

VERSILIAN STD.⁰⁵
Chamber Orchestra 2
INTERMEDIATE ORCHESTRAL SAMPLE LIBRARY



Standard (Kontakt) Edition

Product Manual

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INTRODUCTION

In January of 2010, I sat before a computer with a piece of software called LMMS and only the slightest idea on how to compose a piece of music, using a free soundfont from some now-archaic corner of the Internet. Six and a half years and over a dozen products later, it feels very strange to be sitting on the other side of the artist-supplier relationship.

The original premise of this project was simple: make an original orchestral library better than general midi. Little did I know this would turn into a major two-year-long commercial undertaking, involving dozens of individuals around the world. What was originally a small set of freeware instruments grew in size and quality exponentially into the library that sits before you right now.

The Kontakt version of the standard edition was developed under the complete autonomy of Simon Autenrieth, whose design and implementation choices subsequently reshaped the entire project. Greater multisampling, the inclusion of unique and rare instruments, and dynamic cross-fading with phase-locking on all sustains are just a few features that found their way into the library once he showed the potential of the library's future.

With the help of countless testers, musicians, and other individuals, we managed to sample [just about] every instrument found in a standard orchestra (sorry contrabassoon fanatics). I hope you enjoy this library as much as we enjoyed making it, and that it helps you create music faster, easier, and more realistically.

Sincerely,

A handwritten signature in black ink, appearing to read "Samuel A. Gossner", with a long horizontal flourish extending to the right.

Samuel A. Gossner
Durham, Connecticut. 2016



INSTALLATION

The following system properties are suggested for acceptable performance of VSCO 2: Standard Edition (Kontakt)-

- ❖ 3 GB of RAM
- ❖ Intel Core 2 or later processor
- ❖ At least 4 GB of free disk space (plus 3 GB of additional space for the download, for a total of 25 GB temporarily)
- ❖ Hard Drive speed of 5400 RPM, minimum

For best results, a system of the following properties is preferable –

- ❖ 6 GB of RAM
- ❖ MIDI controller/keyboard, with mod-wheel
- ❖ Hard Drive speed of 7200+ RPM or SSD

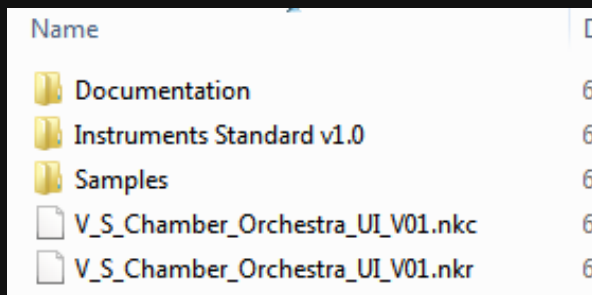
NB: A video overview of the installation process is available [here](#). We highly recommend watching it for best results; below are the ‘cliff-notes’ from the video –

The first step in installation is to complete the multi-part download you are sent at the completion of checkout. You will be asked to enter your order details and access code in order to access the download. We recommend securing a few hours with a reliable high-speed internet connection (preferably with an Ethernet cable) to complete this task. If this is not possible, you can upgrade to VSCO Go (flash drive) for an upgrade fee.

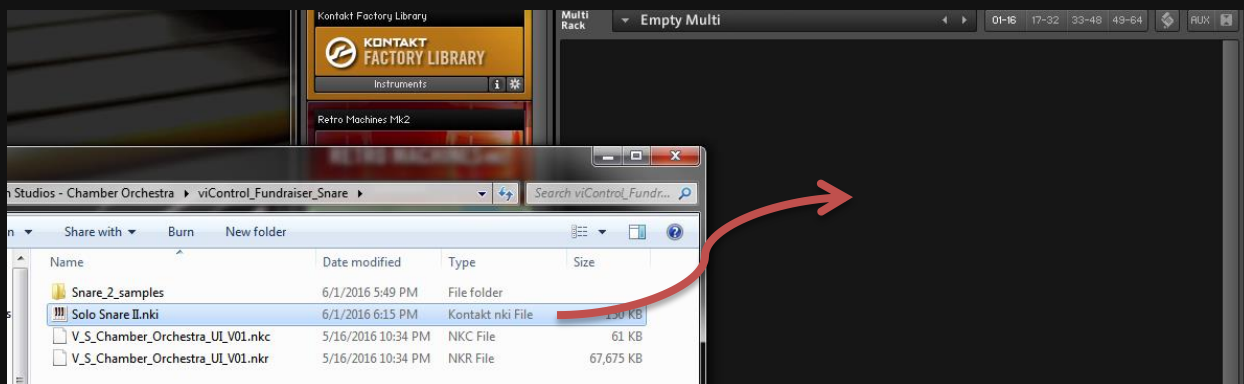
If you are running VSCO off of the VSCO Go flash drive, then you do not need to complete any downloads, and do not need any disk space on your computer, unless you decide to copy the files off of the drive and on to your hard disk/SSD. To do this, simply copy the entire contents of the root directory of the flash drive into a new folder in the desired location.

Extract the contents of each part individually using a tool such as **WinRAR** or **7-zip**. The main folder (VSCO2 Standard.rar) will require the entrance of a custom activation code to unlock, during the un-raring phase. This code will be in the email you were sent at purchase. Be sure you copy the code completely, and do not add any spaces. If you did not receive an email, check your junk folder. Otherwise, visit the support page to request your info.

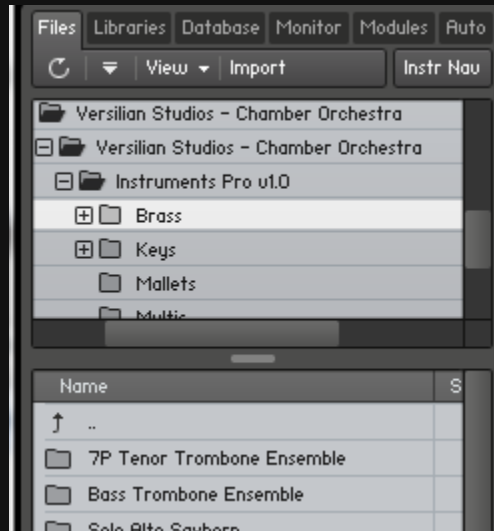
Decide where you would like to set up VSCO 2 (e.g. main HD, External drive, or Flash drive). Place the **“VSCO2 – Standard”** folder in this location (for best results, don’t keep it in ‘downloads’). Place the **Samples** folder inside the main folder -



To load up an instrument, simply navigate into the Instruments Pro folder and navigate to the particular folder of the instrument you want. Drag-and-drop the .nki into the window of the Kontakt instance you want to load the instrument into, like the screenshot below-



Alternately, you can also use the **File** Browser window in Kontakt to locate the instruments you wish to load.



Remember: you cannot access the instruments from the **Libraries** tab. In addition, be sure you are selecting the actual **.nki** files, not just the folders!

Here is a table of terms you will see in file names and articulation names –

What it is...	What it means...
KS = Keyswitch	Patch contains keyswitches / multiple articulations
TM = Time-Machine	Patch contains time-machine option for stretching/shrinking the length of short samples on the UI.
VB/Vib = Vibrato	Patch contains baked/live vibrato
NV = Non-Vibrato	Patch does not contain baked/live vibrato
MS = Muted Sustain	Patch uses a mute of an undocumented sort
HM = Hand-Muted	Horn-specific articulation done by fully putting hand in bell while playing
SM = Straight Mute	Most open/sharpest of brass mutes
CM = Cup Mute	Medium-sounding brass mute
BM = Bucket Mute	Most closed/warmest of brass mutes
HM = Harmon Mute	Special mute with very 'buzzy' sound; common in jazz
GN = Grace Note	Sustain approached by a grace-note
Expr = Expressive	Starts non-vibrato and mp and crescendos, while adding reverb, before tailing back again.
Leg = Legato	Faux legato via WIPS/SIPS
Trem = Tremolo	String articulation where player strokes rapidly back and forth. Technically 'unmeasured tremolo' in VSCO.
Sul P = Sul Ponticello	String bow position, near the bridge.
Sul T = Sul Tasto	String bow position, near the fingerboard.
Flutter = Flutter-tongue	Wind articulation, sustain with a 'rolled R'.



OPERATION

The following section will walk you through the operation and format of the custom user interface shown below. It will appear at the top of each page for visual aid.





1. **“Under the Hood” Access:** Make fine adjustments or add additional effects to the instrument in Kontakt; recommended for advanced/experienced users only! Click the VS logo beneath this to close the rest of the UI.
2. **Instrument Name:** Tells you the instrument loaded.
3. **MIDI Channel Input:** Describes which MIDI channel the instrument is receiving input from. If you set up a template with 16 tracks, each routed to a MIDI channel (1-16), and say, you would like your flute (let’s say its channel 6) receive data from that track, set this to match.
4. **Maximum Voices:** If you find the Voices indicator nearing the max and voices get cut out as a result (more common on multi-mic instruments), then increase this number.
5. **Memory Indicator:** Shows how much memory the instrument takes up. This does not take into account the amount of data reserved for “Direct-from-Disk” (DFD) streaming, which reduces the memory amount required by instead relying on the streaming capabilities of your drive.
6. **Purge:** Unload unnecessary samples here, with caution.



7. **Solo/Mute:** Solo or mute the instrument within this instance of Kontakt. Does not work across multiple instances of Kontakt.
8. **Tune:** Adjust the intonation of the entire instrument at once. Adjustments greater than 4.00 (4 semitones) are not recommended if realism is an objective, but some interesting effects can be had by returning instruments by 12, 24, or 36 in either direction (cinematic vibraslaps? -36 S.T.'s!).
9. **Traditional Pan:** This is likely tied in with the pan knobs in your DAW's mixer- if you want to adjust this, I'd recommend adjusting it in your DAW's mixer window. Use stereo pan instead, or in tandem, for a more realistic effect.
10. **Volume:** Likely tied in with the balance slider in your DAW's mixer, or MIDI CC#7- if you want to adjust this, I'd recommend adjusting it in your DAW's mixer window.



11. Mic Position Volume: Adjust the volume of the mic positions to create the desired mix. Turning off will not unload the position, instead use the...

12. Mic Position Load/Unload: A grey square means the position is unloaded, and an orange square signifies it is loaded. Loading and unloading positions will dynamically purge and load the samples (if running out of RAM, you can unload some extra positions, or save your own instrument files or snapshots with different mic settings for future use).

13. Mono Position L/R Pan: All mono mic positions have a traditional left/right panning slider under them for better positioning. We recommend panning this to the instrument's natural position on an orchestral stage.

14. Stereo Width: Stereo width increases the phase difference between the left and right channels, giving a wider sense of space for the instrument. I'd recommend moving it no more than 25% up or down, as we used almost exclusively



Spaced Pair microphone arrays, which result in a quite wide stereo field to begin with, and can risk **phase interference** if too greatly adjusted.

15. **Stereo Pan:** Simulates an accurate panning effect by slightly delaying one channel over the other by a few milliseconds (just like turning your head to one side or the other would result in sound reaching the ears at slightly different times). Used predominantly, with a little bit of **traditional pan**, can give a very realistic effect!

16. **High-pass & Low-pass:** Click the grey square to enable the filters. High-pass (HP) will remove signals below the cutoff (allowing “*highs*” to “*pass*”), with a fade, while Low-pass (LP) will remove signals above the cutoff (allowing the “*lows*” to “*pass*”), with a fade. HP will help remove hiss, and dull/warm up the instrument sound (also handy for simulating quiet dynamics on many instruments), while LP will remove key thuds and other low-end noises.



17. Convolution Reverb: Typically enabled (orange), but if not, you can click the grey square to enable. Clicking again disables it.

- a. **Pre-Delay:** The length of time before the reverb impulse ‘reacts’. This is analogous to the length of time it takes the original sound signal to bounce off the walls of a hall and return to you. A small amount will result in a crisp, close sound, while a high amount will result in more of an auditorium “slap” sound.
- b. **Room:** The amount of “wet” impulse sent back. Typically -15 to -5 dB is best. Passing -5 dB is only recommended for effects, as any musical figures will be too muddy to be understandable at that point.
- c. **Room Size:** The length of the impulse. This is analogous to the size of the space. 50% is roughly a small ensemble room, while 100%+ is a large concert hall.



18. Advanced Controls: Most instruments will feature some additional controls here, such as attack and the volume of release tails. These are *Articulation-Specific*, meaning each articulation can have different values set.

19. Articulation Lock: Click this icon to keep from accidentally switching articulations if you choose to only use one articulation per that patch.

20. Keyswitch Mover: Move the position of the keyswitches (chromatically) up and down the keyboard by clicking and dragging.

21. Articulation Indicator: Indicates the current articulation.

22. Visual Articulation Indicator: The white articulation is the current selected one; burgundy ones are unselected.



23. Articulation Purge/Load: Purge unneeded articulations by clicking the corresponding white diamond. Purged articulations will be unloaded from the instrument, greatly reducing disk and RAM load. If you choose to follow the “one-articulation-per-instrument” approach rather than the keyswitch approach, make sure you purge your unwanted articulations, as well as lock the articulation.



In legato instruments, the following controls will also be visible on the bottom part of the UI (shown above) –

1. **Sample Start:** Determines where the sample starts (recommended left at current setting).
2. **Length:** Determines how long the legato transition will take place. This basically controls a simple crossfade. A length of about 30-50 is recommended for keyed and valved (most woodwinds and brass) instruments, with values 50-120 for strings and some other instruments, at discretion.
3. **Intensity:** Determines how strong the actual bend sound will be. This basically controls the length of the bend. A length of about 30-50 is recommended for keyed and valved (most woodwinds and brass) instruments, with values 50-120 for strings and some other instruments, at discretion. A value of about 35-45 will result in a quick snap, like clicking a key regularly, while longer values will give more of a bend.
4. **Offset:** Allows you to enter the ‘destination’ note at a certain point. All expressive patches should be full (1000 ms), while most other patches are good about 50-150 ms.



5. **Vibrato Amount:** Adds a synthetic vibrato. 25-40% is typically sufficient. Use this on non-vibrato patches to create a milder and more controllable vibrato for instruments that have too exaggerated of a live vibrato for the style of piece you are writing.
6. **Pitch:** The change in pitch at each vibration. 3-12 cents is typical.
7. **Volume:** The change in pitch at each vibration. 4-8 dB is typical.
8. **Speed:** The speed of the vibrato. A rate of 3-9 Hz is typical, with brass typically around 4-5 and woodwinds 5-7, depending on the mood, style, and era of the piece.

Some **important things** to remember when operating this library –

- ❖ All **sustaining** articulations (including rolls) are controlled by Mod Wheel (CC#1), while all **short** articulations (spic, stac, marc, hit, etc.) are controlled by keyboard velocity. It is **recommended** to always use a keyboard with a modwheel when using this library.
- ❖ Be cautious when switching between sustaining and short articulations, as you may accidentally activate the top velocity layer and create a louder-than-expected sound.
- ❖ Upon loading an instrument, the CC#1 input is set at 64 (halfway). Just wiggle your modwheel (virtual or real) to resolve this; this is a Kontakt default, nothing we can change.
- ❖ All controls on the UI can be automated by right-clicking and clicking "Learn MIDI CC# Automation. This will allow you to do things like change the reverb amount, mic blend, or filters at any point in your piece.
- ❖ Don't forget to load/unload a mic position, effect, or articulation prior to altering it!



CREATING REALISM

Creating a realistic mock-up is a very challenging skill! In this section, I'd like to discuss a few points to help create the most effective mock-up you can with our library. Veteran composers feel free to skip this section if desired.

The first step in creating a realistic mock-up is to understand the strengths and weaknesses of your library, and how those fit into your style. Take several hours to review the entirety of the library (and this goes for all new libraries). Make mental (or physical) notes of the immediate reactions, emotional or otherwise, that you have to each instrument. If one instrument seems to draw you in for a long time and 'ask' to be played, take note.

When an instrument doesn't have a whole lot of round-robins or doesn't sound good in a particular phrase, you should either change the instrument or the phrase. Often times, making small compositional compromises in the name of a more realistic performance by the virtual instrument can result in a far better result than not heeding the limits and strengths of the instruments.

Take your time to learn the names, approximate ranges (which are higher, medium, low, etc.), and timbres (tone qualities) of the various instruments of the orchestra. Being able to select the right instrument for your needs at a moment's notice is a great skill.

When creating any lyrical lines, use a legato instrument, but don't just make every single interval a big legato slur! Try to think of each line as a series of short phrases, or words. You may slur the first three notes, then shorten the third note to $\frac{1}{2}$ length so that the player 'breathes', before the next phrase. Typically big leaps on 'weak' beats are slurred, while pickups/escape tones are not approached by slurs. Try singing the line, allowing yourself to breathe regularly, and wherever you breathe, shorten the previous note.

If you are uncertain what I mean by this, go listen to some recordings of real traditional orchestras, and listen to the way solo instruments space their lines. Unfortunately, neither I nor

anyone can particularly *teach* you what makes a line “musical” and another “stilted”, but enough exposure to music will help your ear develop a sense for what is musical and what is not.

I highly, highly recommend playing all flowing lines into your DAW live, simultaneously recording mod wheel changes, using a MIDI keyboard. If you cannot, then take care to de-quantize the line, and make sure all legato points have the first note stretched so it will trigger the legato change. Even if you are a dreadfully incompetent pianist (such as yours truly), you can always edit your performance to clean it up a little. The rest will add a great deal of realism to the performance.

When adding mod-wheel (or CC#1) changes, try to think about the motion of the phrase. Typically, phrases start quiet and grow to the cadence, before having a sense of release on the resolution. If this means nothing to you, then again, listening to some live recordings (and not just modern film and game scores too) are your best bet. **ALL sustaining patches in VSCO 2, no matter what, have modwheel crossfading. All non-sustaining patches, no matter what, rely on velocity.**

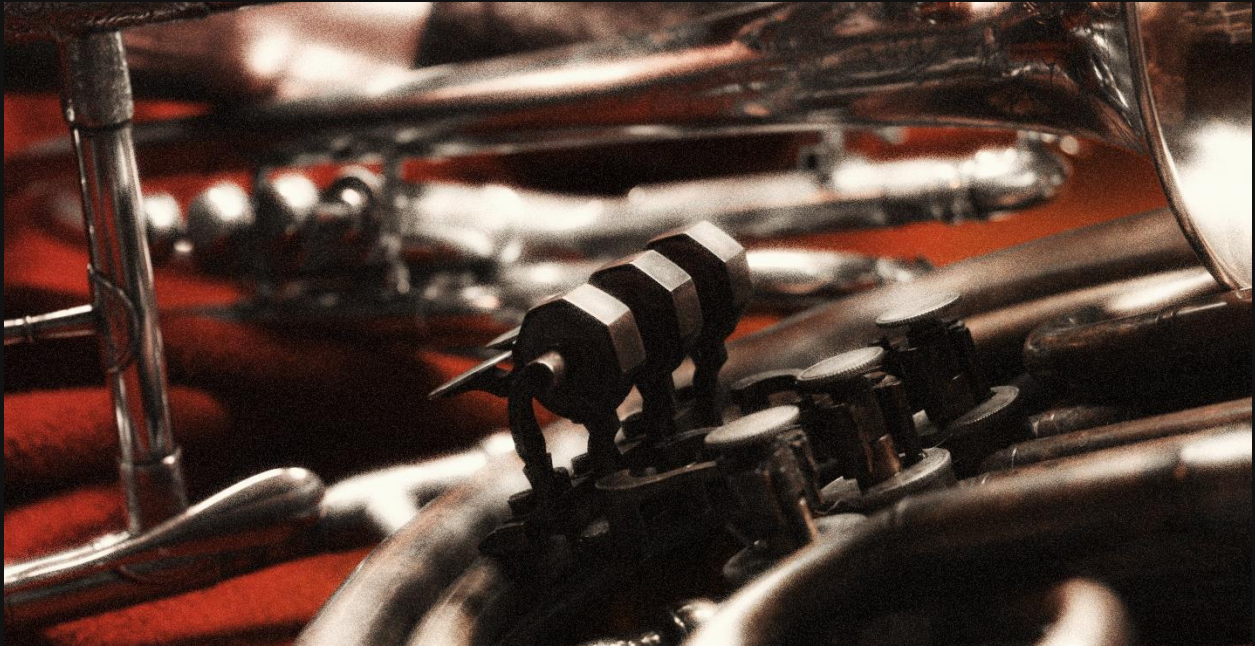
When locating music to guide idiomatic solo writing, search for works such as “concertos”, which are works that feature the particular instrument (piano concerto, oboe concerto), and etudes, which are advanced, highly-idiomatic works that push the



TIPS

128 Kontakt instruments are a lot to keep track of, so here are a few tips to make your life at least a little easier.

- ❖ Want a less exaggerated vibrato for a patch? Consider using the artificial vibrato in the NV legato patch.
- ❖ Turn any snare drum into a tenor drum by pitching down the instrument 4-6 semitones.
- ❖ To reduce mud or 'echo-ness' in a low or fast-transient instrument, reduce the room size of the reverb to 60-80% and reduce pre-delay. This will approximate the sound of a medium ensemble space.



WHAT'S INCLUDED

The Standard Edition stands as a balance between the detail of the Professional Edition and the light weight of the Community Edition. While the number of instruments and articulations is reduced compared to the Professional Edition, the Standard Edition is still a powerful and capable orchestral library. The charts on the next few pages will enumerate the exact numbers and contents of each instrument available with this version.

**Please note that the keyswitch provided is not absolute; the UI allows the moving of the keyswitch section as a whole at will; all KS are listed in Japanese (Kontakt) Notation (C3 = 60 = Middle C).*

WOODWINDS

Woodwinds		
Instrument Name	Articulation	Keyswitch*
Piccolo (flute)	Vibrato Sustain	C0
	Staccato	C#0
	Trill, Half-Step	D0
	Trill, Whole-Step	D#0
Flute I <i>(balanced)</i>	Non-Vib. Sustain	C0
	Vibrato Sustain	C#0
	Expressive Vibrato	D0
	Staccato	D#0
	Trill, Half-Step	E0
Oboe I	Trill, Whole-Step	F0
	Non-Vib. Sustain	C0
	Vibrato Sustain	C#0
	Staccato	D0
Bb Clarinet I <i>(tighter)</i>	Non-Vib. Sustain	C0
	Exp. Sustain (NV)	C#0
	Staccato	D0
	Flutter	D#0
Bassoon I	Non-Vib. Sustain	C0
	Vibrato Sustain	C#0
	Staccato	D0

BRASS

Brass		
Instrument Name	Articulation	Keyswitch*
Horn (Double) I	Non-Vib. Sustain	C0
<i>(pop/'close')</i>	Swell Sustain	C#0
	Staccato	D0
	Tight Staccato	D#0
	Muted Sustain	E0
	Muted Staccato	F0
	'Call' Up P4	F#0
	Diminuendo	G0
Trumpet I	Non-Vib. Sustain	C0
<i>(orchestral)</i>	Vibrato Sustain	C#0
	Staccato	D0
	Straight Mute Sus.	D#0
Tenor Trombone I	Non-Vib. Sustain	C0
<i>(vintage- 1945)</i>	Vibrato Sustain	C#0
	Staccato	D0
	Straight Mute Sus.	D#0
Bass Trombone II	Non-Vib. Sustain	C5
	Staccato	C#5
Tuba (full) I	Non-Vib. Sustain	C0
	Staccato	C#0

KEYS & MALLETS

		Keys & Mallets
Instrument Name	Articulation	Keyswitch*
Church Organ	Powerful Combo	--
	Soft Combo	--
French Harpsichord	Stop I (single)	C0
Grand Piano <i>(close/player)</i>	'Bright'	--
	'Strong'	--
	'Warm'	--
Upright Piano	(Normal)	--
Glockenspiel	Hits, Normal	--
Xylophone	Rubber Mallets (med.)	C0
	Wood Mallets (hard)	C#0
	Yarn Mallets (soft)	D0
	Dia. Gliss Up; Down	D#0
	Penta. Gliss Up; Dn	E0
Tubular Bells	Normal Hits	C0
	Top-Hits	C#0
	Normal, Muted	D0
	Top, Muted	D#0

PERCUSSION

		Percussion
Instrument Name	Articulation	Keyswitch*
Crash Cymbal I	Various Hits	--
Crash Cymbal II	Various Hits	--
Susp. Cymbal I	Hits, Rolls, Bowed	--
Susp. Cymbal II	Hits, Rolls, Bowed	--
Gong I	Hits, Scrapes	--
Snare I	Hits, sampled rolls	--
Snare II	Hits, sticks, rolls	--
Toms	Low (various hits)	--
	High (various hits)	--
Bass Drum	Hits (Orchestral-style)	--
Timpani	Normal Hits	C5
	Hard Hits	C#5
	Center Hits	D5
	Rolls	D#5
	Normal Hits, Muted	E5
	Hard Hits, Muted	F5
	Center Hits, Muted	F#5
	Rolls, Muted	G5
Cowbell I	Hits, muted hits	--
Cowbell II	Hits, muted hits	--
Ratchet I	Rolls, single clicks	--
Tambourine I	Hits, shakes, rolls	--

		Percussion
Instrument Name	Articulation	Keyswitch*
Triangle III	Hits, chokes, rolls	--
Triangle V	Hits, chokes, rolls	--
Anvil	Hits, Various	--
Claves	Two; Hits, Various	--
Guiro	Strokes, Hits	--

STRINGS

		Strings
Instrument Name	Articulation	Keyswitch*
Solo Violin	Non-Vib. Sustain	C0
	Vibrato Sustain	C#0
	Expr. Vibrato	D0
	Spiccato	D#0
	Pizzicato	F0
	Tremolo	F#0
	Solo Viola	Non-Vib. Sustain
Vibrato Sustain		C#0
Expr. Vibrato		D0
Vibrato Spiccato		D#0
Pizzicato		E0
Tremolo		F0
Solo Cello		Non-Vib. Sustain
	Vibrato Sustain	C#0
	Expr. Vibrato	D0
	Spiccato	D#0
	Pizzicato	F0
	Tremolo	F#0
	Solo Contrabass I	Non-Vib. Sustain
Vibrato Sustain		C#5
Spiccato		D5
Pizzicato		D#5

		Strings
Instrument Name	Articulation	Keyswitch*
<i>(Solo Ctbss. I Cont'd.)</i>	Pizzicato (responsive)	E5
	Tremolo	F5
5P Violin Section	Non-Vib. Sustain	C0
	Vibrato Sustain	C#0
	Expr. Vibrato	D0
	Spiccato	D#0
	Pizzicato	E0
	Tremolo	F0
3P Viola Section	Non-Vib. Sustain	C0
	Vibrato Sustain	C#0
	Expr. Vibrato	D0
	Spiccato	D#0
	Pizzicato	E0
	Tremolo	F0
3P Cello Section	Non-Vib. Sustain	C6
	Vibrato Sustain	C#6
	Spiccato	D6
	Pizzicato	D#6
	Pizzicato, Tight	E6
	Tremolo	F6
Concert Harp	Normal	C-1
<i>(close, solo- warm)</i>	Près de la Table	C#-1
	Harmonics	D-1
	Glissandi, Diatonic	D#-1
	Glissandi, Wholetone	E-1

CREDITS

I'd like to take these last few pages to thank all the individuals who made this project not just possible, but real.

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Samuel Hébert

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Dan Lay

Gerson Martinez

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Addy Harris

Parker Ousley

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Harp

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Keys

Samuel Hébert (grand)

Simon Dalzell (upright, organ)

Sam Gossner (harpsichords)

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Jose Hernandez

Dean Coutsouridis

Lisa Larsen

Sarah Cantor

D'Anthoni Wooten

Jesse Hartov

Lee McQuillan

Røde Microphones

Focusrite

Berklee College of Music

Coginchaug High School, CT RSD 13

In Memory of *'Big Bob' Villwock*, whose work on faux legato enabled us...

and *Fredrich Von Huene*, a maker of the world's finest recorders...

Both have created beautiful instruments, new and old;

Enabling thousands to make music in a way

We can only hope to live up to.

Thank You.