

**Vienna Instruments**  
**Solo Download Instruments**  
**Wagner 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 Wagner 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

<b>61 Wagner tuba</b>	
<b>01 SHORT + LONG NOTES</b>	Staccato Portato short, medium and long Sustained
<b>02 DYNAMICS</b>	Medium crescendo and diminuendo, 1.5, 2, 3, 4, and 6 sec. Strong crescendo and diminuendo, 3, 4, and 6 sec. pfp, 4 and 6 sec. Fortepiano, sforzato, sforzatissimo
<b>03 FLATTER</b>	Flutter tonguing normal and crescendo
<b>10 PERF INTERVAL</b>	Legato Marcato
<b>11 PERF INTERVAL FAST</b>	Legato Marcato
<b>12 PERF TRILL</b>	Trills, legato, minor to major 2nd
<b>13 PERF REPETITION</b>	Legato slow and fast Portato Staccato slow and fast Dynamics for all repetitions
<b>14 UPBEAT REPETITION</b>	1 upbeat, 80–140, 160, and 180 BPM 2 and 3 upbeats, 80–140, 160, 180, and 200 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.

# 61 Wagner tuba

## The instrument

### Description

The Wagner tuba, conceived by Richard Wagner for his “Ring of the Nibelung”, is made in two sizes, Bb (tenor instrument) and F (bass instrument). In the symphony orchestra two of each instrument have always been used.

Although the instrument’s conical tubing means that it belongs to the bugle-horn family (tubas), its playing technique and sound characteristics place it among the horns. It is played by a hornist because it has a horn mouthpiece.

### Range and notation

The range of the tenor Wagner tuba in Bb is Eb1–Bb5. Notation is transposing, usually in bass and treble clef. It sounds a major second lower than written.

### Sound characteristics

Round, resounding, hearty, robust, sustaining, gentle, soft, war-like, menacing, sonorous, solemn, stately, heroic, substantial.

Overall the Wagner tuba’s timbre lies somewhere between the horn, the bass tuba and the trombone. Compared to the horn it sounds more somber and softer, has a less incisive attack. In comparison with the bass tuba it sounds thinner, edgier and more incisive, compared to the trombone milder, softer and darker.

### Combination with other instruments

The Wagner tuba is best suited for the evocation of solemn, stately and heroic moods and its timbre bridges the gap between the horns and the low brass as well as between the bass tuba and the trombones. It has enough volume to play themes on its own or an octave above with the bass tuba.



## Patches

### 01 SHORT + LONG NOTES

Range: A#1–G5



#### 01 WTU\_staccato

Samples: 338

RAM: 21 MB

Staccato  
4 velocity layers  
4 Alternations

#### 02 WTU\_portato\_short

Samples: 338

RAM: 21 MB

Portato, short  
4 velocity layers  
4 Alternations

#### 03 WTU\_portato\_medium

Samples: 338

RAM: 21 MB

Portato, medium  
4 velocity layers  
4 Alternations

#### 04 WTU\_portato\_long

Samples: 344

RAM: 21 MB

Portato, long  
4 velocity layers  
Release samples  
2 Alternations

#### 11 WTU\_sus

Samples: 344

RAM: 21 MB

Sustained  
4 velocity layers  
Release samples

### 02 DYNAMICS

Range: A#1–G5



#### 01 WTU\_dyn-me\_1'5s

Samples: 167

RAM: 10 MB

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

#### 01 WTU\_dyn-me\_2s

Samples: 167

RAM: 10 MB

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

#### 02 WTU\_dyn-me\_3s

Samples: 176

RAM: 11 MB

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

<b>03 WTU_dyn-me_4s</b>		<b>Samples: 176</b>	<b>RAM: 11 MB</b>
Medium crescendo and diminuendo, 4 sec. 2 velocity layers AB switch: crescendo/diminuendo			
<b>11 WTU_dyn-str_3s</b>	<b>Range: A#1–F#5</b>	<b>Samples: 88</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo			
<b>12 WTU_dyn-str_4s</b>	<b>Range: A#1–F#5</b>	<b>Samples: 88</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo			
<b>13 WTU_dyn-str_6s</b>	<b>Range: A#1–F#5</b>	<b>Samples: 88</b>	<b>RAM: 5 MB</b>
Strong crescendo and diminuendo, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo			
<b>21 WTU_pfp_4s</b>		<b>Samples: 23</b>	<b>RAM: 1 MB</b>
Crescendo-diminuendo, 4 sec. 1 velocity layer			
<b>22 WTU_pfp_6s</b>		<b>Samples: 23</b>	<b>RAM: 1 MB</b>
Crescendo-diminuendo, 6 sec. 1 velocity layer			
<b>31 WTU_fp</b>		<b>Samples: 43</b>	<b>RAM: 2 MB</b>
Fortepiano 1 velocity layer 2 Alternations			
<b>32 WTU_sfz</b>		<b>Samples: 44</b>	<b>RAM: 2 MB</b>
Sforzato 1 velocity layer 2 Alternations			
<b>33 WTU_sffz</b>		<b>Samples: 37</b>	<b>RAM: 2 MB</b>
Sforzatissimo 1 velocity layer 2 Alternations			

**03 FLATTER****Range: A#1–G5****01 WTU\_flatter****Samples: 86****RAM: 5 MB**

Flutter tonguing  
1 velocity layer  
Release samples

**02 WTU\_flatter\_cre****Samples: 43****RAM: 2 MB**

Flutter tonguing, crescendo  
1 velocity layer

**10 PERF INTERVAL****Range: A#1–F5****01 WTU\_perf-legato****Samples: 1062****RAM: 66 MB**

Legato  
2 velocity layers  
Release samples

**02 WTU\_perf-marcato****Samples: 1142****RAM: 71 MB**

Marcato  
2 velocity layers  
Release samples

**11 PERF INTERVAL FAST****Range: A#1–F5****01 WTU\_perf-legato\_fa****Samples: 1142****RAM: 71 MB**

Legato, fast  
2 velocity layers  
Release samples

**02 WTU\_perf-marcato\_fa****Samples: 1222****RAM: 76 MB**

Marcato, fast  
2 velocity layers  
Release samples

**12 PERF TRILL****Range: A#1–F5****01 WTU\_perf-trill****Samples: 1902****RAM: 118 MB**

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

**13 PERF REPETITION****Range: A#1–F5**

<b>01 WTU_perf-rep_leg-sl</b> Repetition performances: Legato, slow 2 velocity layers	<b>Samples: 220</b>	<b>RAM: 13 MB</b>
<b>02 WTU_perf-rep_leg-fa</b> Repetition performances: Legato, fast 2 velocity layers	<b>Samples: 215</b>	<b>RAM: 13 MB</b>
<b>03 WTU_perf-rep_por</b> Repetition performances: Portato 2 velocity layers	<b>Samples: 396</b>	<b>RAM: 24 MB</b>
<b>04 WTU_perf-rep_sta-sl</b> Repetition performances: Staccato, slow 2 velocity layers	<b>Samples: 396</b>	<b>RAM: 24 MB</b>
<b>05 WTU_perf-rep_sta-fa</b> Repetition performances: Staccato, fast 3 velocity layers	<b>Samples: 594</b>	<b>RAM: 37 MB</b>
<b>11 WTU_perf-rep_dyn5_leg-sl</b> Repetition performances: Legato dynamics, slow, 5 repetitions 1 velocity layer AB switch: crescendo/diminuendo	<b>Samples: 220</b>	<b>RAM: 13 MB</b>
<b>12 WTU_perf-rep_dyn5_leg-fa</b> Repetition performances: Legato dynamics, fast, 5 repetitions 1 velocity layer AB switch: crescendo/diminuendo	<b>Samples: 220</b>	<b>RAM: 13 MB</b>
<b>13 WTU_perf-rep_dyn9_por</b> Repetition performances: Portato dynamics, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo	<b>Samples: 396</b>	<b>RAM: 24 MB</b>
<b>14 WTU_perf-rep_dyn9_sta-sl</b> Repetition performances: Staccato dynamics, slow, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo	<b>Samples: 396</b>	<b>RAM: 24 MB</b>
<b>15 WTU_perf-rep_dyn9_sta-fa</b> Repetition performances: Staccato dynamics, fast, 9 repetitions 1 velocity layer AB switch: crescendo/diminuendo	<b>Samples: 396</b>	<b>RAM: 24 MB</b>

**14 UPBEAT REPETITION****A Single Upbeat****Range: A#1–F#5****01 WTU\_UB-a1\_80 (90/100/110/120/130/140/160/180)****Samples: 66****RAM: 4 MB**

1 upbeat, 80–140, 160, and 180 BPM  
3 velocity layers

**B Double Upbeats****Range: A#1–F#5****01 WTU\_UB-a2\_80 (90/100/110/120/130/140/160/180/200)****Samples: 66****RAM: 4 MB**

2 upbeats, 80–140, 160, 180, and 200 BPM  
3 velocity layers

**C Triple Upbeats****Range: A#1–F#5****01 WTU\_UB-a3\_80 (90/100/110/120/130/140/160/180/200)****Samples: 66****RAM: 4 MB**

3 upbeats, 80–140, 160, 180, and 200 BPM  
3 velocity layers

**98 RESOURCES**

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

**01 Perf Rep dyn****Range: A#1–F5****01 WTU\_rep\_cre5\_leg-1 (2/3/4/5)****Samples: 22****RAM: 1 MB**

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

**01 WTU\_rep\_dim5\_leg-1 (2/3/4/5)****Samples: 22****RAM: 1 MB**

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

**02 WTU\_rep\_cre9\_por-1 (2/3/4/5/6/7/8/9)****Samples: 22****RAM: 1 MB**

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

**02 WTU\_rep\_dim9\_por-1 (2/3/4/5/6/7/8/9)****Samples: 22****RAM: 1 MB**

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

**03 WTU\_rep\_cre9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 22****RAM: 1 MB**

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

**03 WTU\_rep\_dim9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 22****RAM: 1 MB**

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

**02 Long Notes - Single Layer****Range: A#1–G5****01 WTU\_sus\_p****Samples: 87****RAM: 5 MB**

Sustained, piano  
1 velocity layer  
Release samples

**02 WTU\_sus\_mf****Samples: 88****RAM: 5 MB**

Sustained, mezzopiano  
1 velocity layer  
Release samples

**03 WTU\_sus\_f****Samples: 88****RAM: 5 MB**

Sustained, forte  
1 velocity layer  
Release samples

**04 WTU\_sus\_ff****Samples: 81****RAM: 5 MB**

Sustained, fortissimo  
1 velocity layer  
Release samples

**99 RELEASE**

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

# Matrices

## Matrix - LEVEL 1

### L1 WTU Articulation Combi

**Samples: 1282   RAM: 80 MB**

Single note articulations

Staccato, portato short, sustained, crescendo-diminuendo 4 and 6 sec., fortissimo and sforzato, flutter tonguing normal and crescendo

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

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

### L1 WTU Perf-Legato Speed

**Samples: 1310   RAM: 81 MB**

Interval performances

Legato normal and fast

Speed controller

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

	H1	H2
legato	normal	fast

### L1 WTU Perf-Repetitions Combi

**Samples: 1012   RAM: 63 MB**

Repetition performances

Legato slow

Portato

Staccato slow

**Matrix switches:** Vertical: Modwheel, 3 zones

	repetitions
V1	legato slow
V2	portato
V3	staccato slow

## Matrix - LEVEL 2 A - Advanced

### O1 WTU Perf-Universal

**Samples: 2612   RAM: 163 MB**

Interval performances

Legato normal and fast

Marcato normal and fast

Speed controller

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

	H1	H2
legato	normal	fast
marcato	normal	fast

**02 WTU Perf-Trill Speed****Samples: 2070 RAM: 129 MB**

Multi interval performances

Legato and trills

Speed controller

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

	H1	H2
V1	legato no vib.	trills

**03 WTU Short+Long notes - All****Samples: 1527 RAM: 95 MB**

Single notes

Staccato, portato short, medium, and long, sustained

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	staccato	port. short	port.med.	port.long	sustained

**Matrix - LEVEL 2 B - Standard****11 WTU Perf-Legato Speed****Samples: 1310 RAM: 81 MB**

Interval performances

Legato normal and fast

Speed controller

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

	H1	H2
legato	normal	fast

**12 WTU Perf-Marcato Speed****Samples: 1390 RAM: 86 MB**

Interval performances

Marcato normal and fast

Speed controller

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

	H1	H2
marcato	normal	fast

**13 WTU Dynamics - Small****Samples: 643 RAM: 40 MB**

Dynamics

Medium crescendo and diminuendo, 2, 3, and 4 sec.

Fortepiano, sforzato, sforzatisimo

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

	C1	C#1	D1
dyn.medium	2 sec.	3 sec.	4 sec.
fp	%	%	%
sfz	%	%	%
sffz	%	%	%



**14 WTU Dynamics - Large****Samples: 953    RAM: 59 MB**

Dynamics

Medium crescendo and diminuendo, 2, 3, and 4 sec.

Strong crescendo and diminuendo, 3, 4, and 6 sec.

Crescendo-diminuendo, 4 and 6 sec.

Fortepiano, sforzato, sforzatissimo

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

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

**15 WTU Flatter****Samples: 129    RAM: 8 MB**

Flutter tonguing

Normal, crescendo, and normal/crescendo with Cell crossfading

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

	C1	C#1	D1
flutter	normal	crescendo	Cell XF

**Matrix - LEVEL 2 C - Repetitions****31 WTU Perf-Repetitions - Combi****Samples: 1821    RAM: 113 MB**

Repetition performances

Slow and fast legato, portato, slow and fast staccato

**Matrix switches:** Horizontal: Keyswitches, C1–E1

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

**32 WTU Perf-Repetitions - Speed****Samples: 1227    RAM: 76 MB**

Repetition performances

Slow and fast legato, portato, slow staccato

Speed controller

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

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

**33 WTU Upbeats a1****Samples: 528    RAM: 33 MB**

Repetitions: 1 upbeat, 90–140, 160, and 180 BPM

**Matrix switches:** Horizontal: Keyswitches, C1–G1

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

**34 WTU Upbeats a2****Samples: 594    RAM: 37 MB**

Repetitions: 2 upbeats, 90–140, 160, 180, and 200 BPM

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

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

**35 WTU Upbeats a3****Samples: 594 RAM: 37 MB**

Repetitions: 3 upbeats, 90–140, 160, 180, and 200 BPM

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

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

**36 WTU Upbeats all****Samples: 1716 RAM: 107 MB**

Repetitions: 1–3 upbeats, 90–140, 160, 180, and 200 BPM

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

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
1 upbeat	90	100	110	120	130	140	160	180	180
2 upbeats	90	100	110	120	130	140	160	180	200
3 upbeats	90	100	110	120	130	140	160	180	200

**Matrix - LEVEL 2 E - Keyswitch Vel****71 WTU Legato - cre5****Samples: 110 RAM: 6 MB**

Legato notes: Crescendo, keyswitch velocity

Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

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

**72 WTU Portato - cre9****Samples: 198 RAM: 12 MB**

Portato notes: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

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

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

**73 WTU Staccato - cre9****Samples: 198 RAM: 12 MB**

Staccato notes: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

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

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

**74 WTU Combi - cre9****Samples: 396 RAM: 24 MB**

Portato and staccato: Crescendo, keyswitch velocity

Keyswitches control 9 dynamic steps

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

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

**75 WTU Legato - dim5****Samples: 110****RAM: 6 MB**

Legato notes: Diminuendo, keyswitch velocity

Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

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

**76 WTU Portato - dim9****Samples: 198****RAM: 12 MB**

Portato notes: Diminuendo, keyswitch velocity

Keyswitches control 9 dynamic steps

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

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

**77 WTU Staccato - dim9****Samples: 198****RAM: 12 MB**

Staccato notes: Diminuendo, keyswitch velocity

Keyswitches control 9 dynamic steps

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

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

**78 WTU Combi - dim9****Samples: 396****RAM: 24 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

### WTU VSL Preset Level 1

Samples: 3428 RAM: 214 MB

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

**Preset keyswitches:** C6–D6

### WTU VSL Preset Level 2

Samples: 6862 RAM: 428 MB

01 WTU Perf-Universal  
 02 WTU Perf-Trill Speed  
 L1 WTU Articulation Combi  
 31 WTU Perf-Repetitions - Combi  
 74 WTU Combi - cre9

**Preset keyswitches:** C6–E6