

Vienna Instruments
Solo Download Instruments
Tuba
Full Library

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Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments Tuba. 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)	lo	long
150, 160, ...	150, 160, ... BPM (beats per minute)	ma	major
1s, 2s, ...	tone length 1 sec., 2 sec., ...	marc	marcato
acc	accelerando	me	medium
all	combination of all Patches of a category	mi	minor
arp	arpeggio	mord	mordent
blare	"blared" tones (horn)	mu	muted
cre	crescendo	muA, muB	muted, variation A/B
dim	diminuendo	nA	normal attack
dm	diminished (arpeggios)	noVib	without vibrato
dyn	dynamics (crescendo and diminuendo)	perf-rep	repetition performance
dyn5, dyn9	dynamics, 5/9 repetitions	por	portato
fa	fast	run	octave run
faT	fast triplets	sA	soft attack
fA	fast attack	sl	slow
fA_auto	attack automation (normal/fast attack)	sta, stac	staccato
fast-rep	fast repetitions	sto	stopped (horns)
flatter	flutter tonguing	str	strong
fx	effect sound	sus	sustained
gliss	glissando	T	triplets
hA	hard attack	tune	"tuning in" articulation
leg	legato	UB	upbeat
li	light	UB-a1, -a2	1, 2 upbeats
		v1, v2 ...	1st, 2nd, ... variation
		Vib	with (medium) vibrato
		Vib-progr	progressive vibrato
		XF	cell crossfade Matrix

Articulations

56 Tenor trombone - mute B	
01 SHORT + LONG NOTES	Staccato Portato short and medium Sustained with progressive and without vibrato
02 DYNAMICS	Crescendo and diminuendo with and without vibrato, 1.5, 2, 3, and 4 sec. pfp without vibrato, 2, 3 and 4 sec. Fortepiano, sforzato and sforzatissimo
03 FLATTER	Flutter tonguing, normal and crescendo
10 PERF INTERVAL	Legato Marcato
11 PERF REPETITION	Legato Portato Staccato Dynamics for all repetitions
12 FAST REPETITION	Staccato, 9 repetitions, 140–190 BPM Normal and dynamics
13 UPBEAT REPETITION	1–3 upbeats, 90–140, 160, and 180 BPM

The orchestra

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



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

Pitch

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

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

59 Tuba

The Instrument

Description

The bass tuba is a bass and contrabass instrument. Together with the contrabass tuba it is the largest and lowest-pitched brass instrument not only in the orchestra, where the tuba player sits together with the trombone section, but also in wind bands and military music.

The brass section of the modern symphony orchestra has one tuba, especially large brass sections use two tubas.

Range and notation

The bass tuba has a range from D1–G4.

Music for the bass tuba is generally non-transposing and written in bass clef.

Sound characteristics

Round, smooth, calm, velvety, hearty, robust, unobtrusive, ponderous, sustaining, gentle, soft, soothing.

The overall effect of the low notes is soft and unobtrusive. The tone is not penetrating, but nevertheless projects very well.

The middle register is very full-sounding in soft legato phrases. It is the notes within this compass that are used most often.


A very loud and powerful tone is possible in the high register which can hold its own in *tutti* passages.


Combination with other instruments

One of the principal tasks of the bass tuba is the doubling of other bass instruments. Especially in *tutti* passages its role is to provide a firm fundamental bass.


The bass tuba plays bass to the brass section, often doubling or replacing the fourth trombone. It also shares the bass voice with the contrabassoon and the double-bass. With the high woodwinds and strings no tonal blend is possible.


Patches




01 SHORT + LONG NOTES		Range: D1–G4		
01 TU_staccato			Samples: 370	RAM: 23 MB
Staccato 5 velocity layers 4 Alternations				
02 TU_portato_medium			Samples: 185	RAM: 11 MB
Portato, medium 5 velocity layers 2 Alternations				
03 TU_portato_medium_soft			Samples: 175	RAM: 10 MB
Portato, medium, soft attack 5 velocity layers 2 Alternations				
04 TU_portato_medium_hard			Samples: 369	RAM: 23 MB
Portato, medium, hard attack 5 velocity layers 4 Alternations				
05 TU_portato_long_Vib-light			Samples: 296	RAM: 18 MB
Portato, long, with light vibrato 4 velocity layers Release samples 2 Alternations				
07 TU_portato_long_Vib-strong			Samples: 296	RAM: 18 MB
Portato, long, with strong vibrato 4 velocity layers Release samples 2 Alternations				
08 TU_portato_long_noVib-soft			Samples: 259	RAM: 16 MB
Portato, long, without vibrato, soft attack 4 velocity layers Release samples 2 Alternations				
09 TU_portato_long_noVib-hard			Samples: 333	RAM: 20 MB
Portato, long, without vibrato, hard attack 5 velocity layers Release samples 2 Alternations				

21 TU_sus_Vib-1	Samples: 296	RAM: 18 MB
Sustained, with vibrato, var. 1 4 velocity layers Release samples		
22 TU_sus_Vib-2	Samples: 259	RAM: 16 MB
Sustained, with vibrato, var. 2 4 velocity layers Release samples		
23 TU_sus_noVib	Samples: 259	RAM: 16 MB
Sustained, without vibrato 4 velocity layers Release samples		
02 DYNAMICS		
Range: D1–G4		
01 TU_dyn-li_noVib_1s	Samples: 222	RAM: 13 MB
Light crescendo and diminuendo without vibrato, 1 sec. 3 velocity layers AB switch: crescendo/diminuendo		
02 TU_dyn-li_noVib_1'5s	Samples: 222	RAM: 13 MB
Light crescendo and diminuendo without vibrato, 1.5 sec. 3 velocity layers AB switch: crescendo/diminuendo		
03 TU_dyn-li_noVib_2s	Samples: 222	RAM: 13 MB
Light crescendo and diminuendo without vibrato, 2 sec. 3 velocity layers AB switch: crescendo/diminuendo		
04 TU_dyn-li_noVib_3s	Samples: 222	RAM: 13 MB
Light crescendo and diminuendo without vibrato, 3 sec. 3 velocity layers AB switch: crescendo/diminuendo		
05 TU_dyn-li_noVib_4s	Samples: 222	RAM: 13 MB
Light crescendo and diminuendo without vibrato, 4 sec. 3 velocity layers AB switch: crescendo/diminuendo		
11 TU_dyn-me_Vib_2s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo with vibrato, 2 sec. 2 velocity layers AB switch: crescendo/diminuendo		


12 TU_dyn-me_Vib_3s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo with vibrato, 3 sec. 2 velocity layers AB switch: crescendo/diminuendo		
13 TU_dyn-me_Vib_4s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo with vibrato, 4 sec. 2 velocity layers AB switch: crescendo/diminuendo		
14 TU_dyn-me_Vib_6s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo with vibrato, 6 sec. 2 velocity layers AB switch: crescendo/diminuendo		
21 TU_dyn-me_noVib_2s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo without vibrato, 2 sec. 2 velocity layers AB switch: crescendo/diminuendo		
22 TU_dyn-me_noVib_3s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo without vibrato, 3 sec. 2 velocity layers AB switch: crescendo/diminuendo		
23 TU_dyn-me_noVib_4s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo without vibrato, 4 sec. 2 velocity layers AB switch: crescendo/diminuendo		
24 TU_dyn-me_noVib_6s	Samples: 148	RAM: 9 MB
Medium crescendo and diminuendo without vibrato, 6 sec. 2 velocity layers AB switch: crescendo/diminuendo		
31 TU_dyn-str_noVib_2s	Samples: 74	RAM: 4 MB
Strong crescendo and diminuendo without vibrato, 2 sec. 1 velocity layer AB switch: crescendo/diminuendo		
32 TU_dyn-str_noVib_3s	Samples: 74	RAM: 4 MB
Strong crescendo and diminuendo without vibrato, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo		
33 TU_dyn-str_noVib_4s	Samples: 74	RAM: 4 MB
Strong crescendo and diminuendo without vibrato, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo		

34 TU_dyn-str_noVib_6s		Samples: 73	RAM: 4 MB
Strong crescendo and diminuendo without vibrato, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo			
41 TU_pfp_noVib_4s		Samples: 37	RAM: 2 MB
Crescendo-diminuendo without vibrato, 4 sec. 1 velocity layer			
51 TU_fp		Samples: 38	RAM: 2 MB
Fortepiano 1 velocity layer 2 Alternations			
52 TU_sfz		Samples: 37	RAM: 2 MB
Sforzato 1 velocity layer 2 Alternations			
53 TU_sffz		Samples: 37	RAM: 2 MB
Sforzatissimo 1 velocity layer 2 Alternations			
03 FLATTER + TRILLS			
01 TU_flatter	Range: D2-F4	Samples: 80	RAM: 5 MB
Flutter tonguing 1 velocity layer Release samples			
02 TU_flatter_cre	Range: G#1-G4	Samples: 32	RAM: 2 MB
Flutter tonguing, crescendo 1 velocity layer			
11 TU_trill_1	Range: D1-G4	Samples: 213	RAM: 13 MB
Trills, minor 2nd 3 velocity layers Release samples			
12 TU_trill_2	Range: D1-D4	Samples: 178	RAM: 11 MB
Trills, major 2nd 3 velocity layers Release samples			
13 TU_trill_1_cre	Range: D1-G4	Samples: 36	RAM: 2 MB
Trills, crescendo, minor 2nd 1 velocity layer			

14 TU_trill_2_cre	Range: D1–A2	Samples: 15	RAM: 1 MB
Trills, crescendo, major 2nd 1 velocity layer			
04 MUTE BASIC	Range: D1–G4		
01 TU_mu_staccato		Samples: 222	RAM: 13 MB
Staccato 3 velocity layers 4 Alternations			
02 TU_mu_portato_medium		Samples: 222	RAM: 13 MB
Portato, medium 3 velocity layers 4 Alternations			
03 TU_mu_portato_long		Samples: 222	RAM: 13 MB
Portato, long 3 velocity layers Release samples 2 Alternations			
04 TU_mu_sus		Samples: 222	RAM: 13 MB
Sustained 3 velocity layers Release samples			
11 TU_mu_dyn_2s		Samples: 74	RAM: 4 MB
Medium crescendo and diminuendo, 2 sec. 1 velocity layer AB switch: crescendo/diminuendo			
12 TU_mu_dyn_3s		Samples: 74	RAM: 4 MB
Medium crescendo and diminuendo, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo			
13 TU_mu_dyn_4s		Samples: 74	RAM: 4 MB
Medium crescendo and diminuendo, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo			
14 TU_mu_sfz		Samples: 37	RAM: 2 MB
Sforzato 1 velocity layer 2 Alternations			

21 TU_mu_flutter	Range: G1–G4	Samples: 64	RAM: 4 MB
Flutter tonguing 1 velocity layer Release samples			
22 TU_mu_flutter-cre	Range: D2–G4	Samples: 25	RAM: 1 MB
Flutter tonguing, crescendo 1 velocity layer			
10 PERF INTERVAL	Range: D1–F#4		
01 TU_perf-legato_noVib		Samples: 892	RAM: 55 MB
Legato, no vibrato 2 velocity layers Release samples			
02 TU_perf-legato_noVib_sus		Samples: 966	RAM: 60 MB
Legato, no vibrato Sustain crossfading 2 velocity layers Release samples			
03 TU_perf-legato_Vib_sus		Samples: 892	RAM: 55 MB
Legato, vibrato Sustain crossfading 2 velocity layers Release samples			
11 PERF INTERVAL FAST	Range: A1–G4		
01 TU_perf-legato_fa		Samples: 892	RAM: 55 MB
Legato, fast 2 velocity layers Release samples			
12 PERF REPETITION	Range: F1–G4		
01 TU_perf-rep_leg	Range: D1–G4	Samples: 228	RAM: 14 MB
Legato 2 velocity layers			
02 TU_perf-rep_por-sl		Samples: 306	RAM: 19 MB
Portato, slow 2 velocity layers			

03 TU_perf-rep_por-fa Portato, fast 2 velocity layers	Samples: 306	RAM: 19 MB
04 TU_perf-rep_sta-sl Staccato, slow 2 velocity layers	Samples: 306	RAM: 19 MB
05 TU_perf-rep_sta-fa Staccato, fast 2 velocity layers	Samples: 306	RAM: 19 MB
21 TU_perf-rep_dyn6_leg Legato dynamics, 6 repetitions 1 velocity layer AB switch: crescendo/diminuendo	Samples: 192	RAM: 12 MB
22 TU_perf-rep_cre9_por-sl Portato crescendo, slow, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB
23 TU_perf-rep_cre9_por-fa Portato crescendo, fast, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB
24 TU_perf-rep_cre9_sta-sl Staccato crescendo, slow, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB
25 TU_perf-rep_cre9_sta-fa Staccato crescendo, fast, 9 repetitions 1 velocity layer	Samples: 153	RAM: 9 MB

13 FAST REPETITION	Range: D1–G4	
01 TU_fast-rep_140 (150/160/170/180/190) Fast repetitions: 140–190 BPM 2 velocity layers Release samples	Range: A#1–G4	Samples: 120 RAM: 7 MB
11 TU_fast-rep_140_cre (150/160/170/180/190) Fast repetitions: 140–190 BPM, crescendo 1 velocity layer	Range: A#1–G4	Samples: 30 RAM: 1 MB

14 UPBEAT REPETITION**A Single Upbeat****Range: G1–G4****01 TU_UB-a1_80 (90/100/110/120/130/140)****Samples: 64****RAM: 4 MB**

1 upbeat, 80–140 BPM
2 velocity layers

B Double Upbeats**Range: G1–G4****01 TU_UB-a2_80 (90/100/110/120/130/140)****Samples: 64****RAM: 4 MB**

2 upbeats, 80–140 BPM
2 velocity layers

C Triple Upbeats**Range: G1–G4****01 TU_UB-a3_80 (90/100/110/120/130/140/160)****Samples: 64****RAM: 4 MB**

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

15 GRACE NOTES**Range: F1–G4**

The samples are mapped to their target notes.

01 TU_grace-1**Samples: 200****RAM: 12 MB**

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

02 TU_grace-2**Samples: 198****RAM: 12 MB**

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

98 RESOURCES

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

01 Perf Rep dyn		Range: F1–G4	
01 TU_rep_cre6_leg-1 (2/3/4/5/6)		Samples: 16	RAM: 1 MB
Extracted repetitions Legato, crescendo, 1st to 6th note 1 velocity layer			
01 TU_rep_dim6_leg-1 (2/3/4/5/6)		Samples: 16	RAM: 1 MB
Extracted repetitions Legato, diminuendo, 1st to 6th note 1 velocity layer			
02 TU_rep_cre9_por-1 (2/3/4/5/6/7/8/9)		Samples: 17	RAM: 1 MB
Extracted repetitions: Portato, crescendo, 1st to 9th note 1 velocity layer			
03 TU_rep_cre9_sta-1 (2/3/4/5/6/7/8/9)		Samples: 17	RAM: 1 MB
Extracted repetitions: Staccato, crescendo, 1st to 9th note 1 velocity layer			
02 Long Notes - Single Layer		Range: D1–G4	
01 TU_sus_pp_noVib		Samples: 74	RAM: 4 MB
Sustained, pianissimo, without vibrato 1 velocity layer Release samples			
02 TU_sus_p_noVib		Samples: 74	RAM: 4 MB
Sustained, piano, without vibrato 1 velocity layer Release samples			
03 TU_sus_mf_noVib		Samples: 74	RAM: 4 MB
Sustained, mezzoforte, without vibrato 1 velocity layer Release samples			
04 TU_sus_f_noVib		Samples: 74	RAM: 4 MB
Sustained, forte, without vibrato 1 velocity layer Release samples			

03 Perf Speed variation**Range: D1–F#4****01 TU_perf-legato_slow****Samples: 892****RAM: 55 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 TU Articulation Combi

Samples: 1614 RAM: 100 MB

Single note articulations

Staccato, portato medium, sustained with (var.1) and without vibrato, crescendo-diminuendo without vibrato 4 sec., fortepiano and sforzato, flutter tonguing normal and crescendo, trills half and whole tone

Matrix switches: Horizontal: Keyswitches, C6–F6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	D#6	E6	F6
V1	stac	sus vib. v.1	pfp no vib. 4s.	fp	flutter	trill half
V2	port. medium	sus no vib.	pfp no vib. 4s.	sfz	flutter cres.	trill whole

L1 TU Perf-Legato Speed

Samples: 1124 RAM: 70 MB

Interval performances

Legato slow, normal without vibrato, and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal no vib.	fast

L1 TU Perf-Repetitions Combi

Samples: 840 RAM: 52 MB

Repetition performances

Legato

Portato slow

Staccato slow

Matrix switches: Vertical: Modwheel, 3 zones

	repetitions
V1	legato
V2	portato slow
V3	staccato slow

Matrix - LEVEL 2 A - Advanced

O1 TU Perf-Universal

Samples: 1124 RAM: 70 MB

Interval performances

Legato slow, normal without vibrato, and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal no vib.	fast

02 TU Short+Long notes**Samples: 1591 RAM: 99 MB**

Single notes

Staccato, portato medium, portato long with light, strong, and without vibrato

Sustained with (2 variations) and without vibrato

Matrix switches: Horizontal: Keyswitches, C6–D#6 Vertical: Modwheel, 3 zones

	C6	C#6	D6	D#6
V1	staccato	port.med.	port.long light vib.	sus. vib. v.1
V2	staccato	port.med.	port.long strong vib.	sus. vib. v.2
V2	%	%	port.long no vib.	sus. no vib.

Matrix - LEVEL 2 B - Standard**11 TU Perf-Legato Speed****Samples: 1124 RAM: 70 MB**

Interval performances

Legato slow, normal without vibrato, and fast

Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	slow	normal no vib.	fast

12 TU Short notes**Samples: 1100 RAM: 68 MB**

Single notes

Staccato, portato medium with normal, soft, and hard attack

Matrix switches: Horizontal: Keyswitches, C6–D#6

	C6	C#6	D6	D#6
V1	staccato	port.med. norm.	port.med. soft	port.med. hard

13 TU Long notes - All**Samples: 592 RAM: 37 MB**

Single notes

Sustained with (2 variations) and without vibrato

Matrix switches: Horizontal: Keyswitches, C6–D6

	C6	C#6	D6
sustained	vibrato v.1	vibrato v.2	no vibrato

14 TU Dynamics - Small**Samples: 556 RAM: 34 MB**

Dynamics

Medium crescendo and diminuendo without vibrato, 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C6–D6 Vertical: Modwheel, 4 zones

	C6	C#6	D6
dyn.med. no vib.	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%

15 TU Dynamics - Large**Samples: 1554 RAM: 97 MB**

Dynamics

Medium crescendo and diminuendo with and without vibrato, 2, 3, 4, and 6 sec.

Strong crescendo and diminuendo without vibrato, 2, 3, 4, and 6 sec.

Crescendo-diminuendo without vibrato 4 sec.

Fortepiano, sforzato, sforzatissimo

Matrix switches: Horizontal: Keyswitches, C6–D#6 Vertical: Modwheel, 5 zones

	C6	C#6	D6	D#6
dyn.med. vib.	2 sec.	3 sec.	4 sec.	6 sec.
dyn.med. no vib.	2 sec.	3 sec.	4 sec.	6 sec.
dyn.str. no vib.	2 sec.	3 sec.	4 sec.	6 sec.
pfp no vib.	4 sec.	%	%	%
fp/sfz/sffz	fp	sfz	sffz	sffz

16 TU Flatter**Samples: 112 RAM: 7 MB**

Flutter tonguing

Normal, crescendo, and normal/crescendo with Cell crossfading

Matrix switches: Horizontal: Keyswitches, C6–D6

	C6	C#6	D6
flutter	normal	crescendo	Cell XF

17 TU Trills - All**Samples: 442 RAM: 27 MB**

Trills, minor and major 2nd, normal and crescendo

Matrix switches: Horizontal: Keyswitches, C6–C#6 Vertical: Modwheel, 2 zones

	C6	C#6
min 2nd	normal	crescendo
maj. 2nd	normal	crescendo

18 TU Mute Short+Long**Samples: 866 RAM: 54 MB**

Single notes, muted

Staccato, portato medium and long, sustained, flutter tonguing normal and crescendo

Matrix switches: Horizontal: Keyswitches, C6–F6

	C6	C#6	D6	D#6	E6	F6
V1	staccato	port. medium	port. long	sustained	flutter norm.	flutter cres.

19 TU Mute Dynamics**Samples: 259 RAM: 16 MB**

Dynamics, muted

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

Sforzato

Matrix switches: Horizontal: Keyswitches, C6–D6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	
cres/dim	2 sec.	3 sec.	4 sec.	
sfz	%	%	%	%

Matrix - LEVEL 2 C - Repetitions**31 TU Perf-Repetitions - Combi****Samples: 1452 RAM: 90 MB**

Repetition performances

Legato, portato slow and fast, and staccato slow and fast

Matrix switches: Horizontal: Keyswitches, C6–E6

	C6	C#6	D6	E6	
V1	legato	portato slow	portato fast	staccato slow	staccato fast

32 TU Perf-Repetitions - Speed**Samples: 1146 RAM: 71 MB**

Repetition performances

Legato, portato slow and fast, and staccato fast

Speed controller

Matrix switches: Horizontal: Speed, 4 zones

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

33 TU Fast-Repetitions**Samples: 420 RAM: 26 MB**

Fast repetitions: Staccato, 140–190 BPM

Matrix switches: Horizontal: Keyswitches, C6–F6

	C6	C#6	D6	D#6	E6	F6
speed/BPM	140	150	160	170	180	190

34 TU Upbeats a1**Samples: 448 RAM: 28 MB**

Repetitions: 1 upbeat, 80–140 BPM

	C6	C#6	D6	D#6	E6	F6	F#6
speed/BPM	80	90	100	110	120	130	140

35 TU Upbeats a2**Samples: 448 RAM: 28 MB**

Repetitions: 2 upbeats, 80–140 BPM

Matrix switches: Horizontal: Keyswitches, C6–F#6

	C6	C#6	D6	D#6	E6	F6	F#6
speed/BPM	80	90	100	110	120	130	140

36 TU Upbeats a3**Samples: 512 RAM: 32 MB**

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

Matrix switches: Horizontal: Keyswitches, C6–G6

	C6	C#6	D6	D#6	E6	F6	F#6	G6
speed/BPM	80	90	100	110	120	130	140	160

37 TU Upbeats all**Samples: 1408 RAM: 88 MB**

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

Please note that due to a copying error the VI Patch description shows different speeds.

Matrix switches: Horizontal: Keyswitches, C6–G6 Vertical: Modwheel, 3 zones

	C6	C#6	D6	D#6	E6	F6	F#6	G6
1 upbeat	80	90	100	110	120	130	140	140
2 upbeats	80	90	100	110	120	130	140	140
3 upbeats	80	90	100	110	120	130	140	160

Matrix - LEVEL 2 D - Scale+Phrase**41 TU Grace notes - All****Samples: 324 RAM: 20 MB**

Grace notes, minor and major 2nd
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C6–C#6

	C6	C#6
interval	min. 2nd	maj. 2nd

Matrix - LEVEL 2 E - Keyswitch Vel**71 TU Legato - cre6****Samples: 96 RAM: 6 MB**

Legato notes: Crescendo, keyswitch velocity
Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–F6

	C6	C#6	D6	D#6	E6	F6
velocity	1st	2nd	3rd	4th	5th	6th

72 TU Portato - cre9**Samples: 153 RAM: 9 MB**

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

Matrix switches: Horizontal: Keyswitches, C6–G#6

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

73 TU Staccato - cre9**Samples: 153 RAM: 9 MB**

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

Matrix switches: Horizontal: Keyswitches, C6–G#6

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

74 TU Combi - cre9**Samples: 306 RAM: 19 MB**

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

Matrix switches: Horizontal: Keyswitches, C6–G#6 Vertical: Modwheel, 2 zones

	C6	C#6	D6	D#6	E6	F6	F#6	G6	G#6
portato	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
staccato	1st	%	%	%	%	%	%	%	%

75 TU Legato - dim6**Samples: 96 RAM: 6 MB**

Legato notes: Diminuendo, keyswitch velocity
Keyswitches control 6 dynamic steps

Matrix switches: Horizontal: Keyswitches, C6–F6

	C6	C#6	D6	D#6	E6	F6
velocity	1st	2nd	3rd	4th	5th	6th

Presets

TU VSL Preset Level 1

Samples: 3430 RAM: 214 MB

L1 TU Perf-Legato Speed

L1 TU Articulation Combi

L1 TU Perf-Repetitions Combi

Preset keyswitches: C7–D7

TU VSL Preset Level 2

Samples: 4348 RAM: 271 MB

01 TU Perf-Universal

01 TU Perf-Universal

L1 TU Articulation Combi

31 TU Perf-Repetitions - Combi

74 TU Combi - cre9

Preset keyswitches: C7–E7