KIRK HUNTER STUDIOS

CHAMBER STRINGS
ADAPTIVE

Where the Instrument Adapts...

to YOU!

The Orchestra
6 Violins, 5 Violas, 4 Cellos, 3 Basses

The Space
First Presbyterian Church Santa Monica

What's Different About Adaptive Strings

•The concept is to have the most playable, out-of-the-box, professional-sounding chamber strings with a relatively low memory footprint.

•Impressively smooth legato and polyphonic legato with almost no latency.

•Smooth Velocity Chasing - Dynamics, Expression and Vibrato can smoothly and seamlessly "chase" velocity, so you don't normally need to use any controllers while playing live. This creates true, string section "swelling" and modulation for a natural sound. It's additionally helpful when used in your DAW since no matter where you choose to play back in the sequence, the dynamics, expression and vibrato will respond immediately. However, if you choose to use the conventional method of using controllers, you have that option as well.
Note: It is quite usual that when string players play loudly, they tend to increase their vibrato and sound brighter. The current convention is normally to use controllers to effect these changes. Some developers indeed use velocity, but the problem is that once a note is played, it gets "stuck" in the manner in which it was originally played unless a controller(s) is grabbed. Adaptive Strings will have the dynamics, expression and vibrato "chase" the velocity of any notes played later on. It's almost like like having aftertouch, but better because it's much more smooth and dynamic.

•The most flexible "Ensemble" instrument - Most features are divided "per section" so that you can customize the instrument. For example, you can have the violins play spiccato, the violas play col legno, the cellos play sustains, and the basses play pizzicato. And it does not end there. Various controls such as legato, velocity-attack, velocity-shorts, portamento, vibrato and shorts duration are all section-specific.

Summary
  Section-Specific Features (Each feature below can be applied to any section individually.)

•Levels - Set levels for the section.

•Pan - Set pan for the section.

•Purge Section - Purges or loads the samples of the section.

•Legato

•Velocity-Attack on/off - Engage velocity-controlled attack. If off, then you can set a static level of the attack for that section.

•Velocity-Attack Sensitivity - Choose the level of attack based on velocity.

•Section Range - Choose the playable range for each section.

•Shorts - Choose from spiccato, staccato, pizzicato, col legno, bartok pizzicato or turn the shorts off.

•Longs - Choose from sustain, tremolo, half and whole step trills or turn the longs off.

•Portamento - Engage mild or dramatic portamento via keyswitch or controller.

•Velocity Shorts on/off - Engage velocity-controlled shorts if any of the short articulations for that section are on. If off, then you can set a static level of the short articulation for that section.

•Velocity-Shorts Sensitivity - Choose the level of control that velocity has for the level of the short articulation for that section.

•Shorts Duration - Set the duration (length) of the short articulation for the section.

•Bow change samples on/off - allows you to hear bow changes even in legato.

•8va/8vb - Choose to have the violins add an octave up to the played note. Choose to have the basses add and octave down to the played note.

•Vibrato - Attenuate the vibrato of the section.

•Vibrato Control - Choose whether vibrato is controlled by velocity or a slider/controller for that section.

•Vibrato Minimum/Maximum - Set the minimum/maximum vibrato amount if velocity-controlled vibrato is selected.

•Solo/Mute

•Note Mixing - Set the level of each note for the section.

Global features (Each feature below will be applied to all sections at once.)

•3 preset menus that make all of the detailed features immediately available without needing to hunt around.
    -Space - Choose the "space" where you want the orchestra.
    -Touch - Set the velocity-chasing for dynamics, expression and vibrato.
    -Speed - Select how fast you want the strings to respond to your playing.

•Release - Set the release time.

•Sordini

- Sul Tasto

- Reverb

- Reverb Size

- Room Size

- Legato Style

     - Polyleg - Choose from polyphonic legato or monophonic. However, chords can still be played if poly legato is turned off.

     - Tru Leg - Tru Leg is a more "intense" legato.

     - Bowed Leg - Lets you hear a bow change on legato notes.

- Velocity-Attack on/off - Engage velocity-controlled attack. If off, then you can set a static level of the attack for all sections.

- Velocity-Attack Sensitivity - Choose the level of attack based on velocity for all sections.

- Shorts - Choose from spiccato, marcato, pizzicato, col legno, bartok pizzicato or turn the shorts off.

- Longs - Choose from sustain, tremolo, half and whole step trills or turn the longs off.

- 8va/8vb - Choose the have the violins add an octave up to the played note and to have the basses add and octave down to the played note.

- Vibrato - Attenuate the vibrato of all sections.

- Release Samples Volume

- Dynamics

- Expression Velocity Sensitivity

- Dynamics Chase Velocity - Choose to have dynamics smoothly chase the velocity of all notes.

- Velocity Sensitivity - Set the velocity sensitivity for dynamics.

- Vibrato Link to Dynamics - Link the vibrato level to the dynamics slider/controller.

- Globally link Section's Vibrato - Choose to have vibrato chase velocity across the entire keyboard or only from within the individual section's range.

- EQ Band and Gain

- Microphone Levels

•Microphone Purge/Load

•Purge Section - Purges or loads the samples of the section.

•Release Samples on/off

Additionally, there is an Automation page where you can set controllers for various features.

There is an "info" button that shows the current state of vibrato, dynamics and expression along with how they are being controlled and a keyswitch map.

THE INTERFACE DETAILS – THE HOME PAGE (Same as Concert Strings Adaptive)

The home page consists of three large preset drop-down menus, global features, and section-specific features.

PRESETS

Space (The various "space" of the sections)

SPACE
▼ DEFAULT–1st Presbyterian Santa Monica

DEFAULT - 1st Presbyterian Church, Santa Monica
Wooden Stage
Warm Theater
Chamber
Chamber (back row)
Arena
Small Scoring Stage
Large Scoring Stage
Long narrow room with heavy curtains
Hall of the King
Opera House
Italian Concert Hall
1960s Television
Vintage Hollywood
Bone Dry

Touch (The "feel" of the playing style)

TOUCH
▼ DEFAULT – Dynamics and Vibrato Chase Velocity

DEFAULT – Dynamics and Vibrato chase Velocity
Dynamics and Vibrato chase Velocity – Strong
Dynamics and Vibrato chase Velocity – Very Strong
Vibrato Chases Velocity
Dynamics Chase Velocity – Medium
Dynamics Chase Velocity – Strong
Velocity Chasing off
Separate Control for Vibrato and Dynamics

Speed (The response time of the initial attack)

SPEED
▼ Largo

Default – Velocity crispness
Largo
Presto
Velocity-controlled speed
Slow Attack

Global Features (Controls all sections)

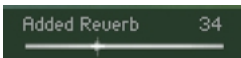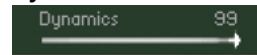Release – Release time of the "long" samples

Sordini - Mutes

Sul Tasto – A lovely "subdued" sound

Added Reverb

Dynamics Slider

Automation – Click here to bring up the following list of automatable features.

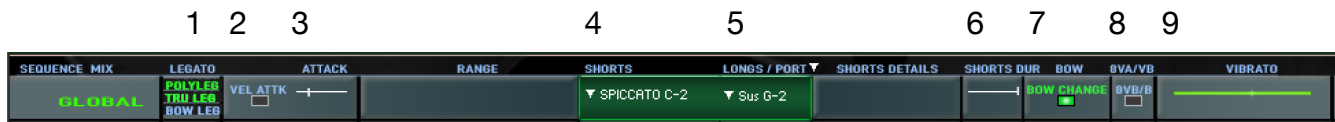| CC 0 | Change Accent Articulation Violins | [X] |
CC 0	Change Accent Articulation Violas	
CC 0	Change Accent Articulation Cellos	
CC 0	Change Accent Articulation Basses	
CC 11	DYNAMICS	
CC 0	Change Long Articulation Violins	
CC 0	Change Long Articulation Violas	
CC 0	Change Long Articulation Cellos	
CC 0	Change Long Articulation Basses	
CC 0	CHANGE LONG ARTICULATION GLOBAL	
CC 0	PORT STYLE	
CC 11	SECTION VIBRATO	

- •Change Accent Articulation Violins – Choose a controller that will choose the "Shorts" samples for the violin section.

- •Change Accent Articulation Violas – Choose a controller that will choose the "Shorts" samples for the viola section.

- •Change Accent Articulation Cellos – Choose a controller that will choose the "Shorts" samples for the cello section.

- •Change Accent Articulation Basses – Choose a controller that will choose the "Shorts" samples for the bass section.

- **CCC values for changing Short (Accent) Articulations:**
- 0 – 43 Spiccato
- 44 – 64 Pizzicato
- 65 – 87 Staccato
- 88 – 109 Col Legno
- 110 – 127 Bartok Pizz

• DYNAMICS – Choose a controller for dynamics.

• Change Long Articulation Violins – Choose a controller that will choose the "Longs" samples for the violin section.

• Change Long Articulation Violas – Choose a controller that will choose the "Longs" samples for the viola section.

• Change Long Articulation Cellos – Choose a controller that will choose the "Longs" samples for the cello section.

• Change Long Articulation Basses – Choose a controller that will choose the "Longs" samples for the bass section.

• Change Long Articulation Global – Choose a controller that will choose the "Longs" samples for all of the sections at once.

• Change Long Articulation Basses – Choose a controller that will choose the "Longs" samples for the bass section.

- **CCC values for changing Long Articulations:**
- 0 – 25 Sustain
- 26 – 50 Tremolo
- 51 – 75 Minor Trill
- 76 – 100 Major Trill
- 101 – 127 Longs off

• Port Style – Choose a controller that selects between a "mild" or "dramatic" portamento style. (More about portamento later.)

• Section Vibrato – Choose a controller that controls global vibrato amount.

SEQUENCE MIX	LEGATO	ATTACK	RANGE	SHORTS	LONGS / PORT ▼	SHORTS DETAILS	SHORTS DUR	BOW	8VA/VB	VIBRATO
GLOBAL	POLYLEG TRU LEG BOW LEG	VEL ATTK		▼ SPICCATO C-2	▼ Sus G-2			BOW CHANGE	BVB/B	

1 – Legato Types. (More about legato later.)
   Polyleg – Polyphonic legato.
   Tru leg – Toggle between an "intense" legato, or a more mild legato.
   Bow Leg – Toggles between bowed or slurred legato.
2 – Vel Attk – Increases the sensitivity of the default velocity-attack curve.
3 – Attack Slider – Controls the amount of the initial attack. If legato is on, then
   overlapped notes' attack will not be controlled by this slider.
4 – Selects the current "short" samples. (spiccato, pizzicato, staccato, col legno,
   Bartok pizzicato, shorts off)
5 – Selects the current "long" samples. (sustain, tremolo, minor trill, major trill, longs off)
6 – Shorts Duration slider - "Tightens" or "Loosens" the currently-sounding short
   samples.
7 – Bow Change – If you want to hear a subtle sound of the bow attack on each note,
   then turn this switch on.
8 – Global Vibrato Slider – Controls the vibrato amount for all sections.

Section-Specific Features

	LEGATO	VEL ATTK	RANGE	SHORTS	LONGS/PORT	VELOCITY SHORTS		BOW CHANGE	8VA/VB			S M
VIOLINS 86	LEGATO	VEL ATTK	Low: G2 High: E6	▼ Spiccato	▼ Sustain / PORT ▼A#-1	VELOCITY SHORTS / Vel Sens		BOW CHANGE	8VA			S M
VIOLAS 92	LEGATO	VEL ATTK	Low: C2 High: C4	▼ Spiccato	▼ Sustain / PORT ▼A#-1	VELOCITY SHORTS / Vel Sens		BOW CHANGE				S M
CELLOS 90	LEGATO	VEL ATTK	Low: C1 High: C3	▼ Spiccato	▼ Sustain / PORT ▼A#-1	VELOCITY SHORTS / Vel Sens		BOW CHANGE				S M
BASSES 84	LEGATO	VEL ATTK	Low: B-1 High: E2	▼ Spiccato	▼ Sustain / PORT ▼A#-1	VELOCITY SHORTS / Vel Sens		BOW CHANGE	8VB			S M

1 – Section level, and section purge/load
2 – Legato on/off (See "Legato Types" above.)
3 - Vel Attk – Increases the sensitivity of the default velocity-attack curve.
4 – Section low and high note range
5 - Selects the current "short" samples. (spiccato, pizzicato, staccato, col legno,
   Bartok pizzicato, shorts off)
6 - Selects the current "long" samples. (sustain, tremolo, minor trill, major trill, longs off)
   Portamento indicator. Choose how you want to trigger portamento; by keyswitch or

controller. (More about portamento later.)

7 – If "Velocity Shorts" is on, this is the Velocity Sensitivity slider.

8 – If the "Velocity Shorts" is off, then this slider becomes a volume slider for the Shorts.

9 - Shorts Duration slider - "Tightens" or "Loosens" the currently-sounding short samples. This way, you can get things such as staccatissimo and spiccatissimo.

10 - Bow Change – If you want to hear a subtle sound of the bow attack on each note, then turn this switch on.

11 – 8va, 8vb – Adds an octave up in the violins and an octave down in the basses.

12 – Section Vibrato sliders

13 – Solo/Mute

Info Button
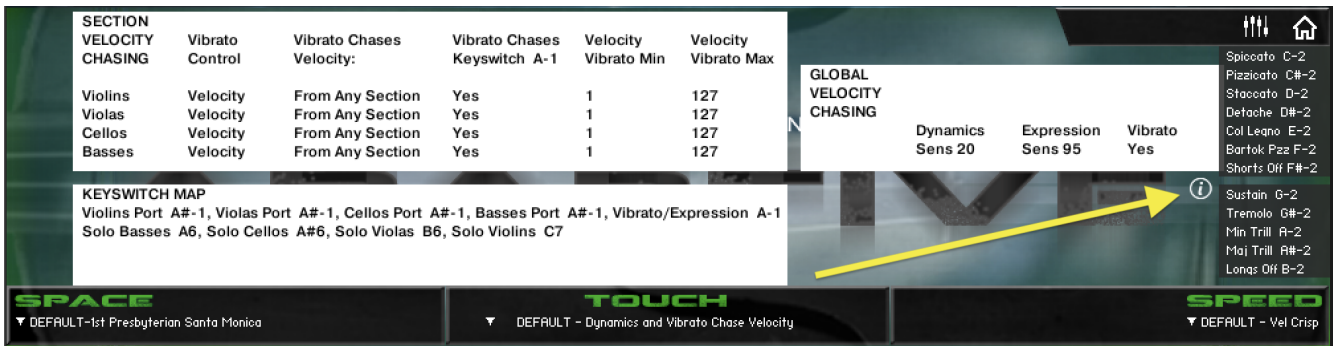
Click the "info" button to see the current velocity-chasing, keyswitch map and keyswitch assignments for short and long articulations.

THE INTERFACE – THE MIX PAGE

▼ SPICCATO C-2 ━━━━ ▼ Sus G-2 ━━━━   **SECTION NOTE MIXER**   RELEASE SAMPLES ON ▣
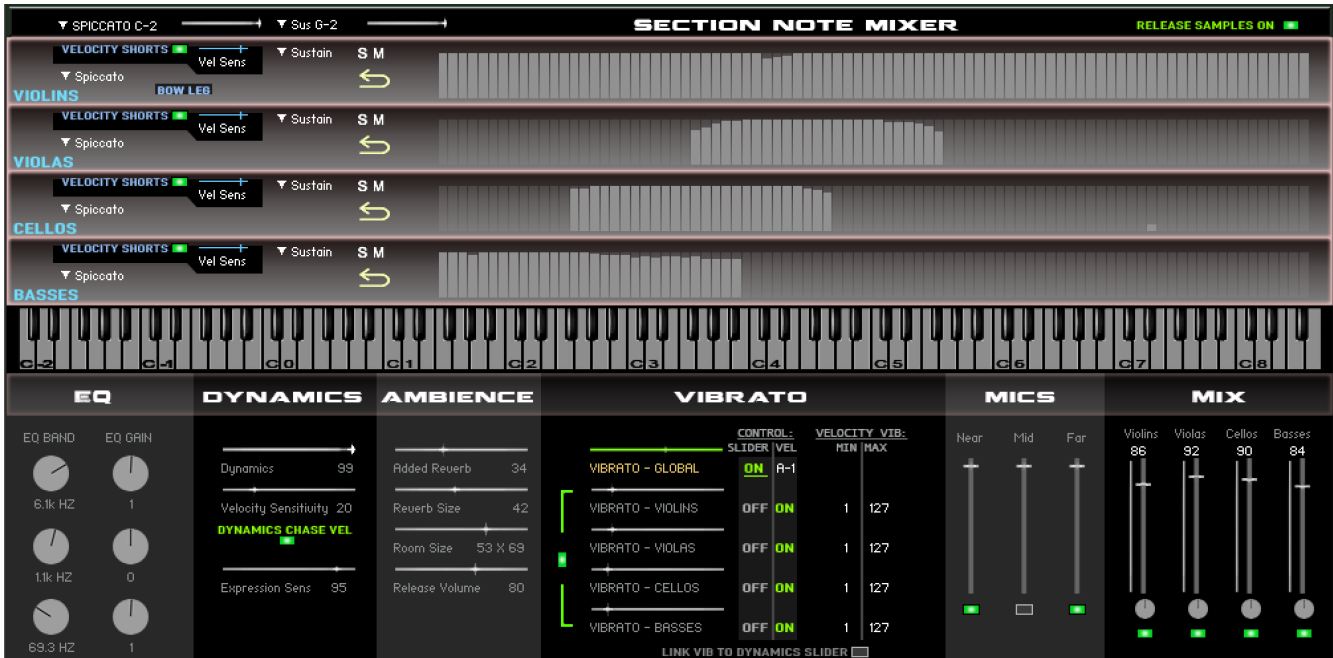
1 – Choose the "shorts" for all sections at once.
2 – Set the level of the "shorts" for all sections at once.
3 – Choose the "longs" for all the sections at once.
4 – Set the level of the "longs" for all the sections at once.
5 – Turn on/off the release samples.

1   2 3   4   5 6   7
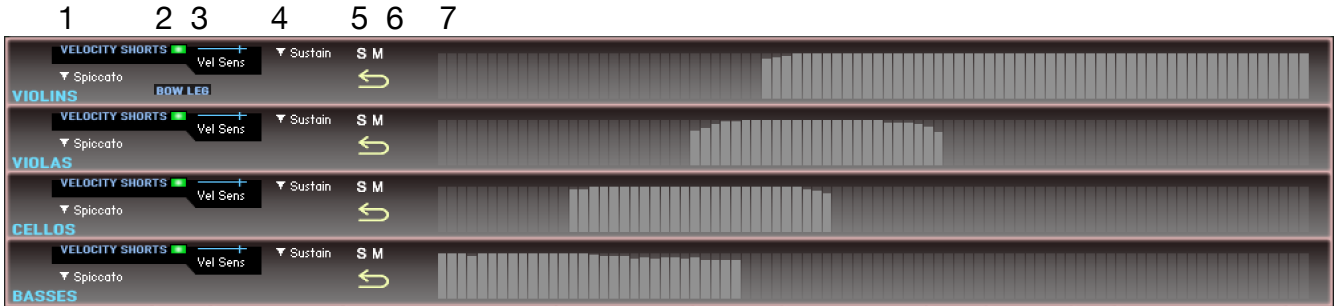
1 – Choose the "shorts" for the specific section.
2 – Turn on/off velocity control for the "shorts" of the specific section.
3 – If Velocity Shorts is on, then this slider controls velocity sensitivity. Otherwise, it
      controls the volume of the shorts.
4 – Choose the "longs" for the specific section.
5 – Solo/mute for the specific section.
6 – Resets the note mixer (see below) for the specific section.
7 – Note Mixer. Set the volume for each note of the specific section. (Hint – play a note
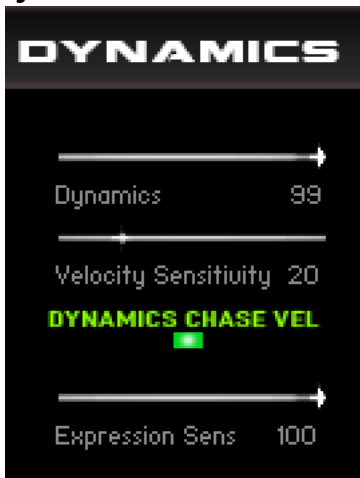   within the section's range, and you'll see an indicator where that note is.)

Above, an E4 is being played. This makes it easy to see where to set the volume of that
      note.

EQ band and gain

Dynamics

Dynamics Slider – Controls dynamics.
Velocity Sensitivity - Sets the velocity sensitivity for dynamics.
Dynamics Chase Vel – Select whether to have dynamics chase velocity.
Expression Sensitivity – Set the velocity sensitivity for expression.

Ambience

Added Reverb – Set the level of additional reverb.
Reverb Size – Set the size of the additional reverb.
Room Size – Set the size of the recording space.
Release Volume – Set the level of the release samples.

Vibrato

Vibrato Global – Control the vibrato of all sections at once.
Vibrato Violins – Control the vibrato of the violin section.
Vibrato Violas – Control the vibrato of the viola section.
Vibrato Cellos – Control the vibrato of the cello section.
Vibrato Basses – Control the vibrato of the bass section.
Control: Slider/Vel – Choose whether to control the vibrato by slider or velocity. For
      Global vibrato, you will see "A-1" in the "Vel" column. This means that if you have

any of the section's vibrato controlled by velocity, you can have that section's vibrato "chase" the velocity you play on A-1 (MIDI note 21). You can click "A-1" here if you wish to use a different note to trigger the effect.

Velocity Vib: Min/Max – If you have chosen to control vibrato with velocity, you can choose the minimum or maximum vibrato for each section in this column.

Link Vib to Dynamic Slider – In some cases, you will be able to link the vibrato amount to the dynamic slider.
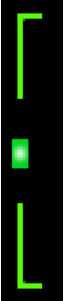
Link all sections' velocity vibrato – If on, vibrato of notes held in ANY section's key range will chase the velocity of ANY notes played later or by playing the designated keyswitch assigned for the global velocity keyswitch. If off, the vibrato of held notes will only chase the velocity of played notes within that section's key range or by playing the designated keyswitch assigned for the global velocity keyswitch.
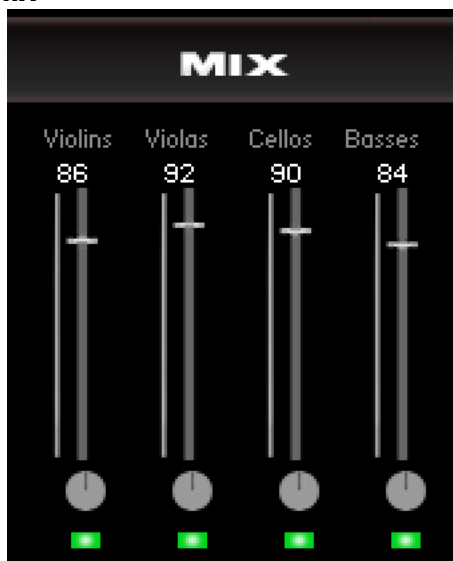
Mics
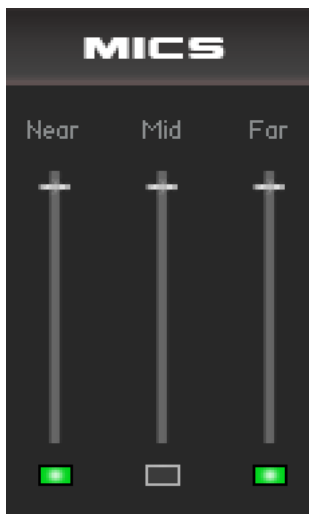
Near – Near mics level, purge, and load.
Mid – Mid mics level, purge, and load.
Far – Far mics level, purge, and load.

Mix

Violins – Level, pan, purge and load
Violas – Level, pan, purge and load
Cellos – Level, pan, purge and load
Basses – Level, pan, purge and load
*Note:* The pan only pans the near mics.

Using Portamento

Note that there are two types of portamento:

> 1 – Mild
> 2 – Dramatic

By default, the "Mild" portamento is active. Also by default, portamento is triggered by keyswitch Bb-1 (MIDI note 22). As long as that low Bb is held, all of the notes will have portamento applied. The direction of the portamento is automatically detected. At this point, if you want to trigger a "dramatic" portamento, then double-hit the same Bb. Again, as long as that low Bb is held, all of the notes will have portamento applied. The direction of the portamento is automatically detected.

If you choose to trigger portamento with a controller such as the sustain pedal, then the style of the portamento, whether mild or dramatic, is controlled by the portamento drop down menu
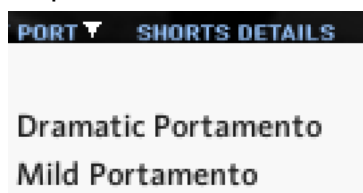
However, if any other section such as the cellos are still using a keyswitch for triggering portamento, then the "style" of the portamento, (mild or dramatic) will be taken over depending on how the keyswitch is played. (Single-hit, or double-hit)

Using Legato

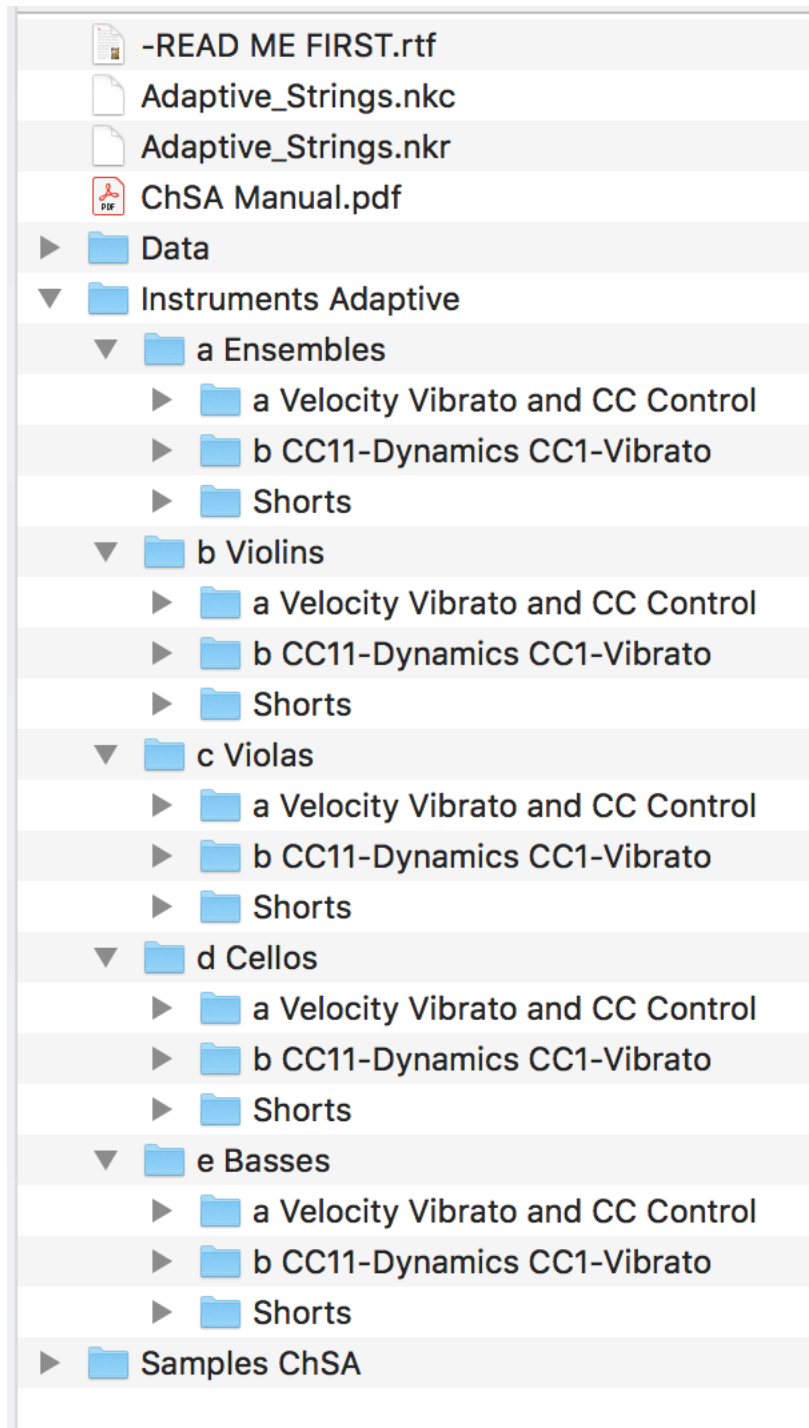The legato in Concert Strings Adaptive is especially flexible. There are three different legato "styles".

1 – Polyleg – Polyphonic legato on/off
2 – Tru Leg – Legato intensity. On = more intense.
3 – Bow Leg – Bowed Legato – Choose to hear bow changes even on overlapped legato notes.

By default, polyphonic legato and Tru Leg are on. Bow Leg is off.

Our philosophy about legato is somewhat different than most of what's out there; where you get noticeable latency and/or slight portamentos. While the portamentos can work from time to time, we felt that having it happen ALL the time was a bit limiting. Therefore, we opted to leave those slight portamentos out, especially since string players don't always "slide" from note to note like wind players often do. But fear not. That's why we created the "mild" portamento style described above. If you WANT to have a slight portamento, then just use the "mild" portamento style, and you're good to go.

Directory Layout (See next page...)

- 📄 -READ ME FIRST.rtf
- 📄 Adaptive_Strings.nkc
- 📄 Adaptive_Strings.nkr
- 📄 ChSA Manual.pdf
- ▶ 📁 Data
- ▼ 📁 Instruments Adaptive
  - ▼ 📁 a Ensembles
    - ▶ 📁 a Velocity Vibrato and CC Control
    - ▶ 📁 b CC11-Dynamics CC1-Vibrato
    - ▶ 📁 Shorts
  - ▼ 📁 b Violins
    - ▶ 📁 a Velocity Vibrato and CC Control
    - ▶ 📁 b CC11-Dynamics CC1-Vibrato
    - ▶ 📁 Shorts
  - ▼ 📁 c Violas
    - ▶ 📁 a Velocity Vibrato and CC Control
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    - ▶ 📁 a Velocity Vibrato and CC Control
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    - ▶ 📁 Shorts
  - ▼ 📁 e Basses
    - ▶ 📁 a Velocity Vibrato and CC Control
    - ▶ 📁 b CC11-Dynamics CC1-Vibrato
    - ▶ 📁 Shorts
- ▶ 📁 Samples ChSA

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