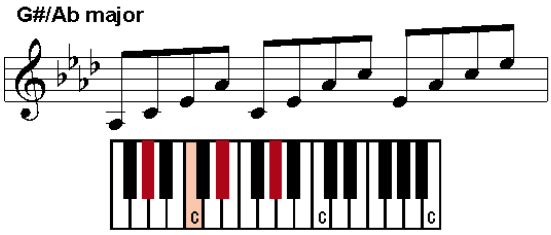
F#/Gb major



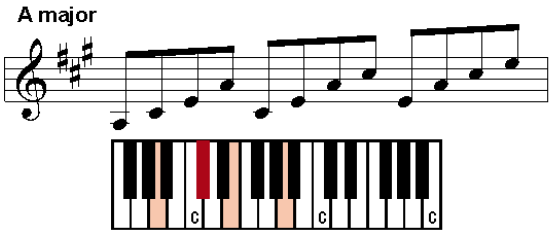
G major



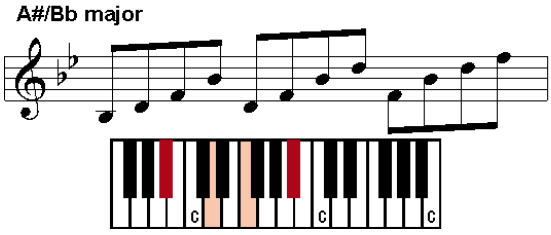
G#/Ab major



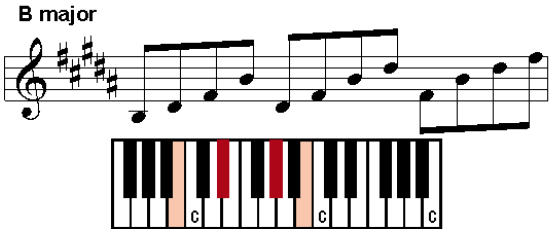
A major



A#/Bb major

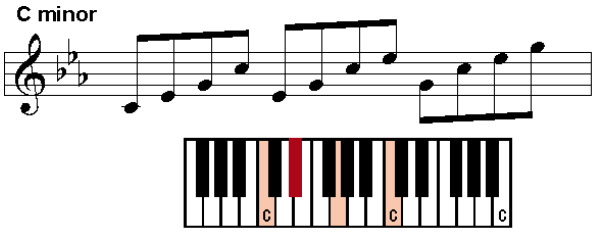


B major

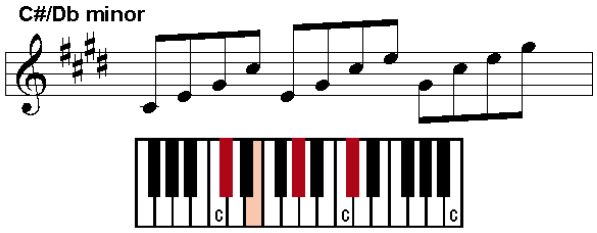


Arpeggios – minor

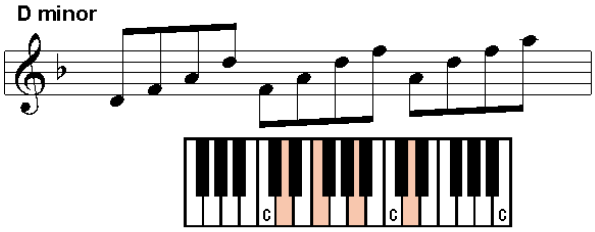
C minor



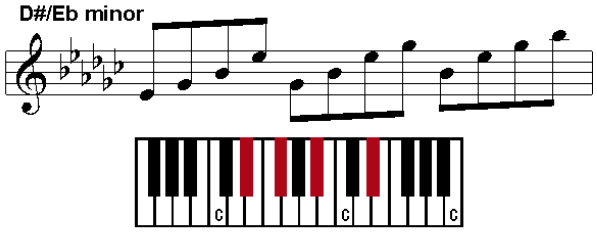
C#/Db minor



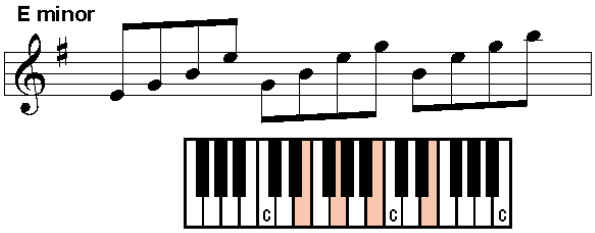
D minor



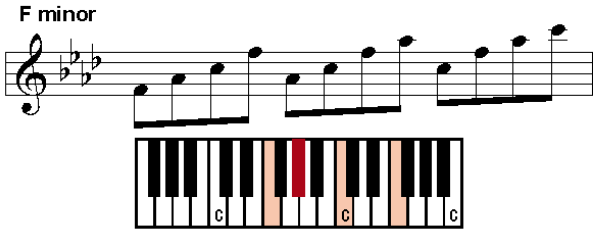
D#/Eb minor



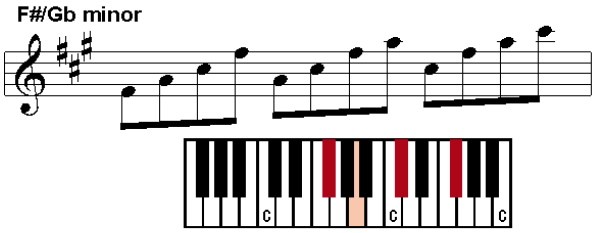
E minor



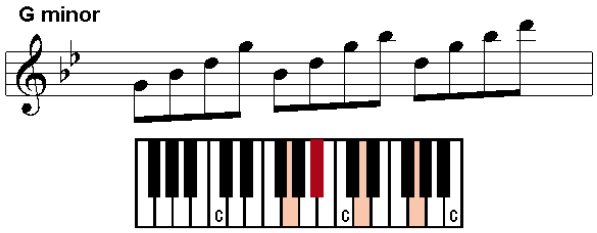
F minor



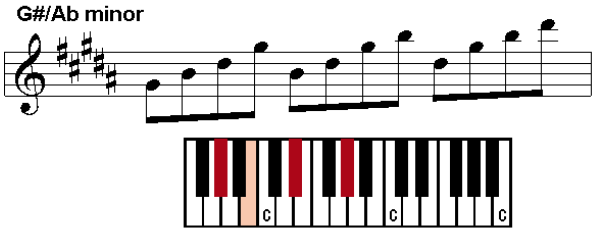
F#/Gb minor



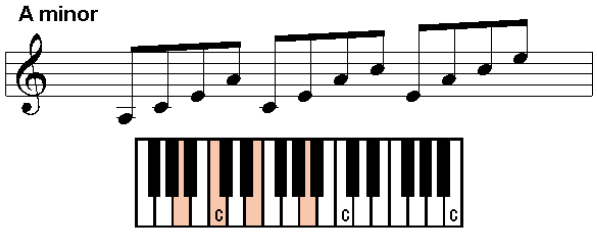
G minor



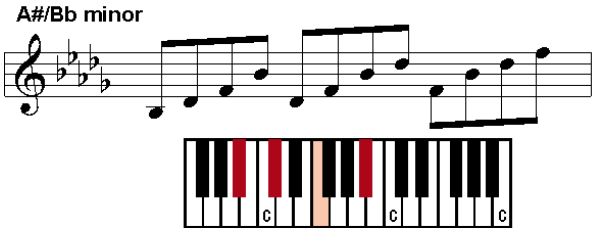
G#/Ab minor



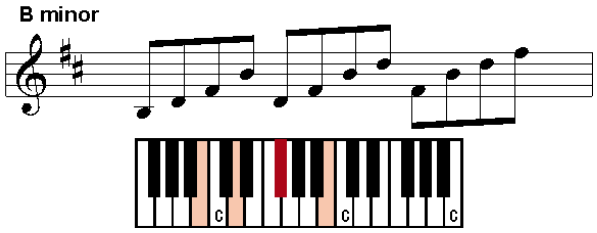
A minor



A#/Bb minor



B minor



Arpeggio ranges

Staccato major	play range
01 HO-4_arp-sta_C-ma	C3–C5
02 HO-4_arp-sta_C#-ma	C#3–C#5
03 HO-4_arp-sta_D-ma	D3–D5
04 HO-4_arp-sta_D#-ma	A#2–D#5
05 HO-4_arp-sta_E-ma	B2–E5
06 HO-4_arp-sta_F-ma	A2–C5
07 HO-4_arp-sta_F#-ma	A#2–C#5
08 HO-4_arp-sta_G-ma	B2–D5
09 HO-4_arp-sta_G#-ma	C3–D#5
10 HO-4_arp-sta_A-ma	A2–C#5
11 HO-4_arp-sta_A#-ma	A#2–D5
12 HO-4_arp-sta_B-ma	B2–B4

Staccato minor	play range
01 HO-4_arp-sta_C-mi	C3–C5
02 HO-4_arp-sta_C#-mi	C#3–C#5
03 HO-4_arp-sta_D-mi	D3–D5
04 HO-4_arp-sta_D#-mi	D#3–D#5
05 HO-4_arp-sta_E-mi	E3–E5
06 HO-4_arp-sta_F-mi	C3–F5
07 HO-4_arp-sta_F#-mi	C#3–F#5
08 HO-4_arp-sta_G-mi	A#2–D5
09 HO-4_arp-sta_G#-mi	B2–D#5
10 HO-4_arp-sta_A-mi	A2–C5
11 HO-4_arp-sta_A#-mi	A#2–C#5
12 HO-4_arp-sta_B-mi	B2–B4

Staccato major fast	play range
01 HO-4_arp-sta+_C-ma	C3–C5
02 HO-4_arp-sta+_C#-ma	C#3–C#5
03 HO-4_arp-sta+_D-ma	D3–D5
04 HO-4_arp-sta+_D#-ma	A#2–D#5
05 HO-4_arp-sta+_E-ma	B2–E5
06 HO-4_arp-sta+_F-ma	A2–C5
07 HO-4_arp-sta+_F#-ma	A#2–C#5
08 HO-4_arp-sta+_G-ma	B2–D5
09 HO-4_arp-sta+_G#-ma	C3–D#5
10 HO-4_arp-sta+_A-ma	A2–C#5
11 HO-4_arp-sta+_A#-ma	A#2–D5
12 HO-4_arp-sta+_B-ma	B2–B4

Staccato minor fast	play range
01 HO-4_arp-sta_C-mi+	C3–C5
02 HO-4_arp-sta_C#-mi+	C#3–C#5
03 HO-4_arp-sta_D-mi+	D3–D5
04 HO-4_arp-sta_D#-mi+	D#3–D#5
05 HO-4_arp-sta_E-mi+	E3–E5
06 HO-4_arp-sta_F-mi+	C3–F5
07 HO-4_arp-sta_F#-mi+	C#3–F#5
08 HO-4_arp-sta_G-mi+	A#2–D5
09 HO-4_arp-sta_G#-mi+	B2–D#5
10 HO-4_arp-sta_A-mi+	A2–C5
11 HO-4_arp-sta_A#-mi+	A#2–C#5
12 HO-4_arp-sta_B-mi+	B2–B4