Vienna Instruments
Solo Download Instruments
Flute I
Full Library

Contents

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 Flute I. 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.

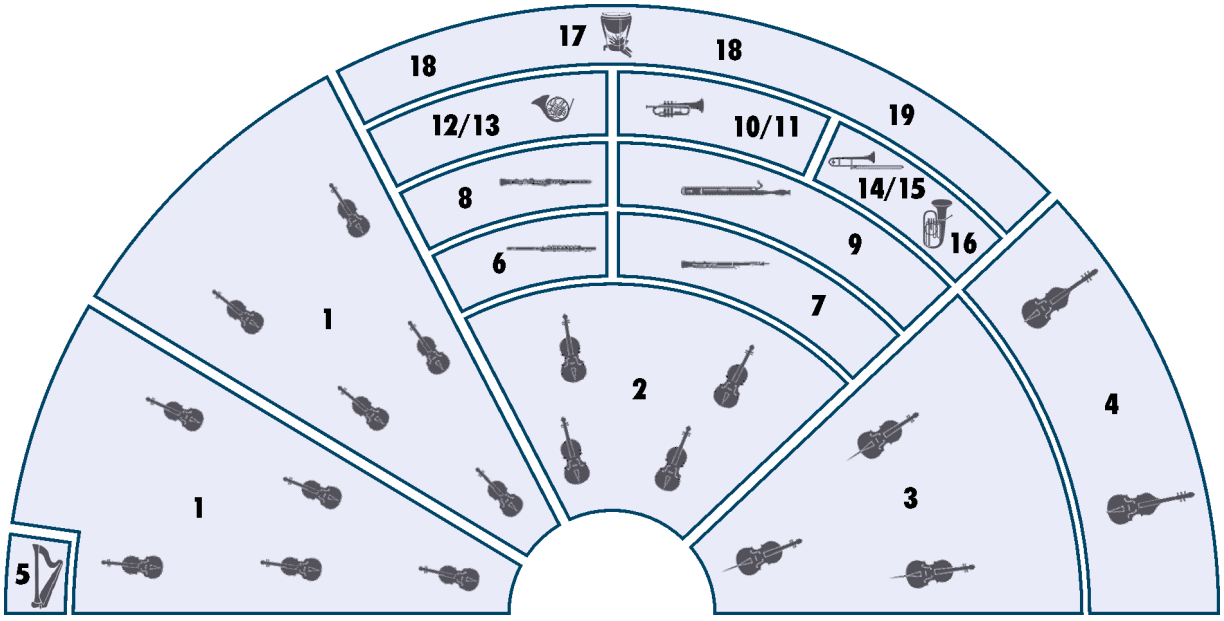
Abbreviation	Meaning	Abbreviation	Meaning
+	faster articulation (runs and arpeggios)	li	light
		lo	long
150, 160, …	150, 160, … BPM (beats per minute)	ma	major
1s, 2s, …	tone length 1 sec., 2 sec., …	me	medium
acc	accelerando	mi	minor
all	combination of all Patches of a category	mord	mordent
		nA	normal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

Articulations

32 Flute I	Full Content
01 SHORT + LONG NOTES	Staccato, tongue-ram staccato Portato short and medium Portato long with strong and without vibrato Sustained with normal, progressive, and without vibrato
02 DYNAMICS	Medium crescendo and diminuendo with vibrato 2, 3 and 5 sec. Medium crescendo and diminuendo without vibrato 1.5, 2, 3 and 4 sec. Strong crescendo and diminuendo without vibrato, 4 and 6 sec. pfp with vibrato, 3, 6 and 9 sec. fpf with vibrato, 6 and 9 sec. Fortepiano, sforzato, sforzatissimo with and without vibrato
03 FLATTER + TRILLS	Flutter tonguing normal and dynamics Trills, minor 2nd to major 3rd Trills accelerando, minor and major 2nd Dynamics for all trills
10 PERF INTERVAL	Legato Marcato Grace notes
11 PERF INTERVAL FAST	Legato Marcato
12 PERF TRILL	Trills, legato, minor 2nd to major 3rd
13 PERF REPETITION	Legato, portato, staccato slow and fast Dynamics for all repetitions Staccato fast triplets
14 PERF UPBEAT REPETITION	1 and 2 upbeats, slow and fast, normal and dynamics
15 FAST REPETITION	Staccato, 9 repetitions, 170 to 210 BPM Staccato triplets, 12 repetitions, 140 to 180 BPM
16 GRACE NOTES	Grace notes, minor 2nd to octave, up and down
17 SCALE RUNS	Octave runs, legato, up and down major and minor from C to B key, chromatic and whole tone 2 speeds for all
18 ARPEGGIOS	Arpeggios, legato and staccato, up and down diminished, major and minor from C to B key 2 speeds for all
19 MORDENTS	Mordents, legato and staccato, up and down 6 variations each

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.

32 Flute I

The Instrument

Description

The flute is a woodwind instrument and usually made of metal (silver, gold, platinum) or wood (grenadilla, coco).

The woodwind section of the modern orchestra usually uses two flutes (and a piccolo or bass flute).

Range and notation

The standard range is from B3–D7 (forced up to F7). The concert flute in C is a non-transposing instrument notated in treble clef.

Sound characteristics

Airy, light, poetic, mellow, bright, wafting, ethereal, rich, soft, graceful, penetrating, brilliant, clear, shrill, silvery, wind-like, whistling, whispering, humming, filigree, sighing, aspirate.

The timbre is homogeneous in all registers with only the very lowest and highest notes exhibiting any different qualities.

The lowest notes can sound rather dull, dry and hollow which gives them a melancholy character.

In the middle register the flute sounds mellow, light, wafting, bright and rich. These characteristics are often used for solo work. In quiet passages the flute's middle register sounds particularly graceful.

The higher notes possess great brilliance and can sound penetrating and shrill.

Combination with other instruments

Like the horn, the flute blends extremely well with all instrument groups. Particularly good blends are achieved with the woodwinds and the strings. High notes are ideally suited for playing melody lines along with the violins, and are therefore found fulfilling precisely this task in practically every orchestral work.

Patches

01 SHORT + LONG NOTES — Range: A#3–D7

01 FL1_staccato — **Samples: 390** **RAM: 24 MB**

Staccato
5 velocity layers

02 FL1_portato_short — **Samples: 382** **RAM: 23 MB**

Portato, short
5 velocity layers

03 FL1_portato_medium **Samples: 382** **RAM: 23 MB**

Portato, medium
5 velocity layers

04 FL1_portato_long_Vib-str **Samples: 298** **RAM: 18 MB**

Portato, long, with strong vibrato
4 velocity layers
Release samples

05 FL1_portato_long_noVib **Samples: 339** **RAM: 21 MB**

Portato, long, without vibrato
5 velocity layers
Release samples

06 FL1_staccato_fx **Range: A#3–F5** **Samples: 56** **RAM: 3 MB**

Tongue-ram staccato
2 velocity layers

11 FL1_sus_Vib **Samples: 300** **RAM: 18 MB**

Sustained, with vibrato
4 velocity layers
Release samples

12 FL1_sus_Vib_progr **Samples: 226** **RAM: 14 MB**

Sustained, progressive vibrato
3 velocity layers
Release samples

13 FL1_sus_noVib **Samples: 339** **RAM: 21 MB**

Sustained, without vibrato
5 velocity layers
Release samples

02 DYNAMICS **Range: A#3–D7**

01 FL1_dyn-me_Vib_2s **Samples: 152** **RAM: 9 MB**

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

02 FL1_dyn-me_Vib_3s **Samples: 152** **RAM: 9 MB**

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

03 FL1_dyn-str_Vib_5s **Samples: 78** **RAM: 4 MB**

Strong crescendo and diminuendo with vibrato, 5 sec.
1 velocity layer
AB switch crescendo/diminuendo

04 FL1_dyn-me_noVib_1'5s **Samples: 152** **RAM: 9 MB**

Medium crescendo and diminuendo without vibrato, 1.5 sec.
2 velocity layers
AB switch crescendo/diminuendo

05 FL1_dyn-me_noVib_2s **Samples: 152** **RAM: 9 MB**

Medium crescendo and diminuendo without vibrato, 2 sec.
2 velocity layers
AB switch crescendo/diminuendo

06 FL1_dyn-me_noVib_3s **Samples: 152** **RAM: 9 MB**

Medium crescendo and diminuendo without vibrato, 3 sec.
2 velocity layers
AB switch crescendo/diminuendo

07 FL1_dyn-me_noVib_4s **Samples: 152** **RAM: 9 MB**

Medium crescendo and diminuendo without vibrato, 4 sec.
2 velocity layers
AB switch crescendo/diminuendo

08 FL1_dyn-str_noVib_4s **Range: A#3–C#7** **Samples: 76** **RAM: 4 MB**

Strong crescendo and diminuendo without vibrato, 4 sec.
1 velocity layer
AB switch crescendo/diminuendo

09 FL1_dyn-str_noVib_6s **Range: A#3–C#7** **Samples: 77** **RAM: 4 MB**

Strong crescendo and diminuendo without vibrato, 6 sec.
1 velocity layer
AB switch crescendo/diminuendo

10 FL1_pfp_Vib_3s **Samples: 39** **RAM: 2 MB**

Crescendo-diminuendo with vibrato, 3 sec.
2 velocity layers

11 FL1_pfp_Vib_6s **Samples: 39** **RAM: 2 MB**

Crescendo-diminuendo with vibrato, 6 sec.
2 velocity layers

12 FL1_pfp_Vib_9s **Samples: 56** **RAM: 3 MB**

Crescendo-diminuendo with vibrato, 9 sec.
2 velocity layers

13 FL1_fpf_Vib_6s **Samples: 39** **RAM: 2 MB**

Diminuendo-crescendo with vibrato, 6 sec.
2 velocity layers

14 FL1_fpf_Vib_9s **Samples: 20** **RAM: 1 MB**

Diminuendo-crescendo with vibrato, 9 sec.
1 velocity layer

15 FL1_fp_Vib **Range: A#3–C#7** **Samples: 38** **RAM: 2 MB**

Fortepiano, with vibrato
1 velocity layer

16 FL1_sfz_Vib **Range: A#3–C7** **Samples: 37** **RAM: 2 MB**

Sforzato, with vibrato
1 velocity layer

17 FL1_sffz_Vib **Samples: 39** **RAM: 2 MB**

Sforzatissimo, with vibrato
1 velocity layer

18 FL1_fp_noVib **Samples: 39** **RAM: 2 MB**

Fortepiano, without vibrato
1 velocity layer

19 FL1_sfz_noVib **Samples: 39** **RAM: 2 MB**

Sforzato, without vibrato
1 velocity layer

20 FL1_sffz_noVib **Samples: 39** **RAM: 2 MB**

Sforzatissimo, without vibrato
1 velocity layer

03 FLATTER + TRILLS

01 FL1_flatter **Range: A#3–C#7** **Samples: 148** **RAM: 9 MB**

Flutter tonguing
2 velocity layers
Release samples

02 FL1_flatter_dyn **Range: A#3–C7** **Samples: 74** **RAM: 4 MB**

Flutter tonguing, crescendo and diminuendo
1 velocity layer
AB switch crescendo/diminuendo

11 FL1_trill_1 **Range: A#3–C7** **Samples: 145** **RAM: 9 MB**

Trills, minor 2nd
2 velocity layers
Release samples

12 FL1_trill_2 **Range: A#3–B6** **Samples: 136** **RAM: 8 MB**

Trills, major 2nd
2 velocity layers
Release samples

13 FL1_trill_3 **Range: A#3–G6** **Samples: 56** **RAM: 3 MB**

Trills, minor 3rd
2 velocity layers
Release samples

14 FL1_trill_4 **Range: A#3–G6** **Samples: 68** **RAM: 4 MB**

Trills, major 3rd
2 velocity layers
Release samples

15 FL1_trill_1_dyn **Range: A#3–C7** **Samples: 74** **RAM: 4 MB**

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

16 FL1_trill_2_dyn **Range: A#3–B6** **Samples: 68** **RAM: 4 MB**

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

17 FL1_trill_3_dyn **Range: A#3–G6** **Samples: 28** **RAM: 1 MB**

Trills, crescendo and diminuendo, minor 3rd
1 velocity layer
AB switch crescendo/diminuendo

18 FL1_trill_4_dyn **Range: A#3–G6** **Samples: 39** **RAM: 2 MB**

Trills, crescendo and diminuendo, major 3rd
1 velocity layer
AB switch crescendo/diminuendo

19 FL1_trill_1_acc **Range: A#3–C7** **Samples: 142** **RAM: 8 MB**

Trills accelerando, minor 2nd
2 velocity layers
Release samples

20 FL1_trill_2_acc **Range: A#3–A6** **Samples: 132** **RAM: 8 MB**

Trills accelerando, major 2nd
2 velocity layers
Release samples

21 FL1_trill_1_acc-dyn **Range: A#3–C7** **Samples: 72** **RAM: 4 MB**

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

22 FL1_trill_2_acc-dyn **Range: A#3–A6** **Samples: 66** **RAM: 4 MB**

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

10 PERF INTERVAL

Range: A#3–C7

01 FL1_perf-legato

Samples: 1043 RAM: 65 MB

Legato
2 velocity layers
Release samples

02 FL1_perf-legato_grace

Samples: 1413 RAM: 88 MB

Grace notes, legato, minor 2nd to octave
3 velocity layers
Release samples

03 FL1_perf-marcato

Samples: 1118 RAM: 69 MB

Marcato
2 velocity layers
Release samples

11 PERF INTERVAL FAST

Range: A#3–C7

01 FL1_perf-legato_fa

Samples: 1192 RAM: 74 MB

Legato, fast
2 velocity layers
Release samples

02 FL1_perf-marcato_fa

Samples: 1260 RAM: 78 MB

Marcato, fast
2 velocity layers
Release samples

12 PERF TRILL

Range: A#3–D7

01 FL1_perf-trill

Samples: 2316 RAM: 144 MB

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

13 PERF REPETITION — Range: A#3–D7

01 FL1_perf-rep_leg-sl — Range: A#3–C7 — Samples: 285 — RAM: 17 MB

Legato, slow
3 velocity layers

02 FL1_perf-rep_leg-fa — Samples: 295 — RAM: 18 MB

Legato, fast
3 velocity layers

03 FL1_perf-rep_por-sl — Samples: 472 — RAM: 29 MB

Portato, slow
3 velocity layers

04 FL1_perf-rep_por-fa — Samples: 464 — RAM: 29 MB

Portato, fast
3 velocity layers

05 FL1_perf-rep_sta-sl — Samples: 464 — RAM: 29 MB

Staccato, slow
3 velocity layers

06 FL1_perf-rep_sta-fa — Samples: 464 — RAM: 29 MB

Staccato, fast
3 velocity layers

07 FL1_perf-rep_sta-faT — Samples: 708 — RAM: 44 MB

Staccato triplets, fast
3 velocity layers

21 FL1_perf-rep_dyn5_leg-sl — Range: A#3–C7 — Samples: 190 — RAM: 11 MB

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

22 FL1_perf-rep_dyn5_leg-fa — Range: A#3–C7 — Samples: 190 — RAM: 11 MB

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

23 FL1_perf-rep_dyn9_por-sl — Range: A#3–C7 — Samples: 342 — RAM: 21 MB

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

24 FL1_perf-rep_dyn9_por-fa — Samples: 360 — RAM: 22 MB

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

25 FL1_perf-rep_dyn9_sta **Range: A#3–C7** **Samples: 342** **RAM: 21 MB**

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

14 PERF UPBEAT REPETITION Range: A#3–D7

01 FL1_perf-rep_UB-a1_sl **Samples: 156** **RAM: 9 MB**

1 upbeat, slow
2 velocity layers

02 FL1_perf-rep_UB-a2_sl **Samples: 156** **RAM: 9 MB**

2 upbeats, slow
2 velocity layers

03 FL1_perf-rep_UB-a1_fa **Samples: 156** **RAM: 9 MB**

1 upbeat, fast
2 velocity layers

04 FL1_perf-rep_UB-a2_fa **Samples: 156** **RAM: 9 MB**

2 upbeats, fast
2 velocity layers

11 FL1_perf-rep_dyn4_UB-a1_sl **Samples: 160** **RAM: 10 MB**

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

12 FL1_perf-rep_dyn4_UB-a2_sl **Samples: 160** **RAM: 10 MB**

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

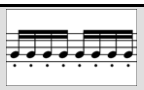
13 FL1_perf-rep_dyn4_UB-a1_fa **Samples: 160** **RAM: 10 MB**

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

14 FL1_perf-rep_dyn4_UB-a2_fa **Samples: 160** **RAM: 10 MB**

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

15 FAST REPETITION — Range: A#3–D7



01 FL1_fast-rep_170 (180/190/200/210) — **Samples: 118** — **RAM: 7 MB**

Fast repetitions
Staccato, 9 repetitions, 170/180/190/200/210 BPM
3 velocity layers
Release samples

11 FL1_fast-rep_140T (150/160/170/180) — **Samples: 116** — **RAM: 7 MB**

Fast repetitions
Staccato triplets, 12 repetitions, 140/150/160/170/180 BPM
3 velocity layers
Release samples

16 GRACE NOTES — Range: A#3–C7

The samples are mapped to their target notes.

01 FL1_grace-1 — **Samples: 184** — **RAM: 11 MB**

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

02 FL1_grace-2 — **Samples: 182** — **RAM: 11 MB**

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

03 FL1_grace-3 — **Samples: 178** — **RAM: 11 MB**

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

04 FL1_grace-4 — **Samples: 178** — **RAM: 11 MB**

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

05 FL1_grace-5 — **Samples: 172** — **RAM: 10 MB**

Grace notes, 4th
3 velocity layers
Release samples
AB switch up/down

06 FL1_grace-6 **Samples: 172** **RAM: 10 MB**

Grace notes, diminished 5th
3 velocity layers
Release samples
AB switch up/down

07 FL1_grace-7 **Samples: 166** **RAM: 10 MB**

Grace notes, 5th
3 velocity layers
Release samples
AB switch up/down

08 FL1_grace-8 **Samples: 166** **RAM: 10 MB**

Grace notes, minor 6th
3 velocity layers
Release samples
AB switch up/down

09 FL1_grace-9 **Samples: 160** **RAM: 10 MB**

Grace notes, major 6th
3 velocity layers
Release samples
AB switch up/down

10 FL1_grace-10 **Samples: 160** **RAM: 10 MB**

Grace notes, minor 7th
3 velocity layers
Release samples
AB switch up/down

11 FL1_grace-11 **Samples: 154** **RAM: 9 MB**

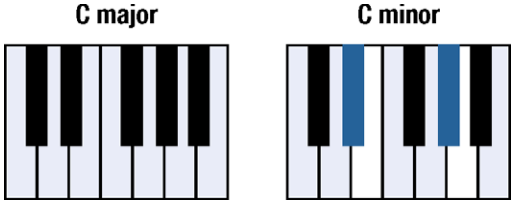
Grace notes, major 7th
3 velocity layers
Release samples
AB switch up/down

12 FL1_grace-12 **Samples: 154** **RAM: 9 MB**

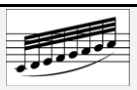
Grace notes, octave
3 velocity layers
Release samples
AB switch up/down

17 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.



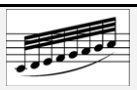
Legato major — Range: B3–D7



01 FL1_run-leg_C-ma (through to B-ma) — **Samples: 64** — **RAM: 4 MB**

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

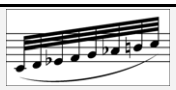
Legato major faster — Range: B3–D7



01 FL1_run-leg+_C-ma (through to B-ma) — **Samples: 62** — **RAM: 3 MB**

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

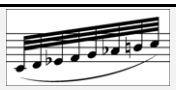
Legato minor — Range: B3–D7



01 FL1_run-leg_C-mi (through to B-mi) — **Samples: 64** — **RAM: 4 MB**

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

Legato minor faster — Range: B3–D7

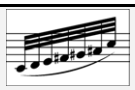


01 FL1_run-leg+_C-mi (through to B-mi) — **Samples: 64** — **RAM: 4 MB**

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

Legato special

Range: A#3–D7



01 FL1_run-leg_chromatic **Samples: 54** **RAM: 3 MB**

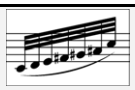
Octave runs, legato, chromatic
2 velocity layers
AB switch up/down

02 FL1_run-leg_whole **Samples: 54** **RAM: 3 MB**

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

Legato special faster

Range: A#3–D7



01 FL1_run-leg+_chromatic **Samples: 56** **RAM: 3 MB**

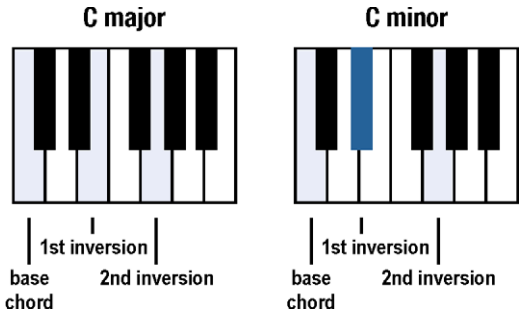
Octave runs, legato, fast, chromatic
2 velocity layers
AB switch up/down

02 FL1_run-leg+_whole **Samples: 56** **RAM: 3 MB**

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

18 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.



Legato diminished

Range: B3–D7

01_FL1_arp-leg_dm **Samples: 80** **RAM: 5 MB**

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

Legato diminished fast — Range: C4–D7

01_FL1_arp-leg+_dm — **Samples: 80** — **RAM: 5 MB**

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

Legato major — Range: C4–C7

01_FL1_arp-leg_C-ma (through to B-ma) — **Samples: 28** — **RAM: 1 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: C4–C7

01_FL1_arp-leg+_C-ma (through to B-ma) — **Samples: 28** — **RAM: 1 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: C4–C7

01_FL1_arp-leg_C-mi (through to B-mi) — **Samples: 28** — **RAM: 1 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: C4–C7

01_FL1_arp-leg_C-mi+ (through to B-mi+) — **Samples: 28** — **RAM: 1 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: C4–D7

01_FL1_arp-sta_dm — **Samples: 78** — **RAM: 4 MB**

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

Staccato diminished fast — Range: C4–D7

01_FL1_arp-sta+_dm — **Samples: 78** — **RAM: 4 MB**

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

Staccato major — Range: C4–C7

01_FL1_arp-sta_C-ma (through to B-ma) — **Samples: 28** — **RAM: 1 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: C4–C7

01_FL1_arp-sta+_C-ma (through to B-ma) — **Samples: 28** — **RAM: 1 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: C4–C7

01_FL1_arp-sta_C-mi (through to B-mi) — **Samples: 28** — **RAM: 1 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

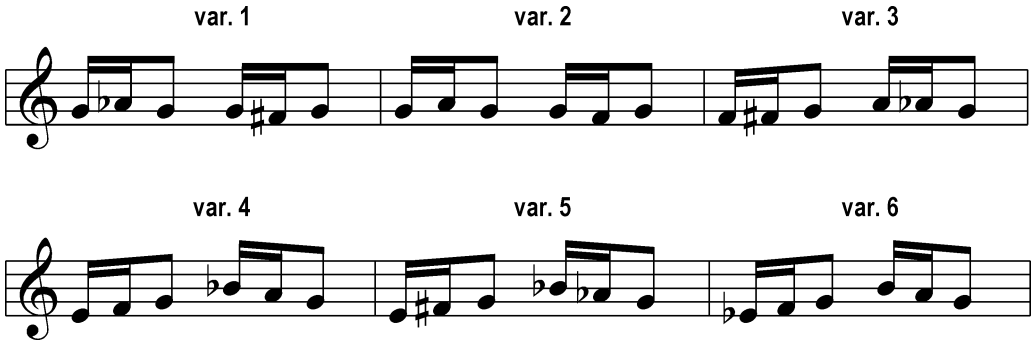
Staccato minor fast — Range: C4–C7

01_FL1_arp-sta_C-mi+ (through to B-mi+) — **Samples: 28** — **RAM: 1 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

19 MORDENTS

The samples are mapped to their target notes.



01 FL1_mord-leg_v1 — **Range: C4–A#6** — **Samples: 60** — **RAM: 3 MB**

Mordents, legato
Single mordent, minor 2nd
2 velocity layers
AB switch up/down

02 FL1_mord-leg_v2 — **Range: C4–B6** — **Samples: 60** — **RAM: 3 MB**

Mordents, legato
Single mordent, major 2nd
2 velocity layers
AB switch up/down

03 FL1_mord-leg_v3 **Range: C4–B6** **Samples: 60** **RAM: 3 MB**

Mordents, legato
Minor 2nd - minor 2nd
2 velocity layers
AB switch up/down

04 FL1_mord-leg_v4 **Range: C4–C7** **Samples: 60** **RAM: 3 MB**

Mordents, legato
Minor 2nd - major 2nd
2 velocity layers
AB switch up/down

05 FL1_mord-leg_v5 **Range: C4–C7** **Samples: 60** **RAM: 3 MB**

Mordents, legato
Major 2nd - minor 2nd
2 velocity layers
AB switch up/down

06 FL1_mord-leg_v6 **Range: C4–C#7** **Samples: 60** **RAM: 3 MB**

Mordents, legato
Major 2nd - major 2nd
2 velocity layers
AB switch up/down

11 FL1_mord-sta_v1 **Range: C4–A#6** **Samples: 60** **RAM: 3 MB**

Mordents, staccato
Single mordent, minor 2nd
2 velocity layers
AB switch up/down

12 FL1_mord-sta_v2 **Range: C4–B6** **Samples: 60** **RAM: 3 MB**

Mordents, staccato
Single mordent, major 2nd
2 velocity layers
AB switch up/down

13 FL1_mord-sta_v3 **Range: C4–B6** **Samples: 60** **RAM: 3 MB**

Mordents, staccato
Minor 2nd - minor 2nd
2 velocity layers
AB switch up/down

14 FL1_mord-sta_v4 **Range: C4–C7** **Samples: 60** **RAM: 3 MB**

Mordents, staccato
Minor 2nd - major 2nd
2 velocity layers
AB switch up/down

15 FL1_mord-sta_v5 **Range: C4–C7** **Samples: 60** **RAM: 3 MB**

Mordents, staccato
Major 2nd - minor 2nd
2 velocity layers
AB switch up/down

16 FL1_mord-sta_v6 **Range: C4–C#7** **Samples: 60** **RAM: 3 MB**

Mordents, staccato
Major 2nd - major 2nd
2 velocity layers
AB switch up/down

98 RESOURCES

Isolated dynamics repetitions
Single layer long notes
Interval performance variations.

01 Perf Rep dyn

Range: A#3–D7

01_FL1_rep_cre5_leg-sl-1 (2/3/4/5) **Samples: 19** **RAM: 1 MB**

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

01_FL1_rep_dim5_leg-sl-1 (2/3/4/5) **Samples: 19** **RAM: 1 MB**

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

02_FL1_rep_cre5_leg-fa-1 (2/3/4/5) **Samples: 19** **RAM: 1 MB**

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

02_FL1_rep_dim5_leg-fa-1 (2/3/4/5) **Samples: 19** **RAM: 1 MB**

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

03_FL1_rep_cre9_por-1 (2/3/4/5/6/7/8/9) **Samples: 20** **RAM: 1 MB**

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

03_FL1_rep_dim9_por-1 (2/3/4/5/6/7/8/9) **Samples: 20** **RAM: 1 MB**

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

04_FL1_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

04_FL1_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#3–F7

01 FL1_sus_Vib-pp **Samples: 74** **RAM: 4 MB**

Sustained, pianissimo, with vibrato
1 velocity layer
Release samples

02 FL1_sus_Vib-p **Samples: 74** **RAM: 4 MB**

Sustained, piano, with vibrato
1 velocity layer
Release samples

03 FL1_sus_Vib-mf **Samples: 76** **RAM: 4 MB**

Sustained, mezzoforte, with vibrato
1 velocity layer
Release samples

04 FL1_sus_Vib-f **Samples: 76** **RAM: 4 MB**

Sustained, forte, with vibrato
1 velocity layer
Release samples

03 Perf Speed variation Range: A#3–C7

01 FL1_perf-leg_sustain **Samples: 1043** **RAM: 65 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 FL1 Articulation Combi — Samples: 1919 RAM: 119 MB

Single note articulations
Staccato, portato short, sustained with and without vibrato, crescendo-diminuendo 3 and 6 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 3s.	fp	flutter	trill half
V2	port. short	sus no vib.	pfp 6s.	sfz	flutter dyn.	trill whole

L1 FL1 Perf-Legato Speed — Samples: 1335 RAM: 83 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 FL1 Perf-Repetitions Combi — Samples: 1213 RAM: 75 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

01 FL1 Perf-Universal — Samples: 2513 RAM: 157 MB

Interval performances
Legato with sustain crossfading, normal, and fast
Marcato normal and fast
Monophonic, Speed controller

	H1	H2	H3
legato	sustain	normal	fast
marcato	normal	normal	fast

02 FL1 Perf-Trill Speed

Samples: 2747 RAM: 171 MB

Multi interval performances
Legato and trills
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
V1	legato	trills

03 FL1 Short+Long notes - All

Samples: 1760 RAM: 110 MB

Single notes
Staccato, portato short and medium
Sustained with normal, progressive, and without vibrato

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

	C1	C#1	D1	D#1
V1	staccato	portato short	portato med.	sus. vibrato
V2	%	%	%	sus. prog. vibrato
V3	%	%	%	sus. no vibrato

Matrix - LEVEL 2 B - Standard

11 FL1 Perf-Legato Speed

Samples: 1335 RAM: 83 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 FL1 Perf-Marcato Speed

Samples: 1478 RAM: 92 MB

Interval performances: Marcato normal and fast
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 2 zones

	H1	H2
Marcato	normal	fast

13 FL1 Short notes - All

Samples: 1699 RAM: 106 MB

Single notes
Staccato, portato short and medium, portato long with and without vibrato, tongue-ram staccato

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	staccato	port. short	port. med.	port.long vib.	port.long no vib.	tongue stac.

14 FL1 Long notes - All

Samples: 606 RAM: 37 MB

Single notes
Sustained with normal, progressive, and without vibrato

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
sustained	normal vibrato	progr. vibrato	no vibrato

15 FL1 Dynamics - Small

Samples: 496 **RAM: 31 MB**

Dynamics
Medium crescendo and diminuendo 2 and 3 sec., strong crescendo and diminuendo 5 sec.
Fortepiano, sforzato, sforzatissimo

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

	C1	C#1	D1
dynamics vib.	med. 2sec.	med. 3sec.	strong 5sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

16 FL1 Dynamics - Large

Samples: 1238 **RAM: 77 MB**

Dynamics
Crescendo and diminuendo, medium with and without vibrato, strong without vibrato
Crescendo-diminuendo 3, 6, and 9 sec.
Fortepiano, sforzato, sforzatissimo

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

	C1	C#1	D1
dynamics vib.	med. 2 sec.	med. 3 sec.	strong 5 sec.
med. dyn. no vib.	2 sec.	3 sec.	4 sec.
strong dyn. no vib.	4 sec.	6 sec.	6 sec.
pfp vib.	3 sec.	6 sec.	9 sec.
special dyn.	fp vib.	sfz vib.	sffz vib.

17 FL1 Flatter

Samples: 222 **RAM: 13 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 FL1 Trills - normal

Samples: 586 **RAM: 36 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 FL1 Trills - accelerando

Samples: 412 **RAM: 25 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 FL1 Trills - All

Samples: 998 **RAM: 62 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

Matrix - LEVEL 2 C - Repetitions

31 FL1 Perf-Repetitions - Combi

Samples: 2149 **RAM: 134 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	
V1	legato slow	portato slow	portato fast	staccato slow	staccato fast

32 FL1 Perf-Repetitions - Speed

Samples: 1685 **RAM: 105 MB**

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

Matrix switches: Horizontal: Speed, 4 zones

	legato	portato	staccato	staccato
speed	slow	slow	slow	fast

33 FL1 Fast-Repetitions

Samples: 354 **RAM: 22 MB**

Fast repetitions
170, 180, 190, 200, 210 BPM

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
speed/BPM	170	180	190	200	210

34 FL1 Perf Upbeat Repetitions — Samples: 624 — RAM: 39 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 FL1 Scale runs-legato - Major — Samples: 376 — RAM: 23 MB

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

	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 FL1 Scale runs-legato - Major+ — Samples: 370 — RAM: 23 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 FL1 Scale runs-legato - Minor — Samples: 376 — RAM: 23 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 FL1 Scale runs-legato - Minor+ — Samples: 370 — RAM: 23 MB

Octave runs, 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

45 FL1 Scale runs-legato - Special — Samples: 108 — RAM: 6 MB

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

Matrix switches: Vertical: Modwheel, 2 zones

	legato
V1	chromatic
V2	whole tone

46 FL1 Scale runs-legato - Special+ — Samples: 112 — RAM: 7 MB

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

Matrix switches: Vertical: Modwheel, 2 zones

	legato fast
V1	chromatic
V2	whole tone

47 FL1 Scale runs-legato - all — Samples: 860 — RAM: 53 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	%	%	%	%	%	%	%	%	%	%	%	%

48 FL1 Scale runs-legato - all+ — Samples: 852 — RAM: 53 MB

Octave runs, legato fast, 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 FL1 Arpeggios-legato - Major — Samples: 160 — RAM: 10 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 FL1 Arpeggios-legato - Major+ — Samples: 158 — RAM: 9 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 FL1 Arpeggios-legato - Minor — Samples: 162 — RAM: 10 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 FL1 Arpeggios-legato - Minor+ Samples: 162 RAM: 10 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 FL1 Arpeggios-legato - All Samples: 406 RAM: 25 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 FL1 Arpeggios-legato - All+ Samples: 400 RAM: 25 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 FL1 Arpeggios-staccato - Major Samples: 160 RAM: 10 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 FL1 Arpeggios-staccato - Major+ Samples: 160 RAM: 10 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 FL1 Arpeggios-staccato - Minor Samples: 162 RAM: 10 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 FL1 Arpeggios-staccato - Minor+ Samples: 162 RAM: 10 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 FL1 Arpeggios-staccato - All Samples: 400 RAM: 25 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 FL1 Arpeggios-staccato - All+ Samples: 400 RAM: 25 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 FL1 Mordents-legato Samples: 360 RAM: 22 MB

Mordents, legato, var. 1 to 6
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
variation	turn min.2nd	turn maj.2nd	min.2nd - min.2nd	min.2nd - maj.2nd	maj.2nd - min.2nd	maj.2nd - maj.2nd

64 FL1 Mordents-staccato Samples: 360 RAM: 22 MB

Mordents, staccato, var. 1 to 6
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
variation	turn min.2nd	turn maj.2nd	min.2nd - min.2nd	min.2nd - maj.2nd	maj.2nd - min.2nd	maj.2nd - maj.2nd

65 FL1 Grace notes - All Samples: 1207 RAM: 75 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 FL1 Legato slow - cre5 — Samples: 95 — RAM: 5 MB

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

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

72 FL1 Legato fast - cre5 — Samples: 95 — RAM: 5 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 FL1 Portato - cre9 — Samples: 180 — RAM: 11 MB

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

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

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

74 FL1 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

75 FL1 Combi - cre5 — Samples: 190 — RAM: 11 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 FL1 Combi - cre9 — Samples: 351 — 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	%	%	%	%	%	%	%	%

77 FL1 Legato slow - dim5 — Samples: 95 — RAM: 5 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 FL1 Legato fast - dim5 — Samples: 95 — RAM: 5 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 FL1 Portato - dim9 — Samples: 180 — RAM: 11 MB

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

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

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

80 FL1 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

81 FL1 Combi - dim5 — Samples: 190 — RAM: 11 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 FL1 Combi - dim9 — Samples: 351 — 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

FL1 VSL Preset Level 1 **Samples: 4167 RAM: 260 MB**

L1 FL1 Perf-Legato Speed
L1 FL1 Articulation Combi
L1 FL1 Perf-Repetitions Combi

Keyswitches: C2–D2

FL1 VSL Preset Level 2 **Samples: 9196 RAM: 574 MB**

01 FL1 Perf-Universal
02 FL1 Perf-Trill Speed
L1 FL1 Articulation Combi
31 FL1 Perf-Repetitions - Combi
76 FL1 Combi - cre9
47 FL1 Scale runs-legato - all

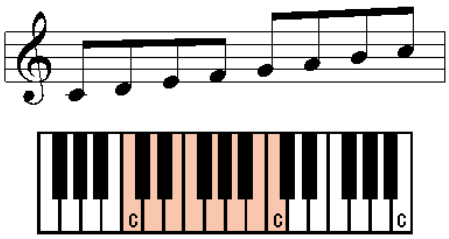
Keyswitches: C2–F2

Appendix

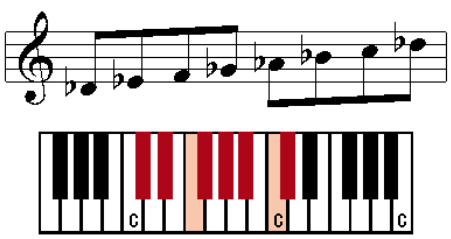
In the following, you will find notations and keyboard layout graphics for major and minor scale runs and arpeggios, as well as a list of playing ranges for the individual scale and arpeggio Patches.

Scale runs - major

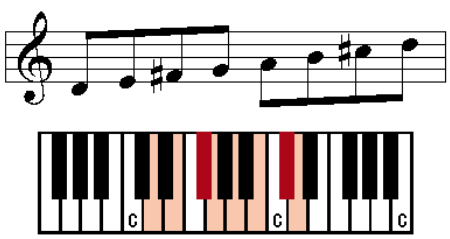
C major



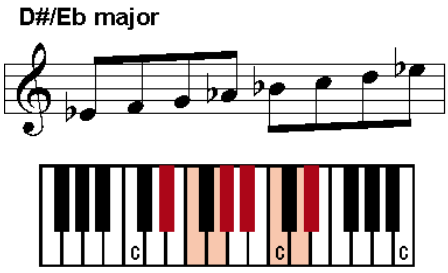
C#/Db major



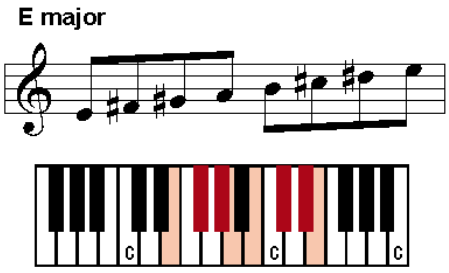
D major



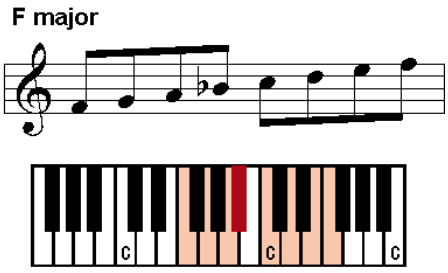
D#/Eb major



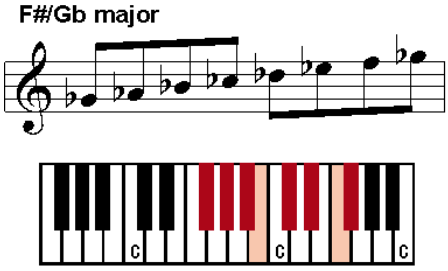
E major



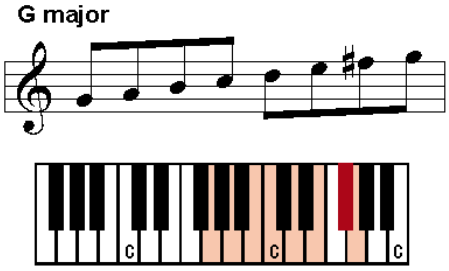
F major



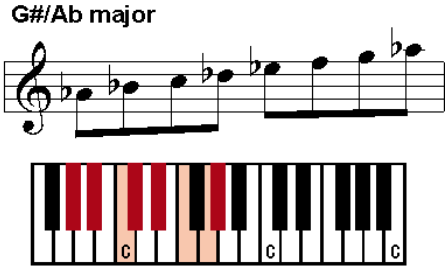
F#/Gb major



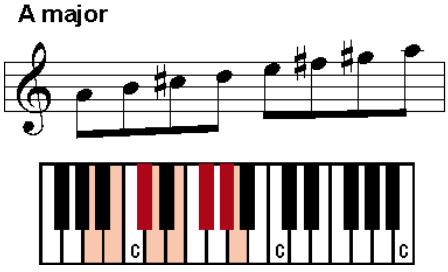
G major



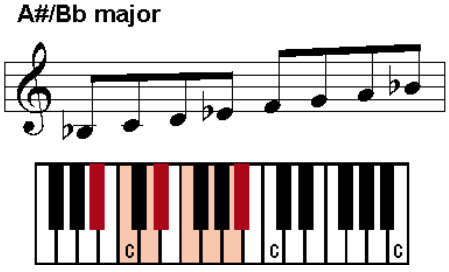
G#/Ab major



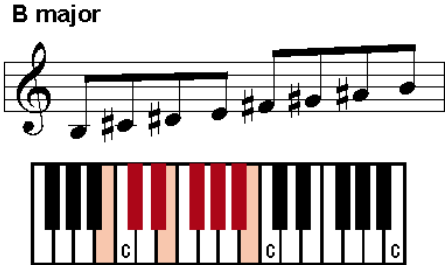
A major



A#/Bb major

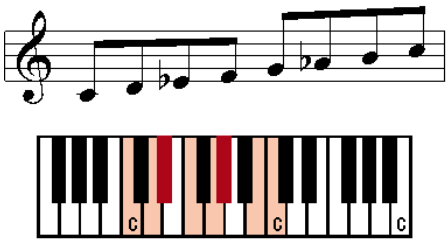


B major

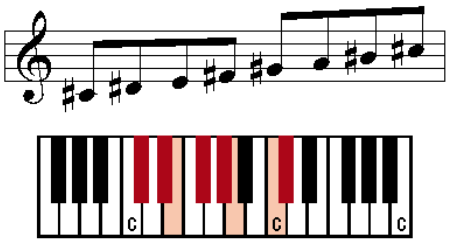


Scale runs - minor

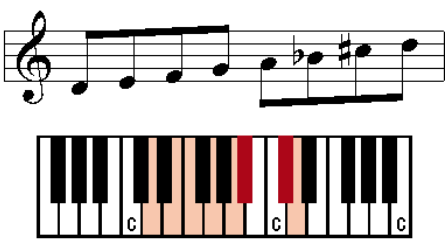
C minor



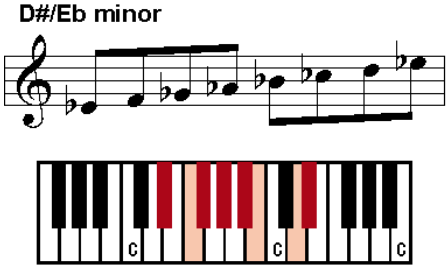
C#/Db minor



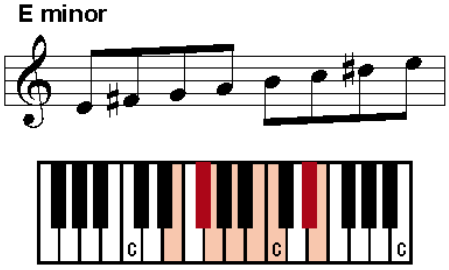
D minor



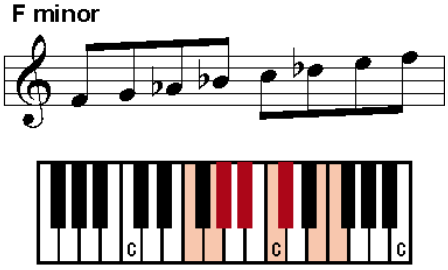
D#/Eb minor



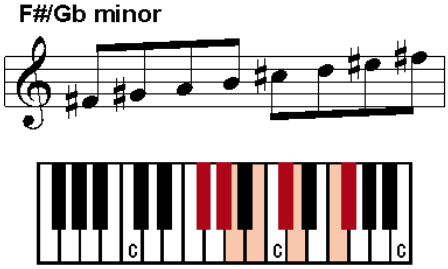
E minor



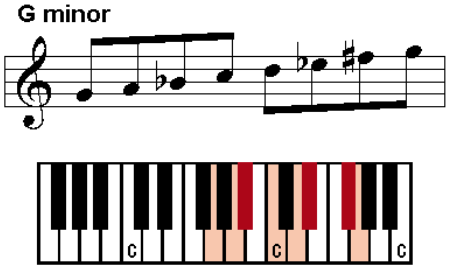
F minor



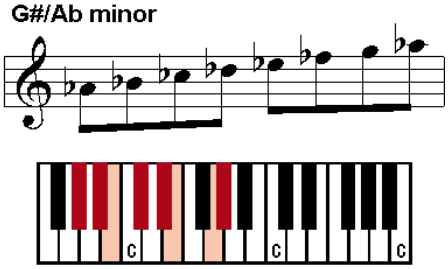
F#/Gb minor



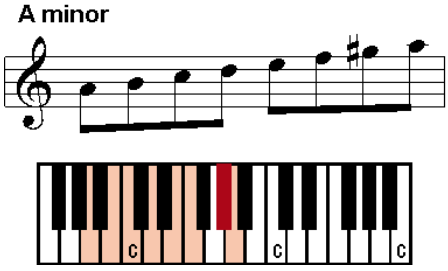
G minor



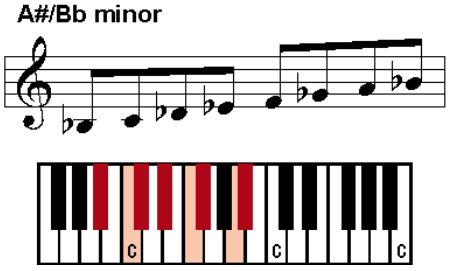
G#/Ab minor



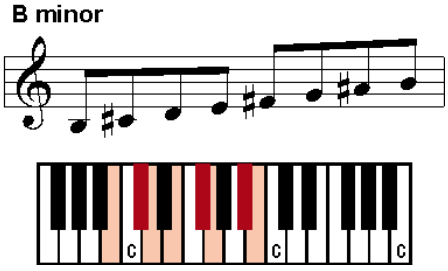
A minor



A#/Bb minor

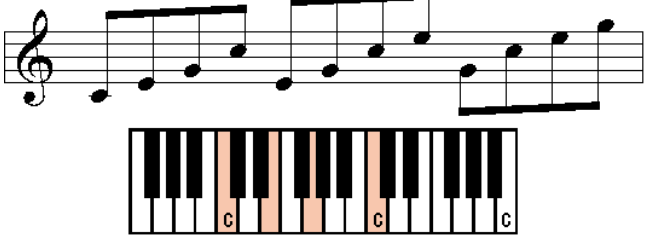


B minor

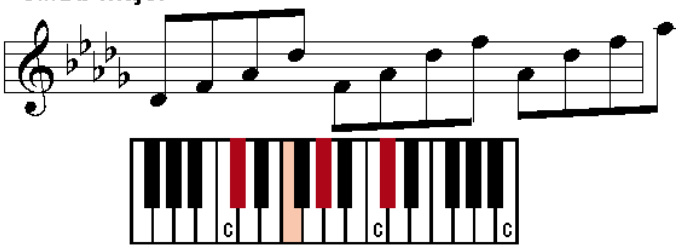


Arpeggios – major

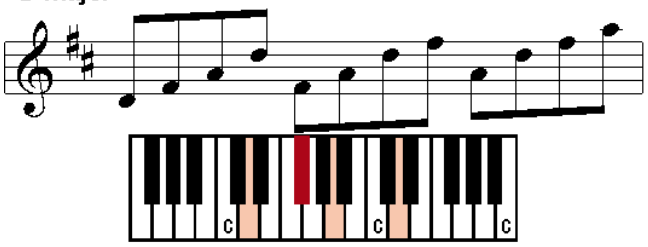
C major



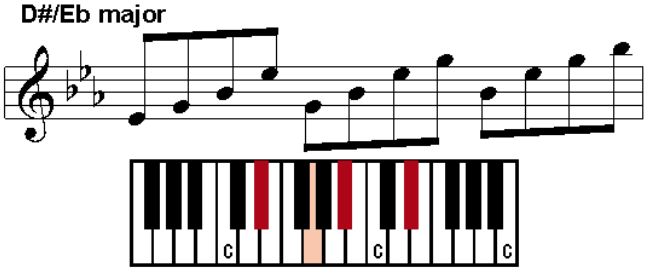
C#/Db major



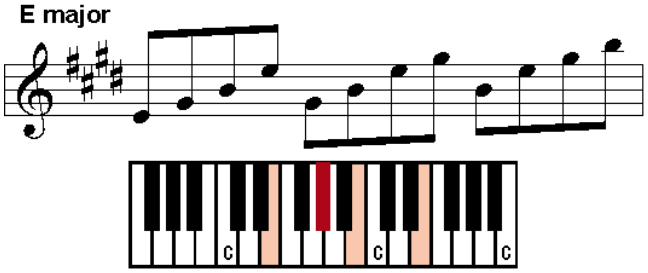
D major



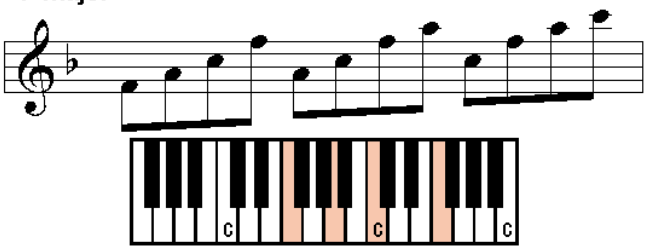
D#/Eb major



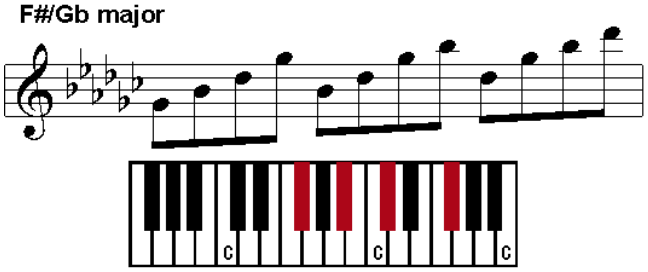
E major



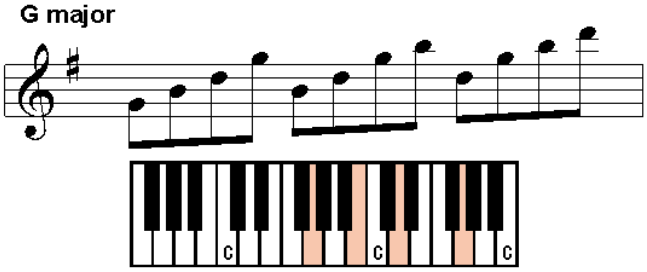
F major



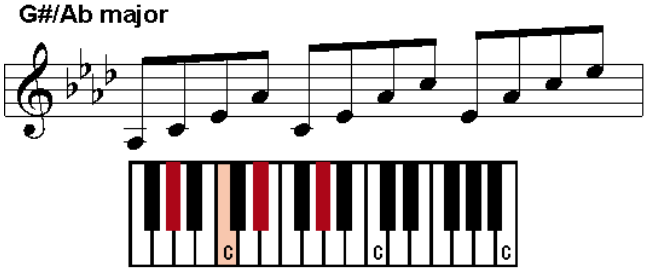
F#/Gb major



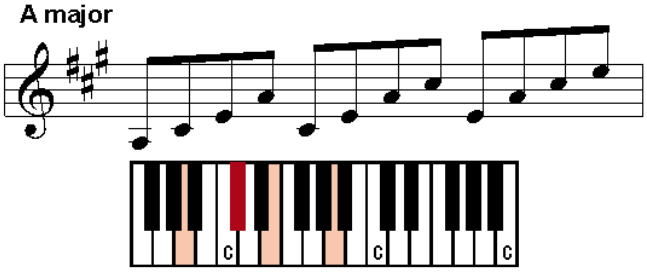
G major



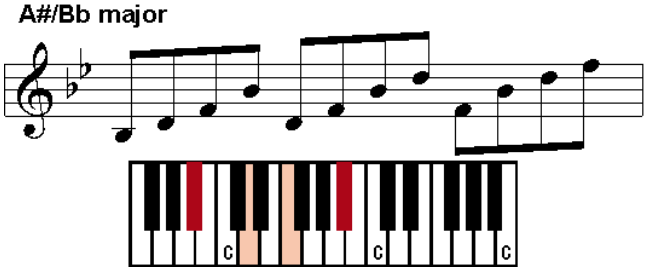
G#/Ab major



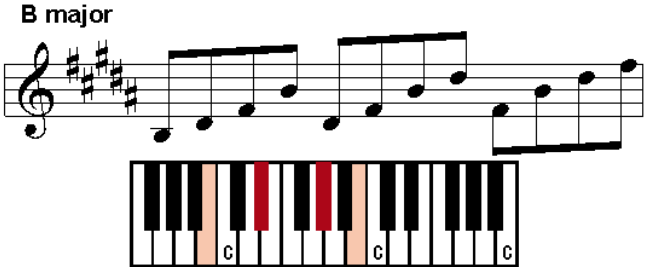
A major



A#/Bb major

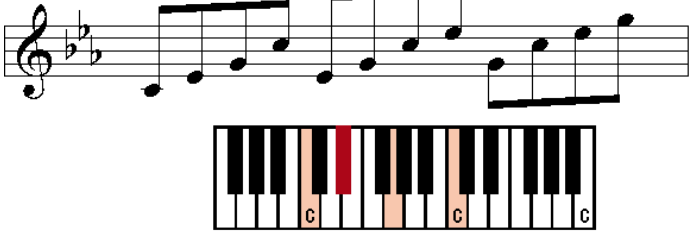


B major

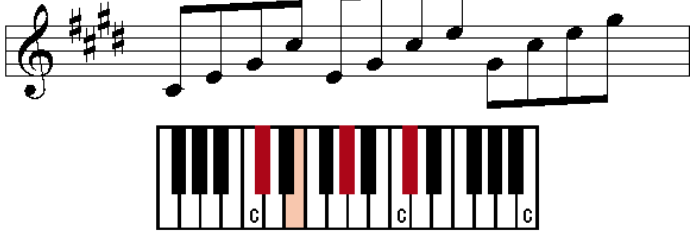


Arpeggios – minor

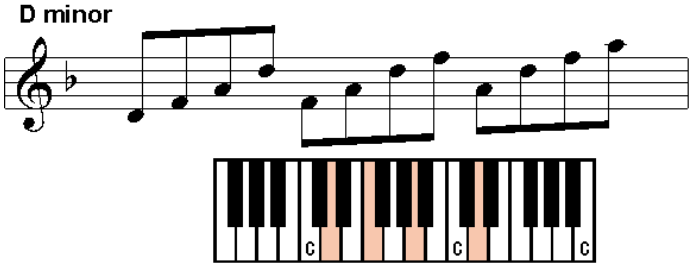
C minor



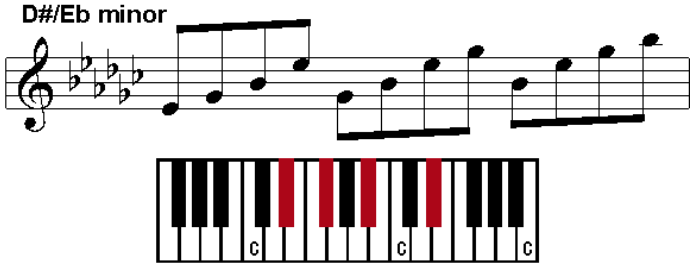
C#/Db minor



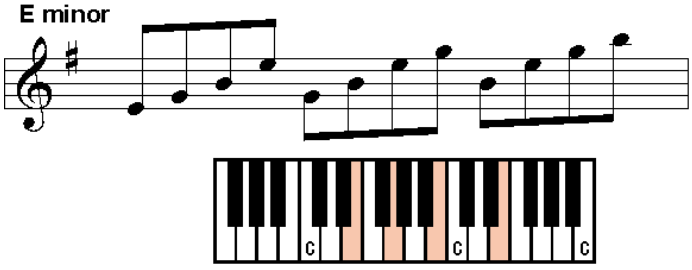
D minor



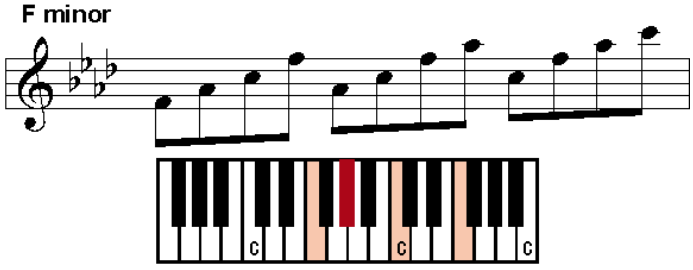
D#/Eb minor



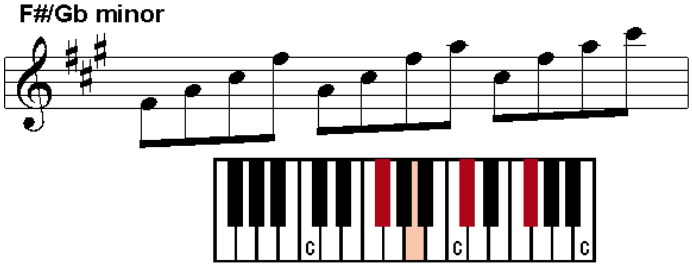
E minor



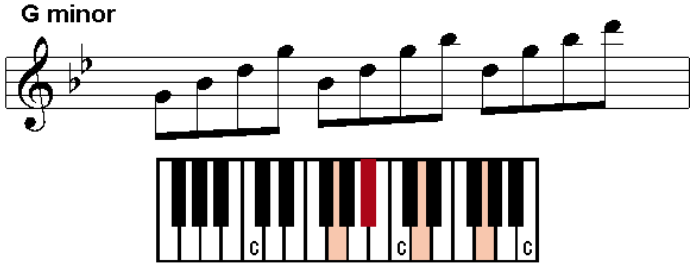
F minor



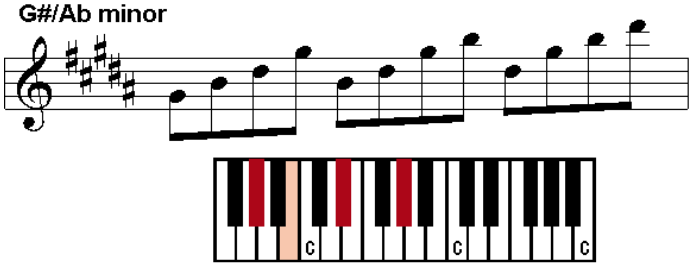
F#/Gb minor



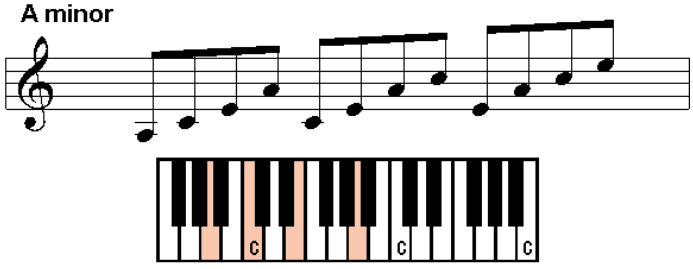
G minor



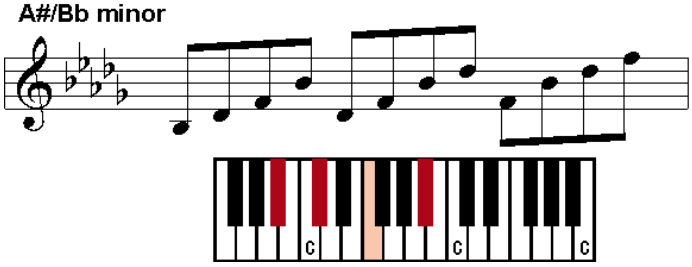
G#/Ab minor



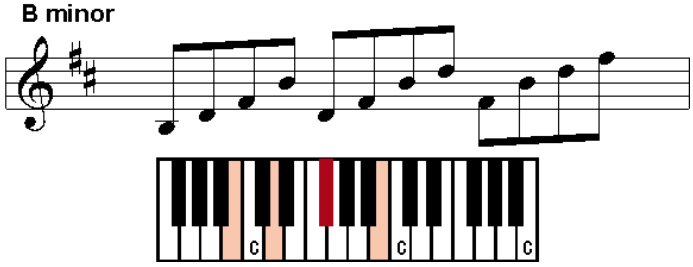
A minor



A#/Bb minor



B minor



Scale and arpeggio ranges

Octave runs

Legato major	play range
01 FL1_run-leg_C-ma	B3–D7
02 FL1_run-leg_C#-ma	C4–C#7
03 FL1_run-leg_D-ma	C#4–D7
04 FL1_run-leg_D#-ma	C4–C7
05 FL1_run-leg_E-ma	C#4–C#7
06 FL1_run-leg_F-ma	C4–C7
07 FL1_run-leg_F#-ma	C#4–C#7
08 FL1_run-leg_G-ma	B3–C7
09 FL1_run-leg_G#-ma	C4–C#7
10 FL1_run-leg_A-ma	B3–C#7
11 FL1_run-leg_A#-ma	C4–D7
12 FL1_run-leg_B-ma	B3–C#7

Legato minor	play range
01 FL1_run-leg_C-mi	C4–D7
02 FL1_run-leg_C#-mi	C4–C#7
03 FL1_run-leg_D-mi	C#4–D7
04 FL1_run-leg_D#-mi	B3–B6
05 FL1_run-leg_E-mi	C4–C7
06 FL1_run-leg_F-mi	C4–C#7
07 FL1_run-leg_F#-mi	C#4–D7
08 FL1_run-leg_G-mi	C4–C7
09 FL1_run-leg_G#-mi	C#4–C#7
10 FL1_run-leg_A-mi	B3–C7
11 FL1_run-leg_A#-mi	C4–C#7
12 FL1_run-leg_B-mi	B3–C#7

Legato major faster	play range
01 FL1_run-leg+_C-ma	C4–D7
02 FL1_run-leg+_C#-ma	C4–C#7
03 FL1_run-leg+_D-ma	C#4–D7
04 FL1_run-leg+_D#-ma	C4–C7
05 FL1_run-leg+_E-ma	C#4–C#7
06 FL1_run-leg+_F-ma	C4–C7
07 FL1_run-leg+_F#-ma	C#4–C#7
08 FL1_run-leg+_G-ma	B3–C7
09 FL1_run-leg+_G#-ma	C4–C#7
10 FL1_run-leg+_A-ma	B3–C#7
11 FL1_run-leg+_A#-ma	C4–D7
12 FL1_run-leg+_B-ma	B3–C#7

Legato minor faster	play range
01 FL1_run-leg+_C-mi	C4–D7
02 FL1_run-leg+_C#-mi	C4–C#7
03 FL1_run-leg+_D-mi	C#4–D7
04 FL1_run-leg+_D#-mi	B3–B6
05 FL1_run-leg+_E-mi	C4–C7
06 FL1_run-leg+_F-mi	C4–C#7
07 FL1_run-leg+_F#-mi	C#4–D7
08 FL1_run-leg+_G-mi	C4–C7
09 FL1_run-leg+_G#-mi	C#4–C#7
10 FL1_run-leg+_A-mi	B3–C7
11 FL1_run-leg+_A#-mi	C4–C#7
12 FL1_run-leg+_B-mi	B3–C#7

Arpeggios

Legato major	play range
01_FL1_arp-leg_C-ma	C4–C7
02_FL1_arp-leg_C#-ma	C#4–C#7
03_FL1_arp-leg_D-ma	D4–D7
04_FL1_arp-leg_D#-ma	D#4–D#7
05_FL1_arp-leg_E-ma	E4–B6
06_FL1_arp-leg_F-ma	C4–C7
07_FL1_arp-leg_F#-ma	C#4–C#7
08_FL1_arp-leg_G-ma	B3–B6
09_FL1_arp-leg_G#-ma	C4–C7
10_FL1_arp-leg_A-ma	C#4–C#7
11_FL1_arp-leg_A#-ma	D4–D7
12_FL1_arp-leg_B-ma	B3–B6

Legato major fast	play range
01_FL1_arp-leg+_C-ma	C4–C7
02_FL1_arp-leg+_C#-ma	C#4–C#7
03_FL1_arp-leg+_D-ma	D4–D7
04_FL1_arp-leg+_D#-ma	D#4–D#7
05_FL1_arp-leg+_E-ma	E4–B6
06_FL1_arp-leg+_F-ma	C4–C7
07_FL1_arp-leg+_F#-ma	C#4–C#7
08_FL1_arp-leg+_G-ma	B3–B6
09_FL1_arp-leg+_G#-ma	C4–C7
10_FL1_arp-leg+_A-ma	C#4–C#7
11_FL1_arp-leg+_A#-ma	D4–D7
12_FL1_arp-leg+_B-ma	B3–B6

Legato minor	play range
01_FL1_arp-leg_C-mi	C4–C7
02_FL1_arp-leg_C#-mi	C#4–C#7
03_FL1_arp-leg_D-mi	D4–D7
04_FL1_arp-leg_D#-mi	D#4–D#7
05_FL1_arp-leg_E-mi	E4–B6
06_FL1_arp-leg_F-mi	C4–C7
07_FL1_arp-leg_F#-mi	C#4–C#7
08_FL1_arp-leg_G-mi	A#3–A#6
09_FL1_arp-leg_G#-mi	B3–B6
10_FL1_arp-leg_A-mi	C4–C7
11_FL1_arp-leg_A#-mi	C#4–C#7
12_FL1_arp-leg_B-mi	B3–B6

Legato minor fast	play range
01_FL1_arp-leg_C-mi+	C4–C7
02_FL1_arp-leg_C#-mi+	C#4–C#7
03_FL1_arp-leg_D-mi+	D4–D7
04_FL1_arp-leg_D#-mi+	D#4–D#7
05_FL1_arp-leg_E-mi+	E4–B6
06_FL1_arp-leg_F-mi+	C4–C7
07_FL1_arp-leg_F#-mi+	C#4–C#7
08_FL1_arp-leg_G-mi+	A#3–A#6
09_FL1_arp-leg_G#-mi+	B3–B6
10_FL1_arp-leg_A-mi+	C4–C7
11_FL1_arp-leg_A#-mi+	C#4–C#7
12_FL1_arp-leg_B-mi+	B3–B6

Staccato major	play range
01_FL1_arp-sta_C-ma	C4–C7
02_FL1_arp-sta_C#-ma	C#4–C#7
03_FL1_arp-sta_D-ma	D4–D7
04_FL1_arp-sta_D#-ma	D#4–D#7
05_FL1_arp-sta_E-ma	E4–B6
06_FL1_arp-sta_F-ma	C4–C7
07_FL1_arp-sta_F#-ma	C#4–C#7
08_FL1_arp-sta_G-ma	B3–B6
09_FL1_arp-sta_G#-ma	C4–C7
10_FL1_arp-sta_A-ma	C#4–C#7
11_FL1_arp-sta_A#-ma	D4–D7
12_FL1_arp-sta_B-ma	B3–B6

Staccato major fast	play range
01_FL1_arp-sta+_C-ma	C4–C7
02_FL1_arp-sta+_C#-ma	C#4–C#7
03_FL1_arp-sta+_D-ma	D4–D7
04_FL1_arp-sta+_D#-ma	D#4–D#7
05_FL1_arp-sta+_E-ma	E4–B6
06_FL1_arp-sta+_F-ma	C4–C7
07_FL1_arp-sta+_F#-ma	C#4–C#7
08_FL1_arp-sta+_G-ma	B3–B6
09_FL1_arp-sta+_G#-ma	C4–C7
10_FL1_arp-sta+_A-ma	C#4–C#7
11_FL1_arp-sta+_A#-ma	D4–D7
12_FL1_arp-sta+_B-ma	B3–B6

Staccato minor	play range
01_FL1_arp-sta_C-mi	C4–C7
02_FL1_arp-sta_C#-mi	C#4–C#7
03_FL1_arp-sta_D-mi	D4–D7
04_FL1_arp-sta_D#-mi	D#4–D#7
05_FL1_arp-sta_E-mi	E4–B6
06_FL1_arp-sta_F-mi	C4–C7
07_FL1_arp-sta_F#-mi	C#4–C#7
08_FL1_arp-sta_G-mi	A#3–A#6
09_FL1_arp-sta_G#-mi	B3–B6
10_FL1_arp-sta_A-mi	C4–C7
11_FL1_arp-sta_A#-mi	C#4–C#7
12_FL1_arp-sta_B-mi	B3–B6

Staccato minor fast	play range
01_FL1_arp-sta_C-mi+	C4–C7
02_FL1_arp-sta_C#-mi+	C#4–C#7
03_FL1_arp-sta_D-mi+	D4–D7
04_FL1_arp-sta_D#-mi+	D#4–D#7
05_FL1_arp-sta_E-mi+	E4–B6
06_FL1_arp-sta_F-mi+	C3–C7
07_FL1_arp-sta_F#-mi+	C#4–C#7
08_FL1_arp-sta_G-mi+	A#3–A#6
09_FL1_arp-sta_G#-mi+	B3–B6
10_FL1_arp-sta_A-mi+	C4–C7
11_FL1_arp-sta_A#-mi+	C#4–C#7
12_FL1_arp-sta_B-mi+	B3–B6