VIENNA SYMPHONIC LIBRARY

Vienna Instruments
Elements

Mapping Documentation

Glass harmonica
Verrophone
Musical glasses A, B, C
Bottles
Lithophone
Tam-Tam XXL
Bass Waterphone

VIENNA SYMPHONIC LIBRARY

Contents

Introduction

This document contains the mapping list for the Elements Collection of Vienna Instruments, which consists of glass harmonica, verrophone, three sets of musical glasses, blown bottles, large lithophone, an extra-large tam-tam, and the bass waterphone. You will find here a comprehensive survey of the articulations/patches for the Standard and the Extended Libraries of each instrument, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset in the collection.

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, the mapping layout will be shown in a detailed graphic.

The 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. In some cases where the velocity mapping differs considerably from the normal layout, this will be noted in the mapping information.

Layers	Layer 1	Layer 2	Layer 3
2	0–88	89–127	
3	0–55	56–108	109–127

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 for this Collection only is applied to release durations, and is set to A0 for longer releases, and B0 for shorter ones.

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. If you want to try out other settings, you can change this as well as any other controller 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.

Articulations

Instrument/Group	Level 1 (Standard) content	Level 2 (Extended) content
01 GLASS HARMONICA	Portato Sustained	Half tone trills Mallet hits normal and secco Mallet glissandos
02 VERROPHONE	Staccato Sustained	Portato, tremolo, half tone trills, mallet hits normal and secco, chromatic mallet trills, mallet glissandos
03 MUSICAL GLASSES - A		Staccato Portato Sustained Tremolo Half tone trills
04 MUSICAL GLASSES - B	Staccato Sustained	Portato Tremolo Half tone trills Single hits with soft, medium, and hard mallets Mallet glissandos
05 MUSICAL GLASSES - C		Staccato fast and slow Portato fast and slow Sustained Tremolo Mallet single hits
06 BOTTLES	Staccato Sustained Flutter tonguing	Portato Sforzato
11 LITHOPHONE	Single notes with soft and hard mallets Small and large stones on slabs Bowed	Soft mallets: Single hits secco Rolls Chord tremolos Sul ponticello normal and secco Glissandos Medium mallets: Single notes normal and secco Chord tremolos Hard mallets: Single notes secco Chord tremolos Effects: Finger strokes normal and secco Nail strokes normal and accented 3mm needle center strokes and plucked 5mm needle side strokes and ponticello "Shattering" tremolo portato and accented

Instrument/Group	Level 1 (Standard) content	Level 2 (Extended) content
21 TAM XXL	Basic articulations: Singe hits, rim and middle Tremolo dynamics, muted Tremolo normal and dynamics, open Long tremolo Effects: Paperbox Miscellaneous 1 and 2	Effects: Flexatone Metal Cardboard tube Plastic Fretsaw and egg cutter
31 BASS WATERPHONE	Staccato A Sustained Tremolo crescendo Arpeggio Glissando	Staccato B Portato A and B Repetitions Crescendo forte and fortissimo Hotrods Wood Strokes

Abbreviations

Instruments

Abbreviation	English	German
Glass Harm	Glass harmonica	Glasharmonika
VER	Verrophone	Verrophon
Mu Glasses	Musical glasses	Gläserspiel
LI	Lithophone	Lithophon
Tam	Tam-Tam	Tamtam
BWPH	Bass waterphone	Bass-Waterphon

Articulations and other abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
acc	accelerando	me	medium (mallet)
all	combination of all the instruments of a type	mute	muted or damped
bow	played with a bow	nail	fingernail
cent	center	pont	bridge
chrom	chromatic	port	portato
cres	crescendo	RS	release samples
fing	finger	sec	secco
flatter	flutter tonguing	so	soft (mallet)
FX	effect	stac	staccato
gliss	glissando	pont	sul ponticello (played near the bridge)
ha	hard (mallet)	sus	sustained

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.

Elements

Patches

01 GLASS HARMONICA — Range: G3–F#6

The glass harmonica was invented in 1761; Mozart wrote several pieces for this instrument. However, the ethereal, crystalline and subtle sound of the glass harmonica was too fragile for the ever growing orchestra, and the instrument fell into oblivion. The hemispherical glass bowls which rotate around a horizontal axis driven by a pedal were rediscovered only in the last decades of the 19th century. The sound is produced by touching the rotating glasses with moistened fingertips. Today, the glass harmonica is an absolute rarity, with roughly 10 professional players world-wide.

All glass instruments were played by Chris and Gerald Schoenfeldinger. The musician couple discovered the world of glass sounds after they had studied music in Vienna (both are accomplished violinists), inspired by a sound experience in Richard Strauss' opera "Die Frau ohne Schatten", in which the voices of unborn children are underscored by the spheric sounds of the glass harmonica. In the beginning of the 1990s, they founded the "Viennese Glass Harmonica Duo"; today, they count among the world-wide leading interpreters on glass harmonica and verrophone. Apart from that, they investigate the psychical and physical effects of the glassy tones in hearing seminars.

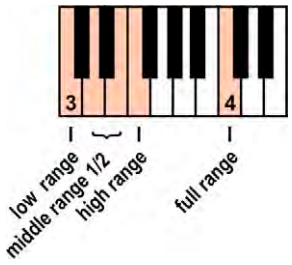
Level 1: Portato, sustained
Level 2: Half tone trills, mallet hits normal and secco, mallet glissandos

01 Glass Harm - port		Samples: 64	RAM: 4 MB	Level 1
Single notes: Portato 2 velocity layers 2 Alternations				
02 Glass Harm - sus		Samples: 64	RAM: 4 MB	Level 1
Single notes: Sustained 1 velocity layer Release samples				
03 Glass Harm - trills	Range: G3–F6	Samples: 62	RAM: 3 MB	Level 2
Phrases: Trills, half tone 1 velocity layer Release samples				
11 Glass Harm - Mallet		Samples: 128	RAM: 8 MB	Level 2
Single notes: Mallet hits, normal 2 velocity layers 2 Alternations				
12 Glass Harm - Mallet sec		Samples: 64	RAM: 4 MB	Level 2
Single notes: Mallet hits, secco 1 velocity layer 2 Alternations				

13 Glass Harm - Mallet gliss | Range: C3–C4 | Samples: 5 | RAM: 1 MB | Level 2

Phrases: Mallet glissandos, low, middle var. 1 and 2, high, and full range
1 velocity layer

Mapping:
C3: low range
D3: middle range, var. 1
E3: middle range, var. 2
F3: high range
C4: full range



02 VERROPHONE — Range: G3–E6

Another rather rarely encountered jewel is the verrophone (from French “la verre” – the glass). It is the youngest of the glass instruments, having been developed only 20 years ago in Germany. It consists of chromatically tuned glass tubes, which in their shape and arrangement remind one a bit of the resonating tubes of mallet instruments. Verrophones are rubbed with moistened fingers like the musical glasses, but are also struck with mallets. The lingering, atmospheric sound is highly esteemed by modern composers due to its extraordinary intensity – an “Eldorado” for sound designers!

Level 1: Staccato, sustained
Level 2: Portato, tremolo, half tone trills, mallet hits normal and secco, chromatic mallet trills, mallet glissandos

01 Verrophone - stac | Samples: 120 | RAM: 7 MB | Level 1

Single notes: Staccato
2 velocity layers
2 Alternations

02 Verrophone - port | Samples: 120 | RAM: 7 MB | Level 2

Single notes: Portato
2 velocity layers
2 Alternations

03 Verrophone - sus | Samples: 120 | RAM: 7 MB | Level 1

Single notes: Sustained
2 velocity layers
Release samples

04 Verrophone - roll | Samples: 60 | RAM: 3 MB | Level 2

Phrases: Tremolo, sustained
1 velocity layer
Release samples

05 Verrophone - trill | Range: G3–D#6 | Samples: 58 | RAM: 3 MB | Level 2

Phrases: Trills, half tone
1 velocity layer
Release samples

11 Verrophone - Mallet — Samples: 120 — RAM: 7 MB — Level 2

Single notes: Mallet hits, normal
2 velocity layers
2 Alternations

12 Verrophone - Mallet sec — Samples: 60 — RAM: 3 MB — Level 2

Single notes: Mallet hits, secco
1 velocity layer
2 Alternations

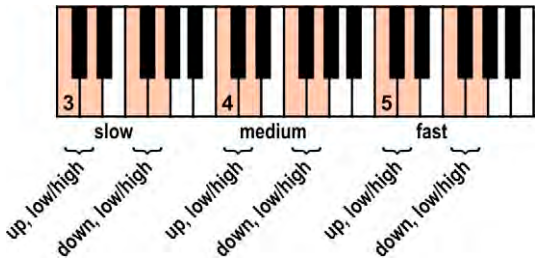
13 Verrophone - Mallet trill-chrom — Samples: 72 — RAM: 4 MB — Level 2

Phrases: Mallet trills, chromatic
2 velocity layers
Release samples

14 Verrophone - Mallet gliss — Range: C3–F5 — Samples: 12 — RAM: 1 MB — Level 2

Phrases: Mallet glissandos, slow, medium, and fast
Low and high range
1 velocity layer

Mapping:C–D – up, F–G – down
C3–F3: Slow, low/high range
C4–F4: Medium, low/high range
C5–F5: Fast, low/high range



03 MUSICAL GLASSES - A — Range: G5–C7

The musical glasses present one of the oldest forms of making music with glasses. The instrument consists of several wine glasses. By rubbing the rim of a glass with a moistened finger it produces ethereal sounds. In order to get different pitches with traditional musical glasses, they are filled with varying amounts of water. In earlier times, “nobler” liquids like wine were also used for this purpose, as is evidenced in an instruction manual for “wine music” preserved from the Baroque era.

The musical glasses sampled by the Vienna Symphonic Library have a chromatic range from G3 to G6 and were custom designed: the pitch of each glass was pre-determined in the glass-blowing workshop using an intricate production process, and no liquid is necessary.

Level 2: Staccato, portato, sustained, tremolo, and half tone trills

01 Mu Glasses - A stac — Samples: 52 — RAM: 3 MB — Level 2

Single notes: Staccato
2 velocity layers
2 Alternations

02 Mu Glasses - A port — Samples: 26 — RAM: 1 MB — Level 2

Single notes: Portato
2 velocity layers
2 Alternations

03 Mu Glasses - A sus	Samples: 52	RAM: 3 MB	Level 2
Single notes: Sustained 2 velocity layers Release samples			
04 Mu Glasses - A roll	Samples: 26	RAM: 1 MB	Level 2
Phrases: Tremolo, sustained 1 velocity layer Release samples			
05 Mu Glasses - A trill	Samples: 24	RAM: 1 MB	Level 2
Phrases: Trills, half tone 1 velocity layer Release samples			

04 MUSICAL GLASSES - B — Range: F4–G7

Level 1: Staccato, sustained
Level 2: Portato, tremolo, half tone trills, single hits with soft, medium, and hard mallets, mallet glissandos

01 Mu Glasses - B stac	Samples: 210	RAM: 13 MB	Level 1
Single notes: Staccato 3 velocity layers 2 Alternations			
02 Mu Glasses - B port	Samples: 210	RAM: 13 MB	Level 2
Single notes: Portato 3 velocity layers 2 Alternations			
03 Mu Glasses - B sus	Samples: 210	RAM: 13 MB	Level 1
Single notes: Sustained 3 velocity layers Release samples			
04 Mu Glasses - B roll	Samples: 140	RAM: 8 MB	Level 2
Phrases: Tremolo, sustained 2 velocity layers Release samples			
05 Mu Glasses - B trill	Range: F4–F#7	Samples: 68	RAM: 4 MB	Level 2
Phrases: Trills, half tone 1 velocity layer Release samples			
11 Mu Glasses - B Mallet so	Samples: 70	RAM: 4 MB	Level 2
Single notes: Soft mallet 1 velocity layer 2 Alternations			
12 Mu Glasses - B Mallet me	Samples: 70	RAM: 4 MB	Level 2
Single notes: Medium mallet 1 velocity layer 2 Alternations			

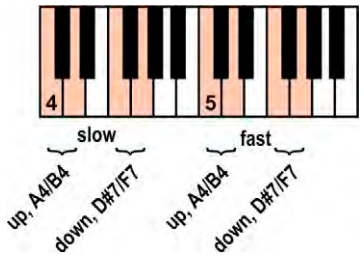
13 Mu Glasses - B Mallet ha — Samples: 70 — RAM: 4 MB — Level 2

Single notes: Hard mallet
1 velocity layer
2 Alternations

14 Mu Glasses - B Mallet gliss — Range: C4–G5 — Samples: 8 — RAM: 1 MB — Level 2

Phrases: Mallet glissandos, diminished 7th
Up and down, slow and fast
1 velocity layer

Mapping:
C4–D4: Up, slow, A4/B4
F4–G4: Down, slow, D#7/F7
C5–D5: Up, fast, A4/B4
F5–G5: Down, fast, D#7/F7



05 MUSICAL GLASSES - C — Range: E3–D7

Level 2: Staccato fast and slow, portato fast and slow, sustained, tremolo, mallet single hits

01 Mu Glasses - C stac-fast — Samples: 180 — RAM: 11 MB — Level 2

Single notes: Staccato, fast
2 velocity layers
2 Alternations

02 Mu Glasses - C stac-slow — Samples: 180 — RAM: 11 MB — Level 2

Single notes: Staccato, slow
2 velocity layers
2 Alternations

03 Mu Glasses - C port-fast — Samples: 180 — RAM: 11 MB — Level 2

Single notes: Portato, fast
2 velocity layers
2 Alternations

04 Mu Glasses - C port-slow — Samples: 180 — RAM: 11 MB — Level 2

Single notes: Portato, slow
2 velocity layers

05 Mu Glasses - C sus — Samples: 270 — RAM: 16 MB — Level 2

Single notes: Sustained
2 velocity layers
Release samples
AB switch: release duration long/short

06 Mu Glasses - C roll — Samples: 135 — RAM: 8 MB — Level 2

Phrases: Tremolo, sustained
1 velocity layer
Release samples

AB switch: release duration long/short

11 Mu Glasses - C Mallet	Samples: 160	RAM: 10 MB	Level 2

Single notes: Mallet hits
2 velocity layers
2 Alternations

06 BOTTLES — Range: C2–F4

Level 1: Staccato, sustained, flutter tonguing
Level 2: Portato, sforzato

01 Bottles stac	Samples: 100	RAM: 6 MB	Level 1

Single notes: Staccato
2 velocity layers
2 Alternations

02 Bottles port	Samples: 50	RAM: 3 MB	Level 2

Single notes: Portato
2 velocity layers

03 Bottles sus	Samples: 100	RAM: 6 MB	Level 1

Single notes: Sustained
2 velocity layers
Release samples

04 Bottles sfz	Samples: 25	RAM: 1 MB	Level 2

Single notes: Sforzato
1 velocity layer

05 Bottles flatter	Samples: 50	RAM: 3 MB	Level 1

Single notes: Flutter tonguing
1 velocity layer
Release samples

11 LITHOPHONE Range: F2–D7

Sounding stones made of basalt, granite, marble and other minerals were used in many ancient cultures for ceremonial and religious purposes. These days, the lithophone is the most commonly known stone instrument, which Carl Orff introduced to orchestral arrangements. There are 15 small round slabs of limestone chromatically arranged on rubber pegs. The lithophone recorded by the Vienna Symphonic Library was newly developed at the Technical University of Zurich, and modelled after the marimba. Unlike to common lithophones, it consists of deeply resonant slabs of serpentine (ranging in size from 17 to 84 cm!) which are equipped with resonating tubes. The unmistakable, round stone sound remains prominent over the instrument's nearly 5 octave range.

The musician

The lithophone was played by the percussionist Felix Perret. Perret, who was born in Switzerland, after his studies entered deeply into the world of jazz and improvised music. He plays in various formations, solo projects, and orchestras, and he is committed to several festivals for New Music, as well as to jazz and improvised music.

Since 1999, Felix Perret has been working with the lithophone, which was developed by Prof. W.A. Meier and his team in Zurich, and is unique in the world for its maturity of sound and technical design. Since then, several pieces have been composed for the stone instrument which draws lots of attention at international symposia and festivals.

Level 1: Single notes with soft and hard mallets, small and large stones on slabs, and bowed
Level 2: Soft mallets: single notes secco, rolls, chord tremolos; sul ponticello, normal and secco; glissandos
Medium mallets: single notes normal and secco, chord tremolos
Hard mallets: Single notes secco, chord tremolos
Effects: finger strokes normal and secco, nail strokes normal and accented, 3mm needle center strokes and plucked, 5mm needle side strokes and ponticello, "shattering" tremolo portato and accented

01 LI Soft Mallet - all	Samples: 324	RAM: 20 MB	Level 1
Single notes: Soft mallet, normal, full range 3 velocity layers 2 Alternations			
02 LI Soft Mallet - all secco	Samples: 108	RAM: 6 MB	Level 2
Single notes: Soft mallet, secco, full range 2 velocity layers			
03 LI Soft Mallet - all roll	Samples: 216	RAM: 13 MB	Level 2
Phrases: Soft mallet rolls, full range 2 velocity layers Release samples			
04 LI Soft Mallet - all roll-chords	Samples: 216	RAM: 13 MB	Level 2
Phrases: Soft mallet rolls for chord tremolos, full range 2 velocity layers Release samples			
05 LI Hard Mallet - all	Samples: 324	RAM: 20 MB	Level 1
Single notes: Hard mallet, normal, full range 3 velocity layers 2 Alternations			
06 LI sul-ponticello - all	Samples: 108	RAM: 6 MB	Level 2
Single notes: Sul ponticello, normal, full range 2 velocity layers			

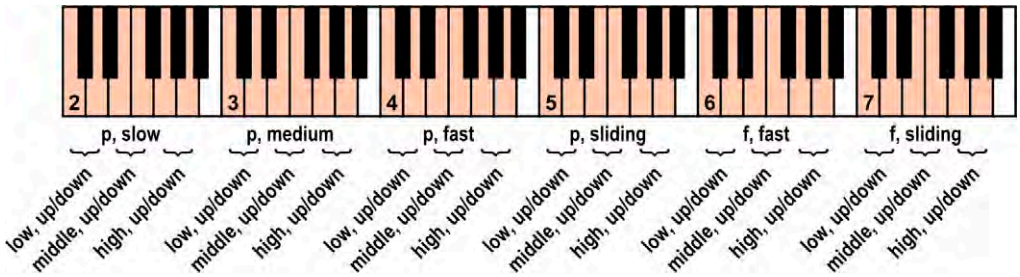
07 LI sul-ponticello - all secco — Samples: 108 — RAM: 6 MB — Level 2

Single notes: Sul ponticello, secco, full range
2 velocity layers

08 LI glissandi — Range: C2–A7 — Samples: 36 — RAM: 2 MB — Level 2

Phrases: Glissandos, p and f
Slow, medium, and fast, up and down
1 velocity layer

Mapping:
C, D: low range, up/down; E, F: medium range, up/down; G, A: high range, up/down
C2–A2: piano, slow
C3–A3: piano, medium
C4–A4: piano, fast
C5–A5: piano, sliding glissando
C6–A6: forte, fast
C7–A7: forte, sliding glissando



11 LI Soft Mallet - low — Range: F2–D4 — Samples: 108 — RAM: 6 MB — Level 2

Single notes: Soft mallet, normal, lower range
3 velocity layers
2 Alternations

12 LI Soft Mallet - low secco — Range: F2–D4 — Samples: 36 — RAM: 2 MB — Level 2

Single notes: Soft mallet, secco, lower range
2 velocity layers

13 LI Medium Mallet - low — Range: F2–D4 — Samples: 72 — RAM: 4 MB — Level 2

Single notes: Medium mallet, normal, lower range
2 velocity layers
2 Alternations

14 LI Medium Mallet - low secco — Range: F2–D4 — Samples: 36 — RAM: 2 MB — Level 2

Single notes: Medium mallet, secco, lower range
2 velocity layers

15 LI Medium Mallet - low roll-chords — Range: G2–C4 — Samples: 72 — RAM: 4 MB — Level 2

Phrases: Medium mallet rolls for chord tremolos, lower range
2 velocity layers
Release samples

16 LI Hard Mallet - high — Range: A#3–D7 — Samples: 148 — RAM: 9 MB — Level 2

Single notes: Hard mallet, normal, higher range
2 velocity layers
2 Alternations

17 LI Hard Mallet - high secco — Range: A#3–D7 — Samples: 74 — RAM: 4 MB — Level 2

Single notes: Hard mallet, secco, higher range
2 velocity layers

18 LI Hard Mallet - high roll-chords	Range: C4–C7	Samples: 148	RAM: 9 MB	Level 2
Phrases: Hard mallet rolls for chord tremolos, higher range 2 velocity layers Release samples				
21 LI finger		Samples: 54	RAM: 3 MB	Level 2
Single notes: Finger strokes, normal 1 velocity layer				
22 LI finger secco		Samples: 54	RAM: 3 MB	Level 2
Single notes: Finger strokes, secco 1 velocity layer				
23 LI nail		Samples: 54	RAM: 3 MB	Level 2
Single notes: Nail strokes, normal 1 velocity layer				
24 LI nail accent		Samples: 54	RAM: 3 MB	Level 2
Single notes: Nail strokes, accented 1 velocity layer				
25 LI stone small		Samples: 54	RAM: 3 MB	Level 1
Single notes, with small stones placed on the Lithophone slabs 1 velocity layer				
26 LI stone big		Samples: 54	RAM: 3 MB	Level 1
Single notes, with larger stones placed on the Lithophone slabs 1 velocity layer				
27 LI Needle 3mm-cent		Samples: 54	RAM: 3 MB	Level 2
Single notes: 3 mm needle, center strokes 1 velocity layer				
28 LI Needle 3mm-FX		Samples: 54	RAM: 3 MB	Level 2
Effects: 3 mm needle, placed on the slab and plucked to create a singing sound 1 velocity layer				
29 LI Needle 5mm-side		Samples: 54	RAM: 3 MB	Level 2
Single notes: 5 mm needle, side strokes 1 velocity layer				
30 LI Needle 5mm-pont		Samples: 54	RAM: 3 MB	Level 2
Single notes: 5 mm needle, sul ponticello 1 velocity layer				
31 LI Shatter port		Samples: 54	RAM: 3 MB	Level 2
Phrases: "Shattering" tremolo, portato 1 velocity layer				
32 LI Shatter accent		Samples: 54	RAM: 3 MB	Level 2
Phrases: "Shattering" tremolo, accented 1 velocity layer				

33 LI Bow piano — Range: F2–C7 — Samples: 106 — RAM: 6 MB — Level 1

Single notes: Bowed, piano
1 velocity layer
Release samples

34 LI Bow forte — Samples: 106 — RAM: 6 MB — Level 1

Single notes: Bowed, forte
1 velocity layer
Release samples

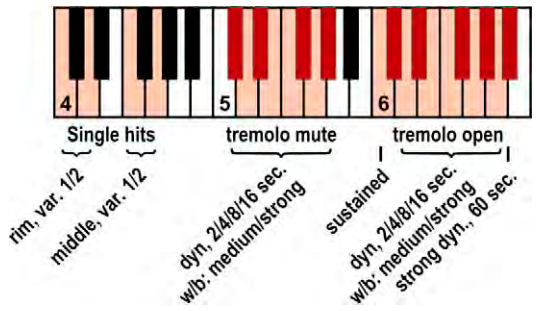
21 TAM XXL

Level 1: Basic articulations, effects: paperbox, miscellaneous 1 and 2
Level 2: Effects: Flexatone, metal, cardboard tube, plastic, fretsaw and egg cutter

01 Tam XXL Basic — Range: C4–A#6 — Samples: 69 — RAM: 4 MB — Level 1

Singe hits, rim and middle
Tremolo dynamics, muted, 2 to 16 sec.
Tremolo normal and dynamics, open, 2 to 16 sec.
Long tremolo, pp–ff, 60 sec.
Velocity mapping:
Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff
Rolls, 4 layers: 0–55 ppp, 56–88 p, 89–108 mf, 109–127 ff
Release samples
AB switch: release duration long/short

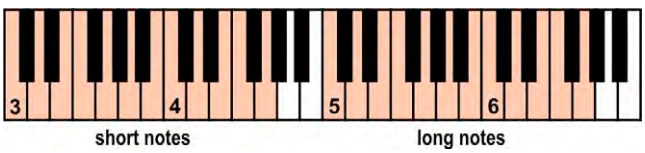
Mapping:
C4–D4: Single hits, rim, var. 1/2
F4–G4: Single hits, middle, var. 1/2
C#5–G#5: Medium and strong tremolo dynamics, muted, 2/4/8/16 sec. (Medium dynamics on white keys, strong dynamics on black keys)
C6: Tremolo sustained, open
C#6–G#6: Medium and strong tremolo dynamics, open, 2/4/8/16 sec. (Medium dynamics on white keys, strong dynamics on black keys)
A#6: Strong tremolo dynamics, 60 sec.



11 Tam XXL FX-1 Flexatone — Range: C3–G6 — Samples: 32 — RAM: 2 MB — Level 2

Effects: Flexatone, short and long notes
1 velocity layer

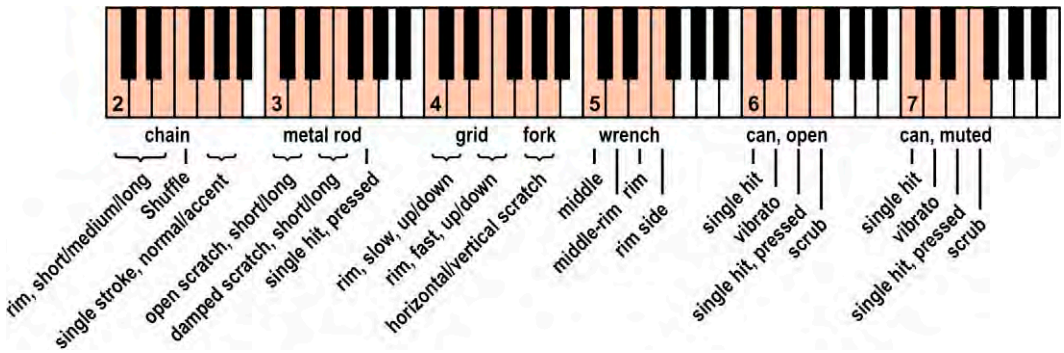
Mapping:
C3–G4: short notes
C5–G6: long notes



12 Tam XXL FX-2 Metal | Range: C2–F7 | Samples: 44 | RAM: 2 MB | Level 2

Effects: Played with a chain, metal rod, grid, fork, wrench, and can
Various articulations according to beater
Velocity mapping:
Wrench, 3 layers: 0–55 p, 56–108 mf, 109–127 f
Release samples
AB switch: release duration long/short

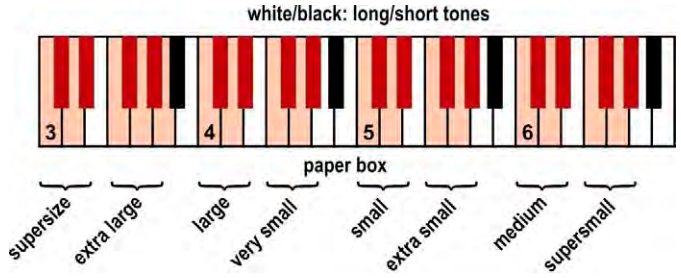
Mapping:
Chain: C2–A2
C–E: drawn over the rim, short/medium/long
F: Shuffling
G–A: Single stroke, normal/with accent
Metal rod: C3–G3
C–D: scratching, open, short/long
E–F: scratching, damped, short/long
G: single hit with rod pressed against tam-tam
Grid: C4–F4
C–D: drawn over the rim, slow, up/down
E–F: drawn over the rim, fast, up/down
Fork: G4–A4
G: horizontal scratching
A: vertical scratching (AB switch release duration)
Wrench: C5–F5
C: middle hits
D: middle to rim
E: rim hits
F: rim hits from the side
Metal can: C6–F6 (open), C7–F7 (muted)
C: single hit
D: vibrato
E: single hit with can pressed against tam-tam
F: scrubbed (open: AB switch release duration)



13 Tam XXL FX-3 Paperbox Range: C3–G#6 Samples: 67 RAM: 4 MB Level 1

Effects: Supersize, extra large, large, medium, small, very small, extra small, and supersmall paperboxes
Long and short tones (AB on long tones)
1 velocity layer
Release samples
AB switch: release duration long/short

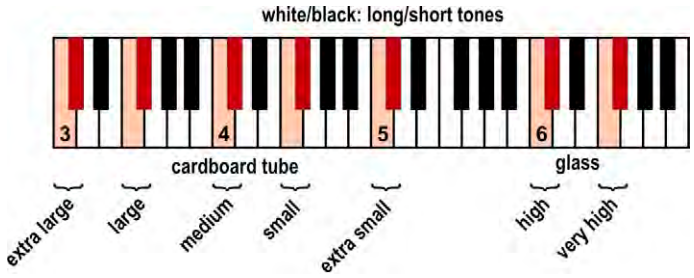
Mapping:
C3–D#3: supersize
F3–A3: extra large
C4–D#4: large
F4–G#4: very small
C5–D#5: small
F5–G#5: extra small
C6–D#6: medium
F6–G#6: supersmall
Long tones on white keys, short tones on black keys



14 Tam XXL FX-4 Boardtube Range: C3–F#6 Samples: 26 RAM: 1 MB Level 2

Effects: Extra large, large, medium, small, and extra small cardboard tubes
Long and short tones (AB on long tones)
Glass scratches, high and very high, Long and short
1 velocity layer
Release samples
AB switch: release duration long/short

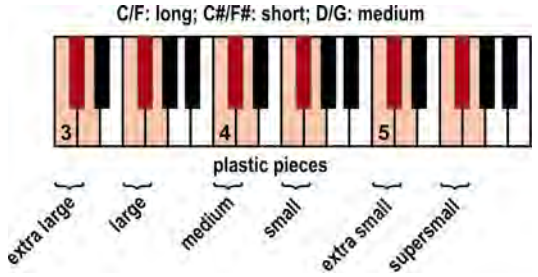
Mapping:
Cardboard tubes
C3–C#3: extra large
F3–F#3: large
C4–C#4: medium
F4–F#4: small
C5–C#5: extra small
Glass
C6–C#6: high
F6–F#6: very high
Long tones on white keys, short tones on black keys



15 Tam XXL FX-5 Plastic | Range: C3–G5 | Samples: 30 | RAM: 1 MB | Level 2

Effects: Extra large, large, medium, small, extra small, and supersmall plastic pieces
Long, medium, and short tones (AB on long tones)
1 velocity layer
Release samples

Mapping:
C/F – long; C#/F# – short; D/G – medium
C3–D3: extra large
F3–G3: large
C4–D4: medium
F4–G4: small
C5–D5: extra small
F5–G5: supersmall



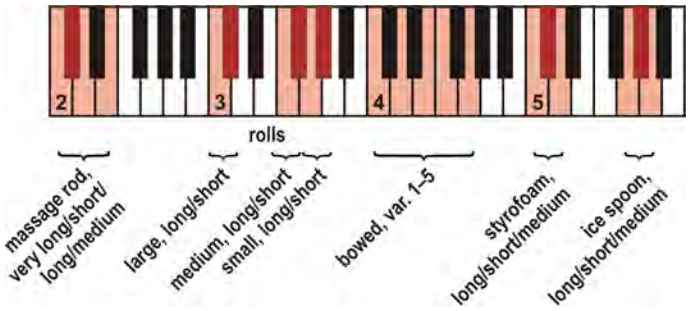
16 Tam XXL FX-6 Fretsaw | Range: F2–F6 | Samples: 17 | RAM: 1 MB | Level 2

Effects: "Bowed" with fretsaw blades, and plucked with an egg cutter
Mapped to create a chromatic scale
1 velocity layer

17 Tam XXL FX-7 Misc1 | Range: C2–A5 | Samples: 21 | RAM: 1 MB | Level 1

Effects: Played with a massage rod, large, medium, and small rolls, bowed, and played with styrofoam and an ice spoon
1 velocity layer

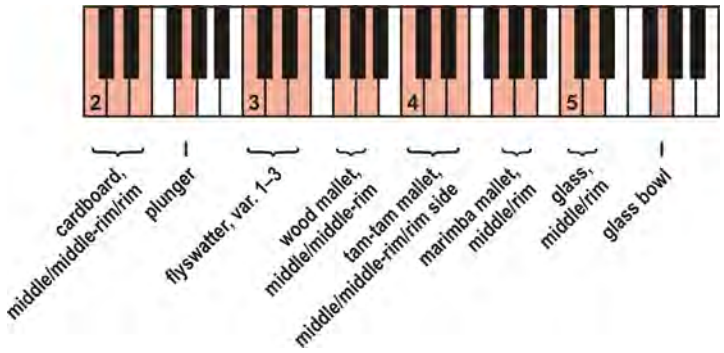
Mapping:
C2–E2: massage rod, very long/short/long/medium
C3–C#3: large roll, long/short
F3–F#3: medium roll, long/short
G3–G#3: small roll, long/short
C4–G4: bowed, var. 1–5
C5–D5: styrofoam, long/short/medium
G5–A5: ice spoon, long/short/medium



18 Tam XXL FX-8 Misc2 Range: C2–G5 Samples: 19 RAM: 1 MB Level 1

Effects: Single hits, played with extra large cardboard, a plunger, a flyswatter; with wood, tam-tam and marimba mallets, a glass and a glass bowl
2 velocity layers

Mapping:
C2–E2: cardboard, middle/between middle and rim/rim
G2: plunger
C3–E3: flyswatter, var. 1–3
G3–A3: wood mallet, middle/between middle and rim (p and f)
C4–E4: tam-tam mallet, middle/between middle and rim/rim side
G4–A4: marimba mallet, middle/rim
C5–D5: glass, middle/rim
G5: glass bowl



31 BASS WATERPHONE

Level 1: Staccato A., sustained, tremolo crescendo, arpeggios, glissando
Level 2: Staccato B, portato A and B, repetitions, crescendo forte and fortissimo, hotrods, wood, strokes

01 BWPH stac A Range: G3–G#6 Samples: 16 RAM: 1 MB Level 1

Single notes: Staccato, var. A
1 velocity layer

02 BWPH stac B Range: G3–C7 Samples: 11 RAM: 1 MB Level 2

Single notes: Staccato, var. B
1 velocity layer

03 BWPH port A Range: E3–A6 Samples: 23 RAM: 1 MB Level 2

Single notes: Portato, var. A
1 velocity layer

04 BWPH port B Range: E3–E6 Samples: 13 RAM: 1 MB Level 2

Single notes: Portato, var. B
1 velocity layer

11 BWPH sus Range: E3–D6 Samples: 75 RAM: 4 MB Level 1

Single notes: Sustained
1 velocity layer
Release samples
AB switch: release duration long/short

12 BWPH repetitions Range: G1–F7 Samples: 175 RAM: 10 MB Level 2

Repetitions: Normal, 4ths at 60 BPM
1 velocity layer

13 BWPH crescendo f — Range: E3–D6 — Samples: 21 — RAM: 1 MB — Level 2

Single notes: Crescendo, forte
1 velocity layer

14 BWPH crescendo ff — Range: E3–G6 — Samples: 15 — RAM: 1 MB — Level 2

Single notes: Crescendo, fortissimo
1 velocity layer

15 BWPH tremolo-cres — Range: A3–D#6 — Samples: 7 — RAM: 1 MB — Level 1

Phrases: Tremolo, crescendo
1 velocity layer

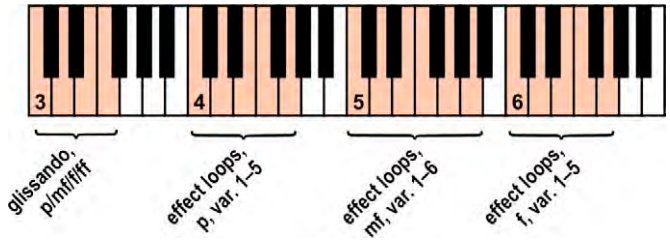
21 BWPH arpeggios — Range: C3–G6 — Samples: 26 — RAM: 1 MB — Level 1

Phrases: Arpeggios, with vibrato, soft attack, var. 1–26
Mapped to white keys
1 velocity layer

22 BWPH FX loops — Range: C3–G6 — Samples: 60 — RAM: 3 MB — Level 1

Effects: Glissando, p/mf/f/ff
effects loops p/mf/f with variations
1 velocity layer
Release samples
AB switch: release duration long/short

Mapping:
C3–F3: glissando, p/mf/f/ff
C4–G4: effect loops, piano, var. 1–5
C5–A5: effect loops, mezzoforte, var. 1–6
C6–G6: effect loops, forte, var. 1–5



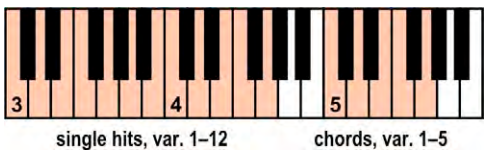
23 BWPH hotrods — Range: C3–E7 — Samples: 31 — RAM: 1 MB — Level 2

Effects: Hotrods, single hits, var. 1–31
Mapped to white keys
1 velocity layer

24 BWPH wood — Range: C3–G5 — Samples: 17 — RAM: 1 MB — Level 2

Effects: Wood mallet, single hits and chords
1 velocity layer

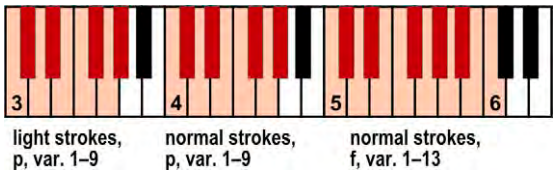
Mapping:
C3–G4: single hits, var. 1–12
C5–G5: chords, var. 1–5



25 BWPH strokes | Range: C3–C6 | Samples: 31 | RAM: 1 MB | Level 2

Effects: Light strokes, piano
Normal strokes, piano and forte
1 velocity layer

Mapping:
C3–G#3: light strokes, p, var. 1–9
C4–G#4: normal strokes, p, var. 1–9
C5–C6: normal strokes, f, var. 1–13



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 01 Glass Harmonica — Samples: 128 — RAM: 8 MB — Level 1

Single notes: Portato and sustained

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

	C1	C#1
V1	portato	sustained

L1 02 Verrophone — Samples: 240 — RAM: 15 MB — Level 1

Single notes: Staccato and sustained

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

	C1	C#1
V1	staccato	sustained

L1 03 Musical Glasses - B — Samples: 420 — RAM: 26 MB — Level 1

Single notes: Staccato and sustained

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

	C1	C#1
V1	staccato	sustained

L1 04 Bottles — Samples: 250 — RAM: 15 MB — Level 1

Single notes: Staccato, sustained, and flutter tonguing

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	staccato	sustained	flutter tonguing

L1 05 Lithophone — Samples: 968 — RAM: 60 MB — Level 1

Single notes

Played with soft and hard mallets, small and large stones, and bowed piano and forte

Matrix switches: Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	soft mallets	hard mallets	small stone	large stone	bowed piano	bowed forte

L1 06 Tam-Tam XXL — Samples: 176 — RAM: 11 MB — Level 1

Patches: 01 Tam XXL Basic, 13 Tam XXL FX-3 Paperbox, 17 Tam XXL FX-7 Misc1, 18 Tam XXL FX-7 Misc2

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

	C1	C#1	D1	D#1
V1	01 Tam Basic	13 Tam Paperbox	17 Tam Misc1	18 Tam Misc2

L1 07 Bass Waterphone — Samples: 184 — RAM: 11 MB — Level 1

Staccato A, sustained, tremolo crescendo, arpeggios, and effect loops

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	staccato A	sustained	tremolo crescendo	arpeggios	FX loops

Matrix - LEVEL 2

01 Glass Harmonica Samples: 387 RAM: 24 MB Level 2

Portato, sustained, and trills, played with the hand
Played with mallets normal, secco, and glissando

	C1	C#1	D1
hand	staccato	sustained	trills
mallet	normal	secco	glissando

02 Verrophone Samples: 742 RAM: 46 MB Level 2

Played with the hand: Staccato, portato, sustained, rolls and trills
Played with mallets: Normal, secco, chromatic trills, and glissando

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

	C1	C#1	D1	D#1	E1
hand	staccato	portato	sustained	rolls	trills
mallet	normal	secco	chromatic trills	glissando	glissando

03 Musical Glasses - A Samples: 180 RAM: 11 MB Level 2

Musical glasses A
Staccato, portato, sustained, rolls and trills

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	staccato	portato	sustained	rolls	trills

04 Musical Glasses - B Samples: 1056 RAM: 66 MB Level 2

Musical glasses B
Played with the hand: Staccato, portato, sustained, rolls and trills
Played with mallets: soft, medium, hard, and glissando

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

	C1	C#1	D1	D#1	E1
hand	staccato	portato	sustained	rolls	trills
mallet	soft	medium	hard	glissando	glissando

05 Musical Glasses - C Samples: 1285 RAM: 80 MB Level 2

Musical glasses C
Played with the hand: Staccato and portato fast and slow, sustained, and rolls
Played with mallets: single strokes

Matrix switches: Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
hand	staccato fast	staccato slow	portato fast	portato slow	sustained	rolls
mallet	%	%	%	%	%	%

06 Bottles Samples: 325 RAM: 20 MB Level 2

Single notes: Staccato, portato, sustained, sforzato, and flutter tonguing

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	staccato	portato	sustained	sforzato	flutter tonguing

07 Lithophone Mallets

Samples: 1414 RAM: 88 MB Level 2

Soft mallets, full range: single notes normal and secco, rolls and chord tremolos
Medium mallets, low range: single notes normal and secco, chord tremolos
Hard mallets, high range: single notes normal and secco, chord tremolos

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

	C1	C#1	D1	D#1
soft mallet, full range	normal	secco	rolls	chord tremolo
medium mallet, low range	normal	secco	chord tremolo	chord tremolo
hard mallet, high range	normal	secco	chord tremolo	chord tremolo

08 Lithophone FX

Samples: 860 RAM: 53 MB Level 2

Effect sounds: Fingers normal and secco, nail normal and accent, small and large stone, 3mm needle center and effect, 5mm needle side and ponticello, shatter portato and accented, bowed piano and forte

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

	C1	C#1	D1	D#1	E1	F1	F#1
V1	finger norm	nail norm	stone small	3mm needle center	5mm needle side	shatter portato	bowed piano
V2	finger secco	nail accent	stone large	3mm needle effect	5mm needle ponticello	shatter accent	bowed forte

09 Tam-Tam XXL

Samples: 325 RAM: 20 MB Level 2

Basic articulations, and effects: Flexatone, metal, paper box, cardboard tube, plastic, fretsaw, miscellaneous 1 and 2

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

	C1	C#1	D1	D#1	E1
V1	basic	flexatone	metal	paperbox	cardboard tube
V2	basic	plastic	fretsaw	misc. 1	misc. 2

10 Bass Waterphone Basic

Samples: 356 RAM: 22 MB Level 2

Basic articulations: Staccato A and B, portato A and B, sustained, repetitions, crescendo forte and fortissimo, and tremolo crescendo

Matrix switches: Horizontal: Keyswitches, C1–F1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1	F1
V1	staccato A	portato A	sustained	repetitions	crescendo f	tremolo cres.
V2	staccato B	portato B	sustained	repetitions	crescendo ff	tremolo cres.

11 Bass Waterphone FX

Samples: 165 RAM: 10 MB Level 2

Effect sounds: Arpeggios, effect loops, hotrods, wood, and strokes

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	arpeggio	FX loops	hotrods	wood	strokes

Presets

Elements VSL Preset Level 1	Samples: 2366	RAM: 147 MB	Level 1

L1 01 Glass Harmonica
L1 02 Verrophone
L1 03 Musical Glasses - B
L1 04 Bottles
L1 05 Lithophone
L1 06 Tam-Tam XXL
L1 07 Bass Waterphone
Keyswitches: G1–C#2

Elements VSL Preset Level 2 Glass	Samples: 3975	RAM: 248 MB	Level 2

01 Glass Harmonica
02 Verrophone
03 musical glasses A
04 musical glasses B
05 musical glasses C
06 Bottles
Keyswitches: G1–C2

Elements VSL Preset Level 2 Stone+Co	Samples: 3120	RAM: 195 MB	Level 2

07 Lithophone Mallets
08 Lithophone FX
09 Tam-Tam XXL
10 Bass Waterphone basic
11 Bass Waterphone FX
Keyswitches: G1–B1