Manual

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1 Introduction

Thank you for choosing to work with Session Strings Pro.
With Session Strings Pro you now have command of a top-notch string ensemble that offers a diverse number of playing styles, sound varieties, and outstanding sound quality. Two factors were of particular importance to us during the development of Session Strings Pro:
Firstly, the simple and intuitive operation of the software and secondly an expressive, warm, and direct string timbre, which is suitable for the production of pop music as well as classical and film music.
The string players that participated in the Session Strings Pro recordings are some of Europe's top string musicians and each individual tone was recorded at the highest level of expression and perfection. We made absolutely no compromises, even with the selection of instruments. All instruments used in Session Strings Pro are crafted by Italian instrument makers of the 18th and 19th centuries. The warmth and balance of the ensemble is indeed the result of this meticulous selection of instruments.
Session Strings Pro is composed of four string groups, each with four violins, three violas, two celli, and two double basses. The volume of each group can be adjusted so that the instrumentation can be changed with a simple turn of a knob.
Bow noises are a natural component of all string performances. However there are often musical situations, where one might want to control the amount of these bow noises. For the first time in sample-based music production, the Bow Noise control included in Session Strings Pro allows the user to have direct control over the amount of bow noise in the ensemble's sound.
The fully programmable Animator transforms chords into rhythmical staccato, spiccato, or pizzicato phrases and is thus an excellent tool for quick and creative composition.
The enormous selection of string articulations can be accessed directly in Session Strings Pro. This does not require you to first load various presets. Depending on your specific utilization of the software, you can assign articulations to free controls so that they can be directly integrated in a live performance or so that you can access them by simply pushing a definable key!

An entire team of musicians, sound designers, and software developers participated in the development of Session Strings Pro. We are convinced that we did more than simply create a string library; our product is a living instrument that offers musicians the possibility to concentrate on what really matters — the music.
We hope you enjoy working with Session Strings Pro and we would be delighted to hear your feedback and ideas! You can find e-instruments online at http://www.e-instruments.com.

Yours,
Thomas Koritke
e-instruments

2 Quick Start

This chapter contains a short description of the functions of Session Strings Pro for a quick start. Chapter ↑3, The User Interface in Detail contains a more detailed description of all the functions.
The user interface of Session Strings Pro provides you with a number of program windows with various functions. These can be accessed by simply clicking on the tabs on the bottom margin of the program window.

The number of program windows available on the user interface depends on the preset type you are utilizing.

2.1 Preset Structure

Session Strings Pro is composed of four string sections, each with four violins, three violas, two celli, and two double basses. Section 1 and 2, and section 3 and 4 make the two top level preset groups in the KONTAKT Instrument browser. In the next lower level you'll find Contemporary and M-Town preset groups. On the lowest level of the structure, there are Performance, Production, and Animator presets.

Sections

- **Section 1 and 2** are characterized by a direct, rather dry sound. The recording was optimized for Pop/Rock production, with section 1 nearer to the listening position than section 2.
- **Section 3 and 4** have more of a spacial, "classical" sound to them. They were recorded in slightly greater distance from the listening position, with section 3 in a traditional orchestral seat.

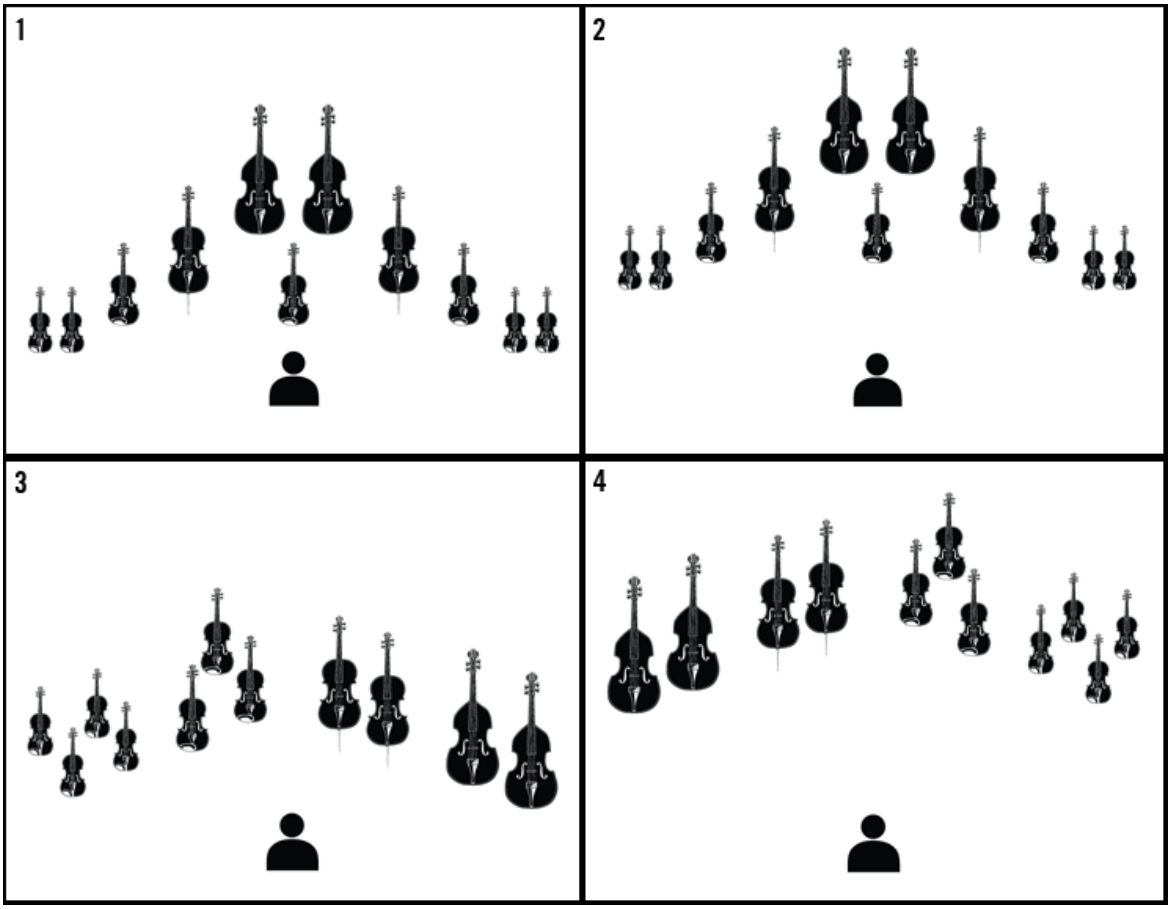

Fig. 2.1 Depiction of the String Arrangements in Sections 1-4

Contemporary and M-Town

- The **Contemporary** presets were recorded in a recording room with neutral acoustics, and the original sound was retained as far as possible. The result is a modern string sound, suitable for a wide variety of musical styles.
- The **M-Town** presets reflect the sonic characteristics of Soul and Disco music from the 60s and 70s, in which the strings had a very present mid-tone sound.

Performance, Production, and Animator Presets

- **Performance presets** are particularly suitable for live performances. This preset type is accompanied by the four program windows Main (see ↑2.2.1, Main Window), Animator (see ↑2.2.2, Animator Window), Articulation (see ↑2.2.4, Articulation Window), and FX (see ↑2.2.5, FX Window).
- **Production presets** are particularly suitable for recording and production. This preset type utilizes the three program windows Main (see ↑2.2.1, Main Window), Keyswitch (see ↑2.2.3, Keyswitch Window), and FX (see ↑2.2.5, FX Window).
- **Animator presets** come with a pre-set Animator function, which lets you turn chords into grooving phrases — staccato, spiccato, or pizzicato — seamlessly.

Chapter ↑2.2, The User Interface at a Glance contains a short description of all available program views for a quick start. Chapter ↑3, The User Interface in Detail provides a more detailed description of all program functions.

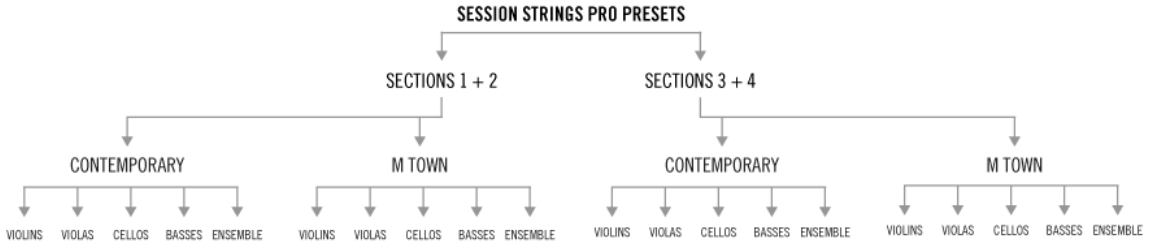

Fig. 2.2 Schematic depiction of the presets available in Session Strings Pro

2.2 The User Interface at a Glance

2.2.1 Main Window

Fig. 2.3 The Main window in Session Strings Pro

The Main window is a component of both preset types (see also ↑2.1, Preset Structure). In the Main window you can configure important overall program functions:

- In the Volume area, you can control the volume of the entire string ensemble. The control knobs Section1 and Section2 are used to control the volumes of both available string ensembles. Details regarding the instrumentation of these two ensembles can be found in Chapter ↑3.1.1, Volume Area — Section1 and Section 2 Control Knobs.

- In the Contour area, you can control the sound's consistency and its physical perception. This includes the amount of bow noise in the overall string ensemble sound as well as their acoustic positioning. Further details can be found in Chapter ↑3.1.2, Contour Area.
- The Envelope area allows the user to set the attack response speed and release time. Further details can be found in Chapter ↑3.1.3, Envelope Area.

2.2.2 Animator Window

Fig. 2.4 The Animator window in Session Strings Pro

The Animator window is included in the performance presets (see also ↑2.1, Preset Structure). This window contains the Animator, a step-sequencer/arpeggiator, with which you can transform chords into rhythmic staccato, spiccato, or pizzicato phrases. The dynamics and number of steps can be quickly and flexibly configured. The Animator can also be used

while you play in addition a legato melody or another chord. You have the option of utilizing a number of predefined presets as well as memory slots for your own presets. A complete description of these functions can be found in Chapter ↑3.2, Animator Window.

- In the Animator window, you can turn the Animator on and off (see ↑3.2.1, Animator Switch and Step LEDs).
- The vertical step control sliders are used to configure the dynamics of the individual steps. A more in-depth description can be found in Chapter ↑3.2.2, Step Control Sliders.
- The three toggle buttons below the control slider area (Retrigger/Continuous, Pattern 1/2, 8/16 Steps) can be used to select the starting mode, to display and manually switch to one of the two possible patterns, as well as to specify whether a single pattern should be played or both patterns successively. It is possible to configure these while you are playing. A more in-depth description can be found in Chapter ↑3.2.3, Retrigger/Continuous Toggle Switch.
- With the Dynamic control knob, you can restrict the dynamics utilized within the scope of an Animator phrase and thereby cancel out the settings of the step control sliders. A more in-depth description can be found in Chapter ↑3.2.6, Dynamic Control Knob.
- The Groove control knob serves to configure the metric values of the notes played by the Animator. You can use values between a quarter note and a sixteenth note, as well as the corresponding triplet values. A more in-depth description can be found in Chapter ↑3.2.7, Groove Control Knob.
- With the Swing control knob, you can transform a rhythmically even phrase into a swing or shuffle phrase. A more in-depth description can be found in Chapter ↑3.2.8, Swing Control Knob.
- With the Length control knob, you can configure the number of steps – in other words, the length of the phrase — for both available patterns. There is a minimum of 5 steps and a maximum of 16 steps. A more in-depth description can be found in Chapter ↑3.2.9, Length Control Knob.
- The Phrase drop-down menu allows you to load Animator factory presets as well as your own presets. A more in-depth description can be found in Chapter ↑3.2.10, Phrase Drop-Down Menu.
- In the Articulation drop-down menu, you can choose the playing styles used by the Animator. A more in-depth description can be found in Chapter ↑3.2.10, Phrase Drop-Down Menu.

- By making a selection in the Animator Mode drop-down menu, you can decide if the Animator should play chords or one of the various arpeggio patterns. A more in-depth description can be found in Chapter ↑3.2.12, Animator Mode Drop-Down Menu.

2.2.3 Keyswitch Window

Fig. 2.5 The Keyswitch window in Session Strings Pro

The Keyswitch window is a component of the production presets (see also ↑2.1, Preset Structure).
In this window, you have access to all articulations that are available to create rich and diverse arrangements. By using specific keys on your keyboard, you can switch between the articulation types you have chosen. You can also decide here which keyboard shortcuts you would like to use to switch articulations.

- By activating the Round Robin switch, the overall sound of the music can be brought to life. This function implements the use of up-bow and down-bow samples. It conveys the feeling of a real performance and contributes to the extremely realistic and true sound characteristics of Session Strings Pro. A more in-depth description can be found in Chapter ↑3.3.1, Round Robin On/Off Switch.
- In the six Articulation drop-down menus, you can select one of the 29 available articulation types. A complete listing can be found in Chapter ↑3.3.4, The Articulation Types Available in the Keyswitch Window.
- In the Key fields, you can configure the keys you wish to use as shortcuts by using your mouse or your computer keyboard. This is described in detailed in Chapter ↑3.3.3, Key Fields.
- In the Dynamic Ctrl. area — bottom-right in the window — you can control the available dynamic range and thereby decide how you want Session Strings Pro to react to dynamic changes in your keyboard playing. The drop-down menu provides two options:
  - Velocity: lets you set a fixed velocity range and curve with the Min, Max and Curve knobs below. By configuring the Min and Max control knobs, you can determine how large of a dynamic range you would like to use while playing with varying velocity dynamic levels. The Curve knob control influences the touch sensitivity of the master keyboard you are using.
  - Mod Wheel: lets you control the velocity with the modulation wheel of your MIDI keyboard (or with the Mod control on KONTAKT's On-Screen Keyboard).

Detailed information regarding the Dynamic Ctrl. area and its elements can be found in Chapter ↑3.3.4, The Articulation Types Available in the Keyswitch Window.

2.2.4 Articulation Window

Fig. 2.6 The Articulation window in Session Strings Pro

The Articulation window is included in the performance presets (see also ↑2.1, Preset Structure). In this window you have access to all the fundamental playing style factors that are available — the so-called articulation. Furthermore, in this window you can also assign various articulations or modes to the various playing aid controls of your keyboard (Velocity, Sustain, Pitchbend, and Expression). Using this myriad of combination possibilities, you can hereby create a particularly expressive playing style during a live performance or in the studio. Furthermore, three additional velocity control knobs are located in this window, with which you can limit and control the overall dynamics of Session Strings Pro.

- In the Main drop-down menu, you can find all available playing styles. Information regarding all the available articulations can be found in Chapter ↑3.4.1, Articulation Types Available in the Articulation Window.
- By activating the Round Robin switch, the overall sound of the music will be brought to life. This function implements the use of up-bow and down-bow samples. It conveys the feeling of a real performance and contributes to the extremely realistic and true sound characteristics of Session Strings Pro. A more in-depth description can be found in Chapter ↑3.4.3, Round Robin On/Off Switch.
- The Velocity Control drop-down menu allows you to choose one of the available articulation types that will be used when a certain velocity value is exceeded. A more in-depth description can be found in Chapter ↑3.4.4, Velocity Control Drop-Down Menu and the Value and Key Control Knobs.
- With the Value control knob to left of the Velocity Control drop-down menu, you can determine the velocity value, at which the articulation chosen in the Velocity Control drop-down menu replaces the articulation chosen in the Main drop-down menu.
- The Sustain Control drop-down menu allows you to choose articulation variants, which you can then employ during playing by means of a sustain controller. More information can be found in Chapter ↑3.4.5, Sustain Control Drop-Down Menu and Animator Articulation Control Knob.
- The Expression Control drop-down menu also has a large number of available articulations, which can be employed by means of an expression controller — e.g. a pedal. More information can be found in Chapter ↑3.4.6, Expression Control Drop-Down Menu and Short Notes Control Knob.
- The Pitchbend Mode defines how Session Strings Pro responds to the pitch bend control. Options are Scoop/Fall and Normal. More information can be found in Chapter ↑3.4.7, Pitchbend Mode Toggle Switch.
- A complete list of all available articulations can be found in Chapter ↑3.4.1, Articulation Types Available in the Articulation Window.

It is not possible to select two identical articulation variants in the drop-down menus of the Articulation Window.

Session Strings Pro handles your computer's memory resources as frugally as possible. For this reason, the last voice must have finished before you can select a new articulation variant in the drop-down menus.

- In the Dynamic Ctrl. area — bottom-right in the window — you can control the available dynamic range and thereby decide how you want Session Strings Pro to react to dynamic changes in your keyboard playing. The drop-down menu provides two options:
  - Velocity: lets you set a fixed velocity range and curve with the Min, Max and Curve knobs below. By configuring the Min and Max control knobs, you can determine how large of a dynamic range you would like to use while playing with varying velocity dynamic levels. The Curve knob control influences the touch sensitivity of the master keyboard you are using.
  - Mod Wheel: lets you control the velocity with the modulation wheel of your MIDI keyboard (or with the Mod control on KONTAKT's On-Screen Keyboard).

Detailed information regarding the Dynamic Ctrl. area and its elements can be found in Chapter ↑3.3.4, The Articulation Types Available in the Keyswitch Window.

2.2.5 FX Window

Fig. 2.7 The FX window in Session Strings Pro

This window is included in both preset types (see also ↑2.1, Preset Structure). In the FX window you will find three important elements for editing sounds: an equalizer for the editing of the desired frequency levels, a compressor for leveling peaks, and a high-end convolution reverb for creating the desired spatial-auditory effect. All three can be switched on or off with their respective switches and can be used, among other things, to increase the assertiveness of Session Strings Pro during a playback.

- The Equalizer has a semi-parametric design. It has the controllers Lo Freq (low frequencies), Mid Freq (medium frequencies), and Hi Freq (high frequencies). By using these control knobs you can select the fundamental frequency within the respective frequency band for each of the three frequency ranges. You can then configure an amplitude

change — a peak increase or decrease — for the selected frequency range by means of the Lo Gain, Mid Gain, and Hi Gain control knobs. More information regarding this can be found in Chapter ↑3.5.1, Equalizer.

- The Compressor is particularly easy to operate, as it only has one controller — the Amount control knob. This is used to decide how strongly peaks should be lowered in the signal before the sound is emitted. The idea behind this is as follows: if there are large dynamic jumps within an overall signal, the compressor can be used to level off peaks, which thereby increases the overall volume and produces a greater volume effect. The extent to which you decide to utilize this function is a matter of taste. Modern pop music often compresses its music so heavily that the dynamics — which are certainly an important element of music — are almost completely lost. On the other hand, compressing an instrument can significantly increase the instrument's assertiveness within an ensemble. Allow your ears to decide what kind of compression is necessary for each case.
- In the Reverb area of the FX window, you will find the Type drop-down menu and the Mix control knob. In the drop-down menu you can select the desired type of hall or room. By using the Mix control knob, you can control the volume ratio between processed and unprocessed signals. Further information regarding the Compressor and Reverb can be found starting in Chapter ↑3.5.2, Compressor.

We now would like to wish you much fun while experimenting and playing with Session Strings Pro!

Detailed information regarding all of the functions described in this chapter can be found in Chapter ↑3, The User Interface in Detail.

3 The User Interface in Detail

In this chapter you will find detailed information regarding all program elements.

With the exception of drop-down menus, all Session Strings Pro controllers and switches can be automated.

3.1 Main Window

This program window can be found in both the performance and production presets.

Fig. 3.1 The Main window in Session Strings Pro

3.1.1 Volume Area — Section1 and Section 2 Control Knobs

The two Section control knobs in the Volume area allow you to control the volume of both string ensemble groups. The available value range is between -∞ dB and +3 dB. When you are adjusting the knob, the current value is displayed below.

Fig. 3.2 The Section control knobs in the Volume area of the Main window

Both string ensemble groups are each composed of 4 violins, 3 violas, 2 celli, and 2 double basses. If you use both sections, you can thus employ a string orchestra with a total of 8 violins, 6 violas, 4 celli, and 4 double basses.

3.1.2 Contour Area

Bow Noise Control Knob

Fig. 3.3 The Bow Noise control knob in the Contour area of the Main window

By using the Bow Noise control knob, you can now, for the first time in the history of sample-based music production, alter the levels of bow noise in the overall sound of the instruments. Bow noise is created by string instruments, when the horsehair of the bow is bowed across the strings, which causes the strings to vibrate. The frictional resistance results in a type of scratchy noise, which is a natural element of the string instrument's sound during musical passages played piano (quiet) or mezzoforte (middle-loud). The Bow Noise control knob can be used in combination with the following articulation types:

Legato	Portamento	Glissando
Sustain	Accent	Fortepiano
Diminuendo	Gliss Down	Gliss Up

- When you alter the setting of the Bow Noise control knob, it appears below the control knob as a percentage. The available values range from 0% to 200%.
- The 100% Bow Noise setting corresponds to the natural amount of bow noise during the recording of the various instruments.
- By setting the control knob to a position between 0% and 100%, you correspondingly decrease the amount of bow noise.
- By setting the control knob to a position between 100% and 200%, you correspondingly increase the amount of bow noise. Even the most extreme control knob positions deliver an authentic sound.

Stereo Width Control Knob

Fig. 3.4 The Stereo Width control knob in the Contour area of the Main window

The Stereo Width control knob is used to adjust the stereo width — that is, the spatial perception of the music. However, this does not include sound reflections, which can be adjusted in the Reverb area of the FX window.

- When you alter the setting of the Stereo Width control knob, a display appears below the control knob.
- If the control knob is set to the far left position (mono), this corresponds to a mono setting. When using a stereo system, the strings are now acoustically exactly in the middle between both loudspeakers.
- If the control knob is set to the middle position (100%), this conveys the acoustic effect of the actual recording situation and the microphone placement for the various instrument groups.
- If the control knob is set the far right position (200%), this conveys an acoustic effect that suggests that the strings are spread far to the left and right in the room.

3.1.3 Envelope Area

Attack Control Knob

Fig. 3.5 The Attack control knob in the Envelope area of the Main window

By using the Attack control knob, you can adjust the attack/response speed of the notes that are played. The values that are available range from 0 milliseconds (ms) to 1.5 seconds (s).

- As soon as you change the setting of the Attack control knob, a display appears below the control knob. This will display the attack time you configured in milliseconds or seconds.
- If you set this knob to any value other than 0 ms, the instrument's response is delayed — i.e. the time from the start of the note until it has reached its full volume — by the time value you selected.
- The 0 ms setting corresponds exactly to the recording situation and the natural oscillating behavior of the strings.
- At the 1.5 s setting, it takes 1.5 seconds from the start of the tone pitch to reach full volume.

Release Samples Switch and Release Control Knob

Fig. 3.6 Release control knob and Release Samples switch in the Contour area of the Main window

Both of these control elements serve to configure the release/decay behavior of Session Strings Pro.

- If the Release Samples switch is activated, all samples will release in a natural manner as they were recorded. The Release control knob is then automatically deactivated and displayed as gray.
- If the Release Samples switch is deactivated, the Release control knob can be used to configure the release time. The Release control knob allows you to adjust the release time according to your musical needs. The release time values range from 0 milliseconds (ms) to 1.5 seconds (s). This allows you — depending on the musical situation, articulation that is employed, and desired musical effect — to achieve a flowing musical transition, which also bears similarity with the effect of a large hall on the music's sound.
- When you change the setting of the Release control knob, a display appears below the control knob and shows the selected release time in milliseconds (ms) or seconds (s).
- If you set this parameter to 0 ms, the note will cease immediately when you release the key on the keyboard. If the control knob is turned completely to the right, the note will continue to sound and decrease for 1.5 seconds after releasing the key.

3.2 Animator Window

Fig. 3.7 The Animator window in Session Strings Pro

This program window is included in the performance preset (see also ↑2.1, Preset Structure). Depending on the selected mode, the Animator can function as a step-sequencer for chords or as an arpeggiator. A complete sequence is called a phrase. It can consist of one or two patterns with a minimum of 5 and maximum of 8 steps.

3.2.1 Animator Switch and Step LEDs

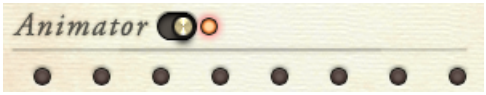

Fig. 3.8 The Animator switch and the Step LEDs in the Animator window

The switch to the right of the Animator label allows you to turn this feature on or off. If you play one or more keys when the Animator is turned on, the Animator playback is immediately started. This runs for as long as the key(s) on your keyboard are held down. After reaching the end of the desired pattern or phrase, the Animator then begins to playback the pattern or phrase from the start. The LEDs above the step control slider display the step of the phrase that is currently being played.

3.2.2 Step Control Sliders

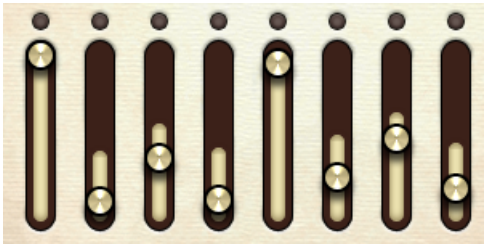

Fig. 3.9 The Step control sliders in the Animator window

With these control sliders, you can adjust the level of each individual step and thereby create the desired dynamics, rhythms, and rests.
In conjunction with this, the Dynamic control described in Chapter ↑3.2.6, Dynamic Control Knob serves to limit the entire range of the dynamic scope that is available.
If you completely pull down the step control sliders, this step is no longer audible and thus has the effect of a rhythmic rest.

3.2.3 Retrigger/Continuous Toggle Switch

Fig. 3.10 The Continuous/Retrigger toggle switch (here in continuous mode) in the Animator window

This toggle switch can be used to determine the starting state of an animator phrase.

- If you select the Retrigger function, the Animator restarts the phrase beginning on step 1/pattern 1 as soon as you press a new key on your keyboard. This can be used very effectively, for example, if a piece of music contains inserted measures in another meter.

- If you select the Continuous function, the Animator simply continues to play the phrase or pattern even if a new note is played on the keyboard as long as you keep at least one key pressed. The Animator will restart the phrase after all keys are released.

3.2.4 Pattern Toggle Switch

Fig. 3.11 The Pattern toggle switch in the Animator window

The Animator allows you to use a maximum of two patterns each with a maximum of 8 steps. By using the Pattern toggle switch, you can switch between the two patterns.
If you set the Steps toggle switch (described below) to 16 steps, patterns 1 and 2 are automatically switched. They are also automatically switched if you reduce the length of the pattern by means of the Length (see Chapter ↑3.2.9, Length Control Knob) to e.g. only 5 steps. After step 5 of the first pattern, the Animator automatically switches to the second pattern and after step 5 of the second pattern back to the first pattern.

3.2.5 Steps Toggle Switch

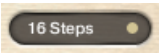

Fig. 3.12 The Steps toggle switch in the Animator window

With this toggle switch, you can decide whether the playback should only include the current pattern or both patterns in alternation without having to manually click on the pattern toggle switch.

- If you select 8 Steps, only the pattern that is currently selected with the Pattern toggle will be played. Exception: you click on the Pattern toggle switch during playback and thereby select the other pattern. Then the new pattern will only be heard until you make a new selection or interrupt the playing.
- If you select 16 Steps, the Animator will automatically switch between both patterns. This continues even if you shorten the pattern lengths using the Length control (see Chapter ↑3.2.9, Length Control Knob).

3.2.6 Dynamic Control Knob

Fig. 3.13 The Dynamic control knob in the Animator window

This control knob serves to limit the dynamics that are actually available in an Animator phrase. You can use this knob to cancel out the settings of all Step control sliders.

- When you alter the setting of the Dynamic control knob, a percentage value appears below the knob. The available values range from 0% to 100%.
- If you turn the knob completely to the left to the 0% position, then you cancel out the dynamic settings of the Step controller for the entire phrase and thereby level out the Step peak volume levels. You thereby remove all volume differences and thus remove all dynamics aspects from the musical phrase. This is displayed graphically by the golden beams within the Step control sliders, which are thereby set to the same height. However, this aspect does depend on the respective velocity dynamic levels that you play on your keyboard. If you hit the keys strongly, all the steps will be played at this loud volume. If you hit the keys softly, all the steps will be played at this soft volume.
- If you turn the knob completely to the right to the 100% position, the dynamic settings selected with the Step control sliders are used 100%.

If you activate Velocity in the Articulation window, the selected settings will influence the Animator's dynamics. If you deactivate Velocity in the Articulation window, you can control the Animator's dynamics by using your keyboard's modulation wheel.

3.2.7 Groove Control Knob

Fig. 3.14 The Groove control knob in the Animator window

By using the Groove control knob you can configure the rhythm, with which the Animator notes will be played in ratio to the metronome of your host application (KONTAKT, Cubase, Logic, etc.). The following rhythmic values are available:

Value	Corresponding note value
1/4	Quarter notes
1/4 tr	Triplet quarter notes
1/8	Eighth notes
1/8 tr	Triplet eighth notes
16	Sixteenth notes
16 tr	Triplet sixteenth notes

To play real triplets in a sequencer, it is recommended to shorten the phrase to 6 steps by using the Length control knob.

3.2.8 Swing Control Knob

Fig. 3.15 The Swing control knob in the Animator window

With the Swing control knob, you can convert an even rhythm to a shuffle or swing rhythm.

- By adjusting the Swing control knob, you will see a percentage value below the knob. The percentage will be between -100% and (+)100%.
- If you increase the Swing, steps 2, 4, 6, and 8 will rhythmically move closer to the following steps 3, 5, 7, and 1.

3.2.9 Length Control Knob

Fig. 3.16 The Length control knob in the Animator window

With the Length control knob, you can determine the number of steps per pattern, after which the Animator either begins again with the same pattern or switches to the second pattern (see Chapter ↑3.2.3, Retrigger/Continuous Toggle Switch). The Length control knob

setting applies for both patterns of a phrase. The values that can be selected range from 5 to 8 steps. Thus you can configure phrases in time signatures of 4/4, 3/4, 5/4, 6/4, and 7/8.

3.2.10 Phrase Drop-Down Menu

Fig. 3.17 The Phrase drop-down menu in the Animator window

In the Factory area of the Phrase drop-down menu, you will find 36 phrase presets for the Animator. In the User Load area, there are 10 user preset save slots. If you haven't yet saved any of your own presets, nothing can be selected here.

► To select one of the presets, click on the Phrase drop-down menu and select the desired preset. You can also do this while the Animator is running. The Animator will immediately switch to the phrase as soon as you have selected the phrase preset.

Here is how to create your own phrase presets:

1. Using the Steps switch and the Length control knob, choose how many steps the phrase should have.
2. Using the Pattern switch, make pattern 1 and then pattern 2 visible and implement the desired settings using the other control sliders and knobs.
3. Select the desired articulation in the Articulation drop-down menu.
4. Make a selection in the Animator Mode drop-down menu to decide whether the Animator should play rhythm chords or an arpeggio.
5. Using the Retrigger/Continuous switch, decide how you want the phrase to react to new notes that you play.
6. Open the Phrase drop-down menu and select one of the ten save slots in the Write User area.
7. You can now select your preset in the Read User area.

Presets will be saved with the session in your host application. To make phrase presets usable in other sessions, you need to save the .nki file in KONTAKT separately, and then load it as required.

Warning: if you select a save slot in the Write User area, which already contains one of your own presets, you will overwrite and lose the original.

Your own programmed presets can be accessed by using the keyboard keys C0, C#0, D0, D#0, E0, F0, F#0, G0, G#0, and A0. This allows you to creatively work with the phrases you have created! Simply hold down the desired key and combine the phrases as you please.

Warning: if you select a save slot in the Write User area, which already contains one of your own presets, you will overwrite and lose the original.

Your own programmed presets can be accessed by using the keyboard keys C0, C#0, D0, D#0, E0, F0, F#0, G0, G#0, and A0. This allows you to creatively work with the phrases you have created! Simply hold down the desired key and combine the phrases as you please.

Key	User Preset
C0	1
C#0	2
D0	3
D#0	4
E0	5
F0	6
F#0	7
G0	8
G#0	9
A0	10

3.2.11 Articulation Drop-Down Menu

Fig. 3.18 The Articulation drop-down menu Animator window

This menu contains articulation types that are available to be used in connection with the Animator: simply click on the Articulation drop-down menu and select the desired preset.

- *Pizzicato* (plucked): during this articulation technique, the strings are not bowed, but rather plucked by the musician's fingers. The bow is normally still held in the hand, as pizzicato passages are often alternated with bowed passages.

- *Spiccato* (bouncing): during this articulation technique, the musician places the bow upon the strings after each separated note in a bouncing manner. The bow returns lightly like a spring to the strings after each stroke. If many successive notes in the same bowing direction utilize this technique, it is referred to as — depending on the direction — Spic Down or Spic Up.
- *Staccato* (separated): staccato is an articulation technique that is characterized by an accented start of each pitch and a short, truncated end. This articulation technique can have feature constantly changing bowing directions or a single bowing direction. The latter is referred to as either Stac Down or Stac Up.

3.2.12 Animator Mode Drop-Down Menu

Fig. 3.19 The Animator Mode drop-down menu in the Animator window

By making a selection in this drop-down menu, you can choose the function of the Animator — as a step-sequencer or as an arpeggiator.

► If you utilize the Animator as a step-sequencer, chords or single notes will be played rhythmically. To do this, select the *Chord* option in the drop-down menu.

- The Animator's rhythm is based on the settings that you selected with the Groove and Length control knobs. Rests can be configured with the Step control sliders. To do this you must simply completely pull down the slider of the desired step. Use the Swing control knob to rhythmically offset certain steps, which results in dotted and shortened notes — this transforms rhythmically even phrases into swing phrases.
- You can considerably alter the musical result by changing other settings. Select the desired articulation style in the Articulation drop-down menu. You can change the dynamics settings by means of the Step control sliders as well as the Dynamic control knob.
- If you utilize the Animator as an arpeggiator, the chords will be played as an arpeggio — a string of single notes following each other.
- Click on one of the Arpeggio options in the drop-down menu to select the desired arpeggio forms.

The following modes are available in the Animator Mode drop-down menu:

- *Chord*: If you play more than one keyboard note when in this mode, all notes that belong to this chord are played simultaneously and with the rhythm and articulation that you selected.
- *Arp Order*: In this mode the played chord tones are played as an arpeggio by the Animator in the order that you have played them. This allows for creating very unique arpeggios, which you can even alter further by switching to single other notes while playing.
- *Arp Up*: In this mode the Animator creates an ascending arpeggio based on all the chord notes you have played. The order of the notes always begins with the lowest note and ends with the highest.
- *Arp Down*: In this mode the Animator creates a descending arpeggio based on all the chord notes you have played. The order of the notes always begins with the highest pitch and ends with the lowest.
- *Arp Up/Down*: In this mode the Animator creates an arpeggio based on all the chord notes you have played — it builds an ascending and then descending arpeggio.

If you play a single key on your keyboard instead of a chord, the result will be the same regardless of the selected Animator Mode. However, all other operating elements maintain their effect.

Test out the Animator by experimenting with its various functions. All the modes listed here can be varied live during performance by selecting or configuring the operating elements and options in the Animator window. Simply try it all out and you will be surprised to see how much is possible.

More information regarding this can also be found in Chapter ↑3.4.5, Sustain Control Drop-Down Menu and Animator Articulation Control Knob.

3.3 Keyswitch Window

Fig. 3.20 The Keyswitch window in Session Strings Pro

The Keyswitch window is an exclusive component of the production presets (see also ↑2.1, Preset Structure). Its counterpart in the performance presets is the Articulation window and has varying functions. The Keyswitch window serves to configure parameters, which are of particular importance for a quick and efficient workflow:

- Whether or not a single voice should utilize various samples or a single sample.
- The selection of articulation types needed for live performance (playing styles).
- The keys on your keyboard, which you would like to use to switch quickly between articulation types.
- The dynamics parameters.

3.3.1 Round Robin On/Off Switch

Fig. 3.21 The Round Robin switch in the Keyswitch window

If you activate Round Robin, the up-bows and down-bows of the string ensemble will be chosen from up to four different samples per key. This tool can be used to prevent a static sound of the music and instead creates a living and realistic sound. If this button is deactivated, only the first of the four samples will be used.

3.3.2 Articulation Drop-Down Menus

In the six drop-down menus, you can select one of 29 available articulation types. By pressing a key on your keyboard, which you configured as a shortcut key in the corresponding Key field, you can switch immediately to the selected articulation.

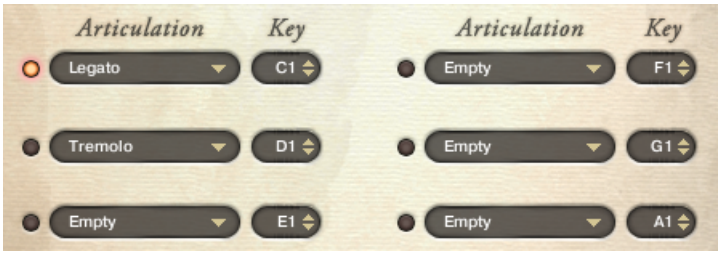

Fig. 3.22 The articulation types in the Keyswitch window

3.3.3 Key Fields

In the Key fields you can configure the keys on your keyboard that correspond to the selected articulations. There are a number of methods to input the shortcut keys:

- Double-click in the field and input the key using your computer keyboard.
- Double-click in the field and input the key using the MIDI note number.
- Click in the field and move the cursor up and down while holding the mouse button.

3.3.4 The Articulation Types Available in the Keyswitch Window

Articulation	Explanation	Notes
Empty	No articulation is selected in the respective drop-down menu.	Unneeded slots should remain empty and thereby avoid utilizing unneeded RAM.
Legato	Italian: tied together. During this musical articulation style, the notes of a melody are played as if tied to one another without an acoustic rest or interruption between the notes.	Here you have to overlay the first played note with the next note within an octave.
Portamento (di voce)	Italian: carrying of the note/voice. This technique is a smooth slide transition from one note to the next as a type of ornamentation. Even siren intervals utilize this function.	Also for this technique, the first note played needs to be overlaid with the following note within an octave.
Glissando	Italian: glide. This technique uses a gliding bridge of the range between two notes that have a larger interval. The note is constantly changing during the glide. In Romantic music each chromatic pitch between the two notes is played. In modern music, glissando is more often played as a smooth transition — similar to legato.	To create the glissando effect, overlay the first played note shortly with the second. If you let go of the first note before playing the second, the glissando effect will not be initiated. To achieve exact multi-voice glissandos, you need to utilize the Gliss Down/Gliss Up functions explained below.
Legato, portamento, and glissando are played monophonically and in a connected manner when played within an octave and are particularly effective for an expressive solo section. When you use one of these techniques, but do not play in a connected manner, the "sustain" articulation type will be automatically utilized. If the octave range is exceeded by two successively played notes, than these will be played polyphonically. Chords played during the solo section will be played polyphonically, if you use an octave other than the one utilized for the solo section.		
Sustain	Sustains one or more notes. This articulation variant is effective to create thick, atmospheric passages.	This articulation is used during the playing of transient and thus nearly seamless transitions of sustained changes between notes.

Articulation	Explanation	Notes
Accent	During this articulation variant, the played note(s) are accented at the start and then sustained at a steady and slightly softer volume.	This articulation is somewhat similar to sustain, however it has a more greatly accented transient effect at the start of the pitch.
Fortepiano	Italian: loud/quiet. During this articulation variant, the played note(s) are accented at the start and then sustained at a considerably quieter volume.	The difference here between the transient effect and the sustaining of the note is especially noticeable for chords and can thus be utilized well for dramatic effects.
Diminuendo	Italian: decreasing volume (synonym of decrescendo).	Based on the starting volume, the note first quickly rises in volume, but is then held for a longer time as it decreases in volume until you release the key.
Fortepiano and diminuendo are dynamic playing styles that are related to sustain and accent. They can provide your music with more expressiveness.		
Tremolo	Italian: trembling. String instruments playing this articulation use their bow to quickly play up-bows and down-bow on a single pitch.	
Trill Semi	A fast and continuous change between two notes that have an interval of a semitone. A musician plays a trill by quickly moving one's fingers on the string instrument's fingerboard.	
Trill Whole	A fast and continuous change between two notes that have an interval of a whole tone. A musician plays a trill by quickly moving one's fingers on the string instrument's fingerboard.	
Tremolo and trill can be used effectively to create sections of tension in a composition.		

Articulation	Explanation	Notes
Gliss Fast Down *Gliss Fast Up* *Gliss Slow Down* *Gliss Slow Up*	As explained above, glissando is a technique for a gliding transition from one note to the next. With the articulation variants Gliss Fast Down, Gliss Fast Up, Gliss Slow Down, and Gliss Slow Up, you can create glissandos with a pitch displacement of a whole tone. Depending on the variant you are using (Down or Up), the string instruments play either upward or downward from the starting note and either slowly or quickly.	
Cresc Fast *Cresc Slow*	Italian: growing = growing louder. This articulation achieves a continual increase in volume. The variants that are available here have a relatively abrupt end when the crescendo ceases.	The volume, which increases to its climax, can be reached either quickly (Cresc Fast) or slowly (Cresc Slow). Both speeds are pre-determined and cannot be adjusted.
FoPiCre Fast (FortePianoCrescendo) *FoPiCre Slow* (FortePianoCrescendo)	Italian: loud/quiet/growing. The FoPiCre articulation begins loud (forte), suddenly quiet (piano), and then increases to an abrupt end (crescendo).	If the loudest point of this volume change is to be reached quickly, this corresponds to the articulation FoPiCre Fast. If it is to be reached slowly, the FoPiCre Slow option should be selected. Again, both speeds are pre-determined and cannot be adjusted.
Fall Fast *Fall Slow*	A fast or slow drop of the pitch level. Instead of fully intoning the note, its starting pitch is simply suggested only to be quickly (Fast) or slowly (Slow) dropped by a whole tone.	This articulation technique is often used in jazz and pop music.
Scoop Fast *Scoop Slow*	Fast or slow increase of the pitch level. Instead of fully intoning the note, its starting pitch is simply suggested only to be quickly (Fast) or slowly (Slow) increased by a whole tone.	This articulation technique is often used in jazz and pop music.

Articulation	Explanation	Notes
Pizzicato	Italian: plucked. During this articulation technique, the strings are not bowed, but rather plucked by the musician's fingers. The bow is normally still held in the plucking hand, as pizzicato passages are often alternated with bowed passages.	The following articulation types are the same as those that are available for the Animator.
Spiccato	Italian: bouncing. During this articulation technique, the musician places the bow upon the strings after each separated note in a bouncing manner. The bow returns lightly like a spring to the strings after each stroke.	
Spic Down	This articulation features spiccato down-bows.	
Spic Up	This articulation features spiccato up-bows.	
Staccato	Italian: separated. Staccato is an articulation technique characterized by an accented start of each pitch and a short, truncated end. This technique can feature constantly changing bowing directions.	
Stac Down	This articulation features down-bows played staccato.	
Stac Up	This articulation features up-bows played staccato.	

3.3.5 Velocity

Fig. 3.23 The Dynamic Ctrl. area in the Keyswitch window

In this area of the Keyswitch window, you can take control of the entire dynamics of Session Strings Pro. You can also control here how Session Strings Pro should react to dynamics changes in your keyboard playing. You have two basic ways to influence the dynamics of your music:

- Using the touch sensitivity of your keyboard.

- Using the modulation wheel.

The drop-down menu provides the two options:

- Velocity: lets you set a fixed velocity range and curve with the Min, Max and Curve knobs below. By configuring the Min and Max control knobs, you can determine how large of a dynamic range you would like to use while playing with varying velocity dynamic levels. The Curve knob control influences the touch sensitivity of the master keyboard you are using.
- Mod Wheel: lets you control the velocity with the modulation wheel of your MIDI keyboard (or with the Mod control on KONTAKT's On-Screen Keyboard).

If Mod Wheel is selected from the drop-down menu, the touch sensitivity of your keyboard has no effect on Session Strings Pro.

Min and Max Control Knobs

When Velocity is selected, these two control knobs allow you to regulate the available dynamic ranges. They thereby limit the touch sensitivity of Session Strings Pro for the dynamics levels of your keyboard.

- If you set the Min control knob to the value of 0 (turn knob completely to the left), the lightest tap of a key produces a very quiet pitch.
- If you turn the Max control knob completely to the right to the value of 127, a maximum velocity strength is required in order to play the highest velocity value and thus the highest volume.
- If you set both control knobs to the value of 64 (in the middle), each note that is played will be played at the same velocity value of 64 (mezzoforte) regardless of how hard or softly the note is played.

Curve Control Knob

This control knob is used to adjust Session Strings Pro to the touch sensitivity of your keyboard and thus to the keyboard's dynamic curve.

3.4 Articulation Window

Fig. 3.24 The Articulation window in Session Strings Pro

The Articulation window is only included in the performance presets (see also ↑2.1, Preset Structure). Its counterpart in the production presets is the Keyswitch window described above. In the Articulation window, you can select different articulations and playing styles by means of a number of drop-down menus, buttons, and control knobs.

- In the Main drop-down menu of this window, you can select all the articulations (playing styles), that Session Strings Pro offers for a basic performance.
- In the Velocity Control, Sustain Control, and Expression Control drop-down menus, you have access to the same articulations as in the Main drop-down menu as well as even further functions.

Using the controller menus, you can switch between five different articulations in real-time! This will allow you to create highly animated music.

It is not possible to select the same articulation type in the various drop-down menus in the Articulation window.

Session Strings Pro handles your computer's memory resources as frugally as possible. For this reason, the last played voice must have finished before you can select a new type of articulation in the drop-down menu.

3.4.1 Articulation Types Available in the Articulation Window

The following table describes all articulations that are all available in the four drop-down menus: Main, Velocity Control, Sustain Control, and Expression Control.

Additional functions that are available solely in the individual drop-down menus will be explained in the descriptions of the individual menus.

Articulation	Explanation	Use in Session Strings Pro
Legato	Italian: tied together. During this musical articulation style, the notes of a melody are played as if tied to one another without an acoustic rest or interruption between the notes.	Here you have to overlay the first played note with the next note within an octave.
Portamento (di voce)	Italian: carrying of the note/voice. This technique is a smooth slide transition from one note to the next as a type of ornamentation. Even siren intervals utilize this function.	Also for this technique, the first note played needs to be overlaid with the following note within an octave.
Glissando	Italian: glide. This technique uses a gliding bridge of the range between two notes that have a larger interval. The note is constantly changing during the glide. In Romantic music each chromatic pitch between both notes is played. In modern music, glissando is more often played as a smooth transition — similar to legato.	To create the glissando effect, overlay the first played note shortly with the second. If you let go of the first note before playing the second, the glissando effect will not be initiated. To achieve exact multi-voice glissandos, you need to utilize the Gliss Down/Gliss Up functions explained below.

Articulation	Explanation	Use in Session Strings Pro
Legato, portamento, and glissando are played monophonically and in a connected manner when played within an octave and are particularly effective for an expressive solo section. When you use one of these techniques, but do not play in a connected manner, the "sustain" articulation type will be automatically utilized. If the octave range is exceeded by two successively played notes, than these will be played polyphonically. Chords played during the solo section will be played polyphonically, if you use an octave other than the one utilized for the solo section.		
Sustain	Sustains one or more notes. This articulation variant is effective in creating thick, atmospheric passages without major changes in dynamics.	This articulation is used during the playing of transient and thus nearly seamless transitions of sustained changes between notes.
Accent	During this articulation variant, the played note(s) are accented at the start and then sustained at a steady and slightly softer volume.	This articulation is somewhat similar to sustain, however it has a more greatly accented transient effect at the start of the pitch.
Fortepiano	Italian: loud/quiet. During this articulation variant, the played note(s) are accented at the start and then sustained at a considerably quieter volume.	The difference here between the transient effect and the sustaining of the pitch is especially noticeable for chords and can thus, for example, be utilized well for dramatic effects.
Diminuendo	Italian: decreasing volume (synonym of decrescendo).	Based on the starting volume, the pitch first quickly rises in volume, but is then held for a longer time as it decreases in volume until you release the key.
Fortepiano and diminuendo are dynamic playing styles that are related to sustain and accent. They can provide your music with more expressiveness.		
Tremolo	Italian: trembling. String instruments playing this articulation use their bow to quickly play up-bows and down-bow of a single note.	Tremolo is particularly effective when used in conjunction with velocity off, in order to create dynamic changes via the modulation wheel.

Articulation	Explanation	Use in Session Strings Pro
Trill	A fast and continuous change between two notes that have an interval of a whole tone or semitone. A musician plays a trill by quickly moving one's fingers on the string instrument's fingerboard. The major or minor key that you are using to compose will determine the distance between the two notes of the trill.	Configure the key by simply using the key control that is visible after selecting this articulation and Session Strings Pro takes care of the rest.
Tremolo and trill can be used effectively to create sections of tension in a composition.		
Gliss Down *Gliss Up*	As explained above, a glissando is a gliding change from one pitch to another. The two variants Gliss Down and Gliss Up can be used to create glissando effects with a pitch displacement of a whole tone. Depending on the variant (Down or Up), the strings will play either an ascending or descending glissando.	After selection one of these two articulation types, a percentage control will appear below the drop-down menu, which you can use to determine the speed of the continually changing pitch. The completely left position of the control (0%) results in the quickest possible change of pitches, which is also referred to as a Gliss Fast Up or a Gliss Fast Down. At the completely right position (100%), the pitches will change at the slowest possible rate, which is also referred to as a Gliss Slow Down or Gliss Slow Up.
Cresc Fast *Cresc Slow*	Italian: growing = growing louder. This articulation achieves a continual increase in volume. The variants that are available here have a relatively abrupt end when the crescendo ceases.	The volume, which increases to its climax, can be reached either quickly (Cresc Fast) or slowly (Cresc Slow). Both speeds are predetermined and cannot be adjusted.

Articulation	Explanation	Use in Session Strings Pro
FoPiCre Fast (FortePianoCrescendo) *FoPiCre Slow* (FortePianoCrescendo)	Italian: loud/quiet/growing. The FoPiCre articulation begins loud (forte), suddenly quiet (piano), and then increases to an abrupt end (crescendo).	If the loudest point of this volume change is to be reached quickly, this corresponds to the articulation FoPiCre Fast. If it is to be reached slowly, the FoPiCre Slow option is to be utilized. Again both speeds are pre-determined and cannot be adjusted.
Fall Fast *Fall Slow*	A fast or slow drop of the pitch level. Instead of fully intoning the note, its starting pitch is simply suggested only to be quickly (Fast) or slowly (Slow) dropped by a whole tone.	This articulation technique is often used in jazz and pop music.

Articulation	Explanation	Use in Session Strings Pro
Scoop Fast *Scoop Slow*	Fast or slow increase of the pitch level. Instead of fully intoning the note, its starting pitch is simply suggested only to be quickly (Fast) or slowly (Slow) increased by a whole tone.	This articulation technique is often used in jazz and pop music.
Short Notes	If you select this menu entry, a selection controller will appear below the drop-down menu, which will allow you to choose one of the following articulations: Pizzicato (Italian: plucked). During this articulation technique, the strings are not bowed, but rather plucked by the musician's fingers. The bow is normally still held in the plucking hand, as pizzicato passages are often alternated with bowed passages. Spiccato (Italian: bouncing) During this articulation technique, the musician places the bow upon the strings after each separated note in a bouncing manner. The bow returns lightly like a spring to the strings after each stroke. If the musician bows multiple notes in the same direction, this is referred to as Spic Down or Spic Up — depending on the bowing direction. Staccato (Italian: separated) Staccato is an articulation technique characterized by an accented start of each pitch and a short, truncated end. This technique can feature constantly changing bowing directions or a single direction. We refer to the later as Stac Down or Stac Up.	These are the same articulation types that you can select for the Animator.

3.4.2 Main Drop-Down Menu and Additional Controllers

Fig. 3.25 The Main drop-down menu in the Articulation window

In this drop-down menu you can select the main articulation. This articulation will be employed as long as you do not engage any other controller — such as Velocity (dynamic), Sustain (pedal), Expression, or Pitchbend (pedal, wheel, joystick, etc.). The available articulation types are described in the table in Chapter ↑3.4.1, Articulation Types Available in the Articulation Window.

When selecting specific articulation types, an additional controller will appear below the drop-down menu and can be used to configure some further parameters. Details regarding this controller can also be found in the aforementioned table.

An easy way to obtain an acoustic overview of the articulation types available in the Main drop-down menu is to simply select each articulation one at a time and listen.

The other drop-down menus of the Articulation window are used to assign articulations to the controls.

If you select the *Animator* entry in the Main drop-down menu, the other three drop-down menus as well as the Pitchbend Mode switch will be displayed as gray and will no longer be useable. This helps to minimize the RAM required to operate the software when you only need the Animator function.

3.4.3 Round Robin On/Off Switch

Fig. 3.26 The Round Robin switch in the Articulation window

If you activate this function, the up-bows and down-bows of the string ensemble will be chosen from up to four different samples per key. This tool can be used to prevent static sound of the music and instead creates a living and realistic sound. If this switch is deactivated, only the first of the four samples will be used. This can sometimes be very useful as a special effect.

3.4.4 Velocity Control Drop-Down Menu and the Value and Key Control Knobs

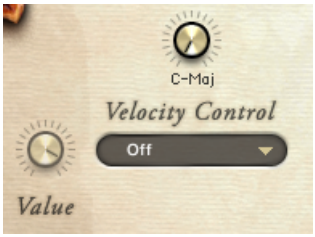

Fig. 3.27 The Velocity Control area in the Articulation window

While playing, you can change the employed articulation type by means of the Velocity Control area.
With the Velocity Control drop-down menu you can decide which articulation type Session Strings Pro should switch to, if the configured velocity value is exceeded while you are playing or during the sequencer's playback.
With the exception of the Animator function, the exact same articulation types are available to you in this menu as in the Main drop-down menu.

This drop-down menu has a single additional entry: *Off*. If you select this option, there will be no articulation change made due to velocity values.

As soon as you have made a selection other than Off in the Velocity Control drop-down menu, a Value control knob will become active to the left of the menu and will allow you to set the threshold velocity value.
If the threshold velocity value you have configured is exceeded while playing, then the articulation selected in the Velocity Control drop-down menu will be used instead of the articulation selected in the Main drop-down menu.
For example: you...

- ...selected the Legato articulation in the Main drop-down menu,
- ...selected the Trill articulation in the Velocity Control drop-down menu,

- ...and configured the Value control knob to a threshold value of 100.
- If you now play on your keyboard, all notes played at a velocity value below 100 will be played legato.
- All notes played at a velocity value above 100 will be played instead as trills.

3.4.5 Sustain Control Drop-Down Menu and Animator Articulation Control Knob

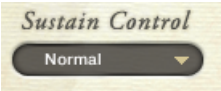

Fig. 3.28 The Sustain Control drop-down menu in the Articulation window

This menu's functions can be used very creatively, if you connect a sustain pedal (foot pedal to sustain notes) to your keyboard. Alternatively you can simply transfer the MIDI controller data (64) to Session Strings Pro, which you can produce with external hardware or software (hardware controller or sequencer).

- If you step on the pedal or if Session Strings Pro receives the MIDI controller data (64), the articulation type configured in the Main drop-down menu is switched to the articulation configured in the Sustain Control drop-down menu.
- Session Strings Pro switches back to the original articulation type as soon as you release the sustain pedal and play new notes.

This menu also contains exactly the same articulation types as in the Main drop-down menu. In addition the menu possesses two other important functions: Normal and Animator:

- **Normal**: If *Normal* is selected you can use the sustain pedal in its usual way - to hold notes.
- **Animator**: If you select *Animator*, you can engage the Animator via the sustain pedal to combine the articulation types selected in the other drop-down menus with the Animator. Here is how:

1. Make the desired configurations in the Animator window.
2. Make the desired configurations in the Articulation window's drop-down menu and select the Animator function in the Sustain Control drop-down menu. A control knob will appear below the menu, with which you can select the articulation used by the Animator and also select a new articulation while playing. Please note here that the three spiccato and the three staccato articulations are variations of the respective articulation type (staccato or spiccato). Thus if you notice only slight articulation changes after select-

ing a new articulation with the control knob, you have probably selected a closely related articulation.

3. Press down the sustain pedal and play a chord. The Animator starts and the chord will be played in the articulation style that you selected in the Animator window.
4. Hold down the chord, let go of the pedal, and now play a melody. Depending on the velocity you are playing at, this melody will be played with the articulation selected in either the Main or the Velocity Control drop-down menu, while the Animator phrase continues in the background.
5. Use the sustain pedal to change the Animator chord as described in steps 3 and 4 and continue to play the melody.

3.4.6 Expression Control Drop-Down Menu and Short Notes Control Knob

Fig. 3.29 The Expression Control drop-down menu and the Short Notes control knob in the Articulation window

If your keyboard has an expression pedal (foot pedal for volume), you can use this to switch to the articulation type that you select in this drop-down menu. You can also do this by sending the MIDI controller data (11) to Session Strings Pro. This controller data can be produced with external hardware or software (hardware controller or sequencer).

The expression pedal is actually meant to be used to control the music's volume. However, it can become an on/off switch if you would like to use it to activate a selected articulation type.

- If you step on the pedal at a pedal value greater than 64, Session Strings Pro switches from the articulation type selected in the Main drop-down menu to the articulation selected in the Expression Control drop-down menu.

- With a second step on the pedal — this time softly at a pedal value of less than 64 — Session Strings Pro switches back from the articulation type selected in the Expression Control drop-down menu to the articulation selected in the Main drop-down menu.

Short Notes Control Knob

If you select the *Short Notes* articulation type, the Short Notes control knob will appear below the menu. You can use this control knob to choose the desired articulation variant.
Besides the same articulation types as in the Main drop-down menu, the Expression Control menu also contains two additional important functions: *Normal* and *Dynamic*.

Normal

When this function is selected, the expression pedal is used for its actual intended purpose — controlling the volume.

Dynamic

When this function is selected in the Expression Control drop-down menu, you can pass through the various dynamics variants of Session Strings Pro by using the expression pedal. The pedal behaves here exactly like the modulation wheel when (in Velocity area, see below) Velocity is deactivated.

The Velocity function is hereby automatically deactivated and the touch sensitivity of your keyboard is ignored.

3.4.7 Pitchbend Mode Toggle Switch

Fig. 3.30 The Pitchbend Mode toggle switch in the Articulation window

The pitchbend controller of your keyboard is used to control the function selected on this toggle switch. The available settings are:

- **Normal**: If you select this option, the pitchbend wheel will behave like normal; you can use it to increase or decrease pitches.

- **Scoop/Fall**: If you select this option, an upwards movement of the pitchbend controller results in a so-called scoop effect (the pitch is twisted tonally upwards and abruptly stopped). A downwards movement of the controller results in a so-called fall (the pitch is tonally twisted downwards and abruptly stopped). You can control the timing of these scoops and falls using the velocity dynamic, with which the notes are played. A low velocity results in a slow pitchbend and a high velocity results in a fast pitchbend.

First twist the controller and then play. The Scoop/Fall option is not available for bass presets.

3.4.8 Velocity

Fig. 3.31 The Dynamic Ctrl. area in the Articulation window

In this area of the Articulation window you can configure the overall dynamics for the music you create with Session Strings Pro. In this area you can also control how Session Strings Pro should react to changes in your keyboard dynamics. You have two basic ways to influence the dynamics of your music:

- Using the touch sensitivity of your keyboard.
- Using the modulation wheel.

The drop-down menu provides the two options:

- Velocity: lets you set a fixed velocity range and curve with the Min, Max and Curve knobs below. By configuring the Min and Max control knobs, you can determine how large of a dynamic range you would like to use while playing with varying velocity dynamic levels. The Curve knob control influences the touch sensitivity of the master keyboard you are using.
- Mod Wheel: lets you control the velocity with the modulation wheel of your MIDI keyboard (or with the Mod control on KONTAKT's On-Screen Keyboard).

If Mod Wheel is selected from the drop-down menu, the touch sensitivity of your keyboard has no effect on Session Strings Pro.

Min and Max Control Knobs

When Velocity is selected, these two control knobs allow you to regulate the available dynamic ranges. They thereby limit the touch sensitivity of Session Strings Pro for the dynamics levels of your keyboard.

- If you set the Min control knob to the value of 0 (turn knob completely to the left), the lightest tap of a key produces a very quiet pitch.
- If you turn the Max control knob completely to the right to the value of 127, a maximum velocity strength is required in order to play the highest velocity value and thus the highest volume.
- If you set both control knobs to the value of 64 (in the middle), each note that is played will be played at the same velocity value of 64 (mezzoforte) regardless of how hard or softly the note is played.

Curve Control Knob

This control knob is used to adjust Session Strings Pro to the touch sensitivity of your keyboard and thus to the keyboard's dynamic curve.

3.5 FX Window

Fig. 3.32 The FX window in Session Strings Pro

The FX window offers you a number of various options to change the overall sound of Session Strings Pro. This window is included in both preset types (see also ↑2.1, Preset Structure).

- With the Equalizer, you can change the frequency levels of the signal and thus the frequency range of the output signal.
- With the Compressor, you can reduce dynamic peaks and thereby produce a leveled signal that is aligned with the volume peaks. The compression results in the ability to increase the signal's volume within the mix, because there are no longer any upper peak outliers. Furthermore, this can help the signal to be better implemented in the mix.

- With the Reverb function, you have access to acoustic simulations of a number of different room and hall types, which you can use to create a contrast between Session Strings Pro and other instruments in your mix.

The Reverb function is automatically activated when Session Strings Pro is first opened, but it can be deactivated at any time. The Equalizer and Compressor start off deactivated.

3.5.1 Equalizer

Fig. 3.33 The Equalizer area in the FX window

The Equalizer allows you to access three, partially overlapping frequency bands:

Control Knob Name	Configuration of	Frequency Band	Control Range
Lo Freq	Fundamental frequency	Low frequencies	45.2 Hz to 1.1 kHz
Mid Freq	Fundamental frequency	Mid frequencies	270.3 Hz to 7.2 kHz
Hi Freq	Fundamental frequency	High frequencies	3.0 kHz to 20.0 kHz

The Equalizer has a semi-parametric design. This means that within each of the three frequency bands, you can configure a fundamental frequency by means of the corresponding Freq control knob and then gradually increase or decrease the peaks in the more narrow frequency range around the fundamental frequency by using the corresponding Gain control knob.

Control Knob Name	Configuration of	Control Range
Lo Gain	Peak decrease/increase in the range of the configured fundamental frequency	-6 dB to +6 dB
Mid Gain	Peak decrease/increase in the range of the configured fundamental frequency	-6 dB to +6 dB
Hi Gain	Peak decrease/increase in the range of the configured fundamental frequency	-6 dB to +6 dB

If the Gain control knob is set in the middle (0.00 dB), there will be no peak increase or decrease. Here is how you can practically implement the Equalizer:

1. First configure the fundamental frequency by using the respective Freq control knob — you thereby set the middle of the frequency range, which has peaks that you would like to increase or decrease.
2. Using the corresponding Gain control knob, you can then configure a peak increase or decrease for the selected frequency range.

If you greatly increase the peak for a frequency range, then, if graphically depicted as a peak curve, the result would look like a bell curve. If you greatly decrease the peak for a frequency range, then the peak curve would like a vertically inverted bell curve.

3.5.2 Compressor

Chapter ↑3.5, FX Window already described the effects of the Compressor. Other than the on/off switch, this tool possesses only one other operating element and is thus easy to use.

Amount Control Knob

Fig. 3.34 The Compressor area in the FX window

In the bottom-left of the FX window you will find the Compressor area and the Amount control knob. Using this control knob, you can determine to what degree the dynamics should be compressed.

- At the complete left position of the knob (0%), there is no compression.
- A setting of 20% is often particularly suitable for notes that are held longer (sustain).
- A setting of 80% can improve the assertion of the Animator and shorter articulation types.
- At the complete right position (100%), the dynamics have maximum compression.

3.5.3 Reverb

Fig. 3.35 The Reverb area in the FX window

With this built-in reverberation device, you can add the natural sound of concert hall acoustics to Session Strings Pro and thereby give the strings their own spatial setting within the mixing of your music. This effect is an easy-to-use and especially high-quality convolution reverb.

Type Drop-Down Menu

In this drop-down menu you can select one of ten different halls or rooms. The following presets are available:

Name	Room Type
Concert Hall A	Large concert hall — Variant A
Concert Hall B	Large concert hall — Variant B
Cathedral	Church
Small Room	Smaller room — Variant A
Strings Room	Smaller room — Variant B
Vintage Room	Smaller room — Variant C
Studio 1–4	Very small rooms with a short reverberation time

Mix Control Knob

This control knob is found in the Reverb area of the FX window. You can use this to configure the ratio between the original (dry) signal and the reverberation.

Fig. 3.36 The Mix control knob in the Reverb area of the FX window

The available values range from 0% to 100%.

4 Practical Tips

4.1 How the Operating Elements Function

Within its four program window, Session Strings Pro utilizes a variety of control knobs, buttons, and drop-down menus. This chapter will briefly describe how to work with these operating elements.

All knobs and buttons can be automated by your host application. This does not apply for the tabs in the individual program windows and the selection of elements in the drop-down menus.

Program Tabs

Fig. 4.1 The Program window tabs in Session Strings Pro

Four tabs are located on the bottom margin of Session Strings Pro, which can be used to access the four corresponding program windows.

► Simply click on one of the tabs to open the corresponding program window.

On/Off Switch

Fig. 4.2 An on/off switch in Session Strings Pro

► Simply click on the switch to activate or deactivate the corresponding function.

Toggle Switch

Toggle switches are used to switch between one of two available options.

► Simply click on the toggle switch to switch between the two available options.

Fig. 4.3 A toggle switch in Session Strings Pro

Drop-Down Menu

Drop-down menus are rectangular fields that have a stylized downward arrow on the right side.

Fig. 4.4 An opened drop-down menu in Session Strings Pro

► Simply click on a drop-down menu to open it. Then you can use your mouse to select one of the drop-down entries and the desired function.

Control Knob

Fig. 4.5 A control knob in Session Strings Pro

This controller type is most common in Session Strings Pro.
► To configure the controller's value, click on the knob with the left mouse button and move the mouse up or down while the mouse button is held. If you click on a control knob and set a new value, this will be displayed below the knob.

Control Slider

The Animator window features a row of vertical control sliders that are used to configure the Animator's dynamics.

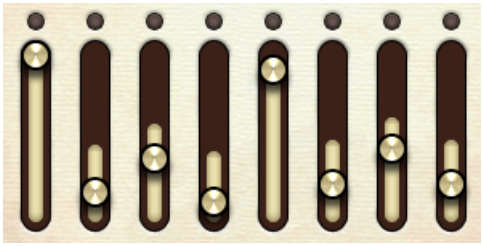

Fig. 4.6 The control sliders in the Animator window in Session Strings Pro

► To configure the slider values, simply click on the slider handles and move the mouse up or down while the left mouse button is held.

Resetting the Controllers to the Original Settings

All controllers in Session Strings Pro can be easily reset to their original settings:
► If you are using a Mac, hold down the Command key and click on the controller with the left mouse button.
► If you are using a Windows PC, hold down the Control key and click on the controller with the left mouse button.

4.2 Emergencies

Fig. 4.7 The Alarm button in KONTAKT

► If Session Strings Pro is not functioning as you desire within KONTAKT, click on the Alarm button (the small box with the exclamation mark). The same applies if a MIDI malfunction results in hanging notes.

5 FAQ

Question	Answer
How can I get in contact with e-instruments?	You can reach us online in a number of ways: At www.kvraudio.com/forum/viewforum.php?f=175 you will find the official e-instruments forum. Depending on your specific concern, you can reach us via email at info@e-instruments.com or support@e-instruments.com.
Why can't I select Session Strings Pro directly as a plug-in in my host application?	Session Strings Pro is a KONTAKT instrument, thus you must first select KONTAKT as a plug-in and then select Session String Pro from within KONTAKT.
Why do the drop-down menus sometimes not react to my articulation selection?	Session Strings Pro was designed to handle your computer's resources as frugally as possible, thus the last note must be completely finished before you can select a new articulation.
Why am I sometimes unable to activate the Animator button?	The Animator function is selected in the Main or Sustain Control drop-down menus in the Articulation window. When selected here, it takes precedence.
Why can't I select certain articulations?	The same articulation has already been selected in another drop-down menu.
Why can't I change the release time in the Envelope area of the Main window?	The Release Samples switch is activated. This activates the natural sounding (release) of the recorded samples. If you would like to change the release time, Release Samples needs to be deactivated.
Why are there sometimes interruptions in the playback immediately after selecting an articulation?	Session String Pro stores all articulations within a SINGLE preset and loads these in the background when they are required. This can possibly result in a short interruption.
Why am I sometimes unable to activate the Velocity button?	The Dynamic function is selected in the Expression Control drop-down menu. This takes precedence.
Why can't I configure the Velocity Value control knob?	The Velocity Control drop-down menu has Off selected.

Question	Answer
I'm using an older computer. How can I save computer resources or reduce the instrumentation?	1. Turn off Section 2 or Section 4 in the Volume area of the Main window by setting the respective control knob to 0; this reduces the polyphony. 2. Keep the Velocity function activated. If Velocity is deactivated, Session Strings Pro uses a crossfade function, which is controlled by the modulation wheel and also results in an increased instrumentation.
Does the Animator have a delay when starting?	There is a fundamental minimal delay of 13.5 ms. If necessary you can counteract this by using the track delay function of your host application for the other song tracks. Alternatively, you can bounce the animator track to audio and move the resulting track 13.5 ms ahead.
I don't have a sustain pedal or an expression pedal. How can I use these functions?	You can input the corresponding controller data with any controller keyboard that can send MIDI controller data or by directly entering the data in your host application. Sustain has the MIDI controller number 64 and expression has the MIDI controller number 11.
Can I automate all Session Strings Pro controllers in my host application?	With the exception of drop-down menus, all controllers and switches can be automated. The Animator user presets can be accessed with the keys C-2 to A-2 on your keyboard.
Why doesn't Pitchbend always work?	1. If Scoop/Fall is selected in the Pitchbend drop-down menu, it is first activated for the next note that is played. 2. If the Animator is activated, Pitchbend is automatically deactivated.

Question	Answer
I hold down a chord and change the Section 2 / Section 4 volume level from Off to a higher value, but I don't hear any change. Why not?	The Section 2 / Section 4 instruments are deactivated when the control knob is in the Off position and they are first activated after the control knob has been adjusted and after new notes have been played. This is designed to offer you the highest possible number of voices (polyphony). If you don't want this option, simply adjust the Section 2 / Section 4 control knob to a value slightly above Off.
Why isn't the Bow Noise control knob working?	Short articulations have been chosen. The Bow Noise control knob only has an effect on the following articulations: *Legato* *Portamento* *Glissando* *Sustain* *Accent* *Fortepiano* *Diminuendo* *Gliss Down* *Gliss Up*

6 Credits

- Produced, engineered and mixed by Thomas Koritke
- Sound design / sample editing: Sascha Haske, Holger Brauns, Lars Dahlke, Tim Grunwald
- Script programming / product development: Sebastian Bretschneider
- Musical recording coordination: Wolfang Meier zu Eissen
- Interface design: Shaun Ellwood, Gösta Wellmer, Mirko Wannemacher
- Impulse responses: Studiotools, e-instruments
- Manual: musicandtext.com, Holger Brauns
- Special thanks to Jürgen Klever, Gerhard Groth, Johannes Waehneldt and all the fantastic musicians for their patience and devotion.

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