

# SSSP

SPITFIRE SYMPHONIC STRINGS PRO  
USER MANUAL

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# CONGRATULATIONS

Thank you for purchasing Spitfire Symphonic Strings Professional. If there was a single product that could sum up the foundation of Spitfire's approach to sampling, it would be this. Recorded in Lyndhurst Hall at AIR Studios, which has played host to scores from the highest grossing blockbusters, using those same players playing the same instruments, sampled with our usual more is more approach. If you want that blockbuster sound you have to go bold. If you want cinematic, you have to go big. The ultimate encyclopaedic compendium of Symphonic strings sampling, recorded in London, with no expense spared.

## Quick Specs

- 89,365 Samples (48k recorded at 96k)
- 254.38 GB disk space required
- 508.76 GB disk space required during install
- NKS Ready
- Compatible with Native Instruments hardware
- Free Kontakt Player Included
- New intuitive GUI with inline help
- Essential microphones (CTA)
- Deep sampled:
  - Multiple Instruments
  - Multiple Articulations
  - Multiple dynamics
  - Multiple round robins
  - Release Triggers
  - True Legato

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# PRECAUTIONS

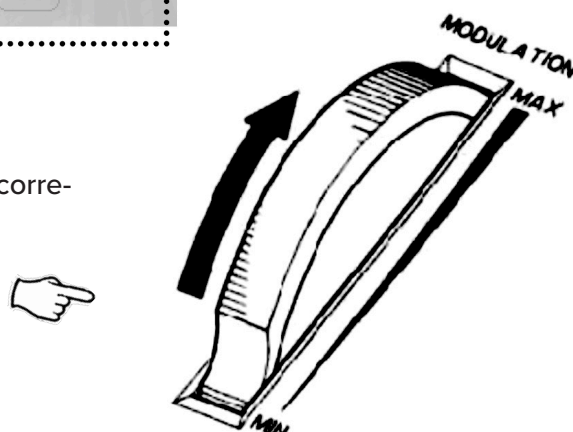
If you've never used a Spitfire instrument before there are two very basic principles to grasp. Once you've got these, you'll be up and running and ready to go. By all means read on, but the first two rules are:



TOP TIP: The little 'i's on your GUI are 'in-line' help. Click on these to find out stuff.

1.) Use these switches to change the articulations. They also correspond to keyswitches on the very bottom of your keyboard.

2.) On long notes make sure you always use your Mod-wheel



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# WELCOME

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60 Star Players, 16 1st Violins, 14 2nd Violins, 12 Violas, 10 Cellos & 8 Basses sampled with over 175 articulations, including 59 shorts, 94 longs, and 5 legato patches programmed by Andrew Blaney. Recorded with multiple round robins, dynamic layers and presented with three essential and versatile microphone positions. In addition to each individual section, we also offer a comprehensive selection of articulations and techniques presented in an 'ensemble' format designed for sketching and composing with 'out of the box' satisfaction.

This is our shot at creating the definitive compendium of Symphonic strings, recorded with a no-holds-barred approach. From classic and elegant vibrato, and expression controlled 'dolce' samples, to our own up-to-the-minute techniques designed by our award-winning team of composers and producers. Highlights of these include our hugely popular 'flautando' and 'super sul tas-to' articulations.

Go as detailed as you wish with each section individually, or dive in with our specially curated 'ensembles' tools, designed for quick writing and broad brush strokes.

## BACKGROUND

Spitfire Audio was built on a very simple core concept. The best way to create samples that enable people to recreate some of the most successful, award-winning recordings of recent times is to simply replicate where and how they were recorded, along with the instruments and talent that appeared on those recordings, and the way they were instructed to play.

SSS Pro is a consolidation of nearly a decade's worth of sampling experience; befriending London's finest string players, perfecting the accuracy; playability and scripting innovations that you have come to expect from a library that contains a component that was awarded "Best Sample Library Of The Year 2014" by Music Tech magazine.

By collating what was formerly contained in 4 separate volumes, SSS is now an encyclopaedic compendium of Symphonic Strings.

## FEATURES

Every articulation for every section plus ensembles formerly available in Mural volumes 1, 2, 3 & Ensembles in a single encyclopaedic compendium:

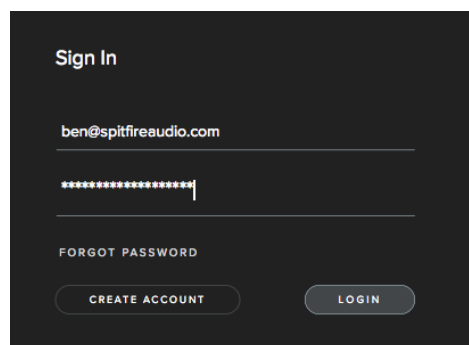
- 175 articulations, including 59 shorts, 94 longs, & 45 legatos
- 60 top London string players
- Recorded in situ (ie: in the positions they occupy in a scoring session)
- Recorded using priceless valve and ribbon mics
- Neve Montserrat Pre-amps into a Neve 88R desk
- Recorded digitally at 96k via 2" Studer tape
- Deep sampled with multiple dynamic layers and round robins
- Diverse and detailed with essential, additional and some totally unique articulations
- Legatos designed by Andrew Blaney
- 152.61GB of additional content to help you make the most of Spitfire Symphonic Strings
- Includes Core pack shipped with 3 distinct mic positions
  - Close (C)
  - Tree (T)
  - Ambient (A)
- As well as added signals exclusive to Pro
  - Alt:
    - Close Ribbon (Cr),
    - Stereo Pair (St)
    - Gallery (G) signals
    - Leader (L)
  - CTAO:
    - Close (C)
    - Tree (T)
    - Ambient (A)
    - Outriggers (O)
  - Stereo Mixes:
    - Fine (F)
    - Medium (M)
    - Broad (B)

# DOWNLOADING & INSTALLING

Thank you for buying Symphonic Strings. If you are a total newbie to this kind of thing you can get up to speed here: <http://www.spitfireaudio.com/info/basics/>

First though, grab the 'Spitfire Audio App' from this link: this app will enable you to download the library  
<http://www.spitfireaudio.com/info/library-manager/>

## THE SPITFIRE AUDIO APP

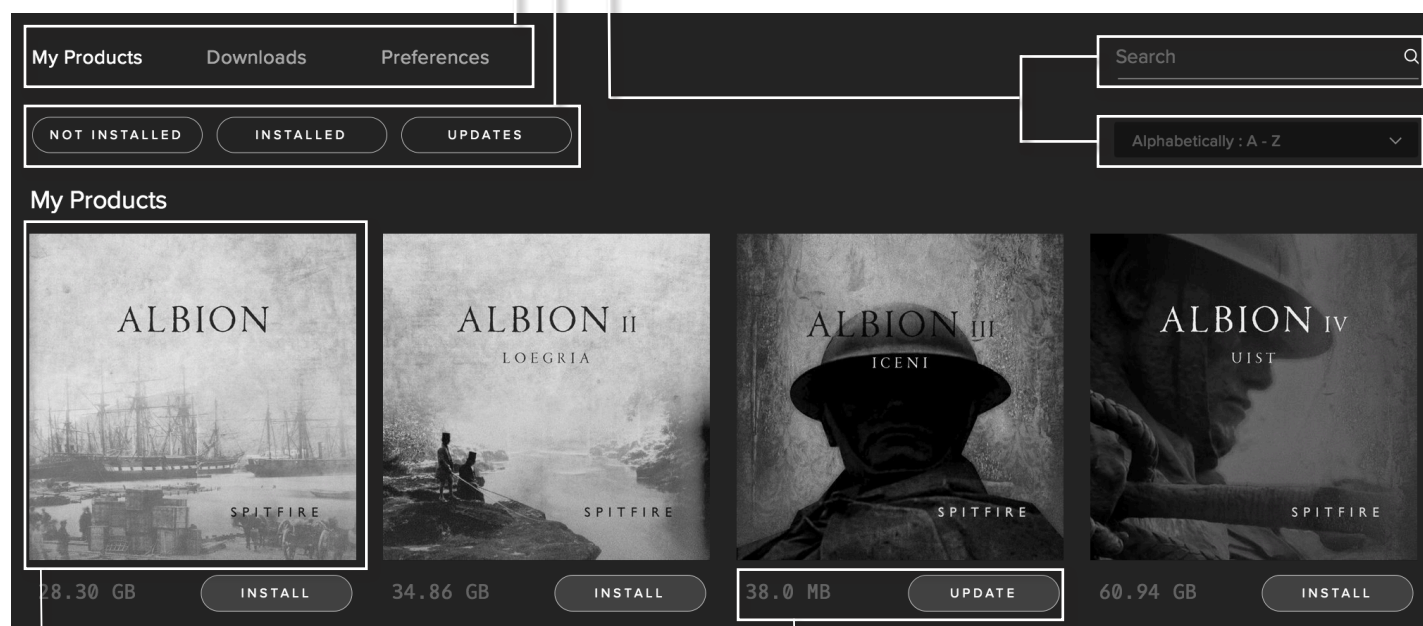


When you launch the app you will be prompted to login using the same details you use at our site. Then you'll see the page pictured below:

**TABS** the default tab is **My Products**, which shows all of the libraries on your Spitfire Account. **Downloads** will show currently downloading products and **Preferences** allows you to set default locations and behaviours as described on the next page.

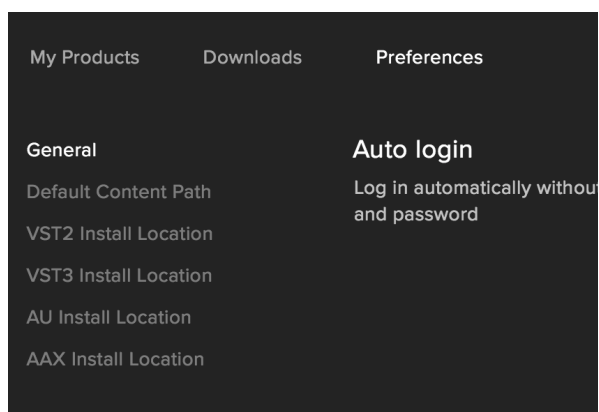
**FILTERS** clicking these filters will quickly display products you've yet to install, those already installed, and any available updates. Clicking again will remove the filter.

**SEARCH** and **SORT** allow you to quickly navigate through your collection and arrange your collection either by size or name.



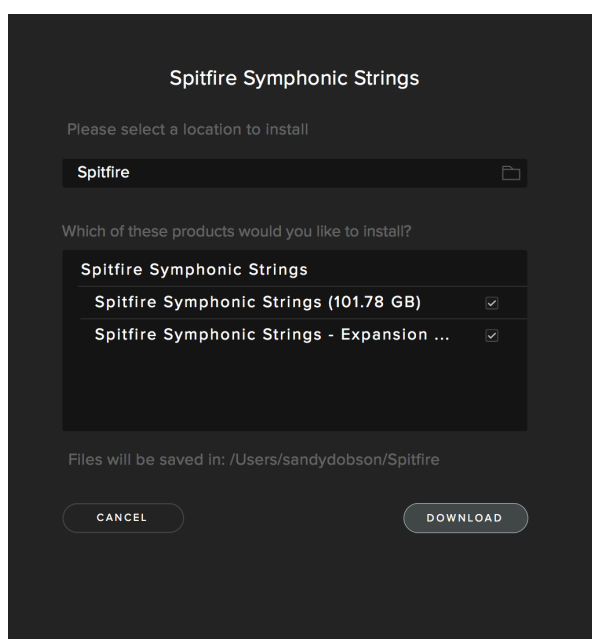
**LIBRARY** All libraries and plugins in your collection will appear with their artwork on the **My Products** tab. Clicking this artwork will open the product page. This is a great place to find information such as system requirements and instructions as well as where to find **Reset** and **Repair** options.

**INSTALL/UPDATE** buttons allow you to quickly start a download directly from the **My Products** tab, instead of clicking through to the **Library**. Next to the button the size of the download is shown, you will need twice as much available space to allow the download to unzip correctly.



If this is your first time using the Spitfire Audio App for a download you may wish to first navigate to the Preferences tab and make sure that the **Default Content** location is set to the location where you wish to download your libraries and that the **VST2 install location** is set to the folder where your DAW expects to find VST files.

Here you can also enable **Auto Login** to save time in future.

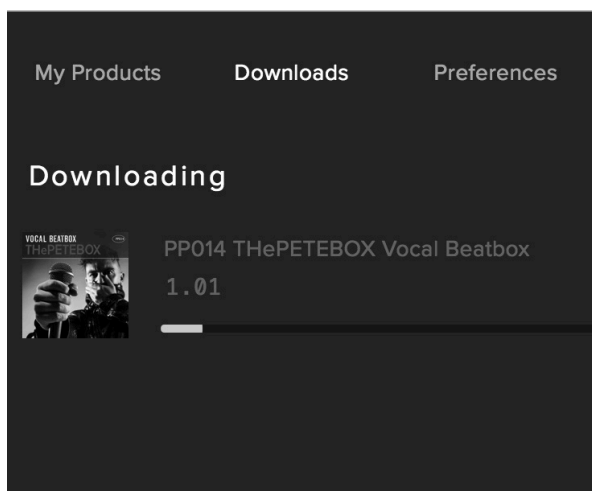


Once you are happy with your preferences, simply click the **Install** button, either directly on **My Products** tab, or by clicking on the library image you wish to install and then clicking the **install** button on the page that appears.

Clicking either of these will prompt you for a location, the **default content location** in your preferences will be suggested but you can select any suitable location.

With the professional version, you will have the option to choose which parts are installed, generally we advise installing all parts unless you already have some installed.

Once you are happy with the location click **Download**.



After clicking download you will be directed to the Downloads tab where you can watch the progress if you like. You can of course leave the Downloads tab and start other downloads but at this point you should leave the Spitfire App open until the download completes.

As this is a Kontakt player library, once it is downloaded you will need to activate it by following the steps on the next page.

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# REGISTERING WITH KONTAKT PLAYER

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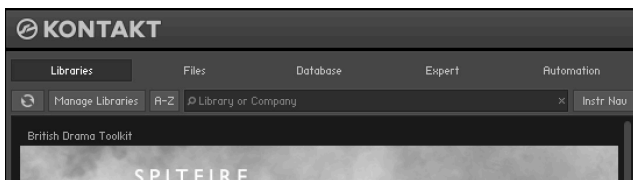
If you've never used one of our libraries before and you don't own a copy of Native Instruments Kontakt, you'll need to download the free "Kontakt Player" here:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/downloads/>

If you'd like to find out more about the differences between Kontakt and Kontakt Player) go to *Appendix A*.

If you'd also like to know what we recommend as an optimal set up please go to *Appendix B*.

1. Install Kontakt Player (skip this step if you already have it)
2. Open the player (or Kontakt 5 full version if you have that) and click **manage libraries** in the library browser window, then click **Launch Native Access** in the window that opens:



3. Once you have opened Native Access, click **Add Serial** in the top left of the window.

4. Enter the serial number in this format:

XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

...It can be found in your 'ready to download' email.

5. You will then be prompted for the location where you unzipped the library. Simply navigate to and select the library folder, in this case: the 'Spitfire Symphonic Strings library' folder that contains your library's instruments and samples folders, and also contains the 'nicnt' file

6. Your library is authorised. If the library does not add to the libraries pane, or disappears when you re-open Kontakt, see *Appendix E - Troubleshooting and common problems*

If you have never used Kontakt before we wholeheartedly recommend that you familiarise yourself with the basics of patch (or instrument) loading, multi management, outputting and midi routing detailed in the Kontakt user-manual and native instruments website:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/downloads/>

If you are an established Kontakt user please make sure you absolutely have the latest version of it downloaded via the NI service centre or the NATIVE ACCESS apps. Our libraries are frequently updated and often simply won't work on any previous versions. We cannot describe the multitude of painful symptoms you will experience if you don't do this!

## NKS - USE WITH NI HARDWARE

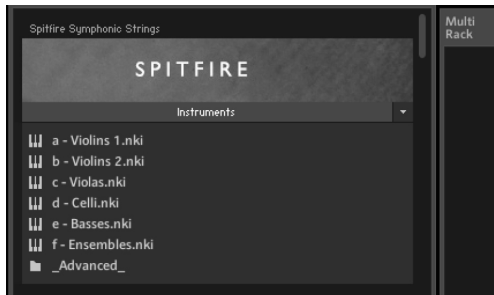
For more information about NKS and integration with Native Instruments hardware controllers and keyboards please checkout their online instructions:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/downloads/>

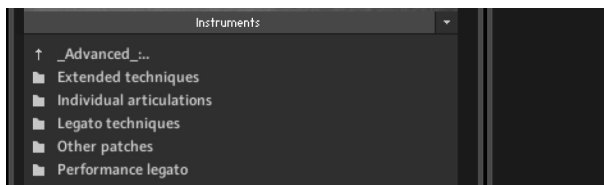
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# FOLDER STRUCTURE

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If you click the 'instruments' bar to expand it you will see that you have a 'basic' startup palette for each instrument section or soloist. These are your basic patches which contain a selection of curated 'work-horse' articulations. At the bottom is an 'Advanced' folder that has more folders which contain more curated articulation sets, the different legato options and patches with advanced editing possibilities.



If you click the 'Advanced' bar to expand it you will see that your instruments fall into 4 categories. You can double click the folder name to open that folder. Double click it again to go back up a level in the folder structure.

**Extended Techniques** - contains 'core' and 'decorative' techniques for each section and can be viewed as the next stage in detail up from the 'basic' startup patches.

**Individual Articulations** - each separate articulation in its own patch.

**Legato Techniques** - these monophonic patches rely on you playing the notes 'joined up' so it can fill in the joins for you for super realism. Especially popular with single solo top lines.

**Other Patches** - Have another three sub-folders:

**Economic** - A pre-curated smaller selection of articulations which won't break your RAM bank.

**Light** - Stripped back articulations that reduce the stresses on your CPU.

**Time Machine** - These patches contain all of the short articulations fully loaded into RAM so that you are able to vary the length of the short notes via CC.



The professional version contains three extra folders as well as the Advanced folder, which makes up the content of the expansion pack.

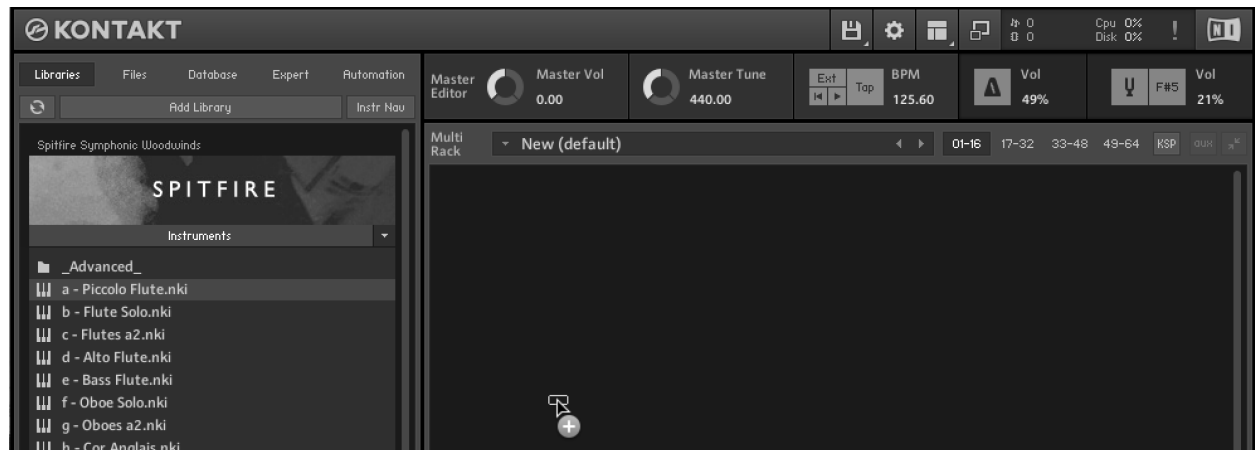
**Alt Mics** - These are patches that contain alternative signals consisting of Close Ribbon (Cr), Stereo Pair (St) and Gallery (G) signals

**CTAO Mics** - Patches with the common Close, Tree and Ambient signals, but with the Outriggers added to create the "Classic" Spitfire setup.

**Stereo Mixes** - Comprised of Fine (F), Medium (M) and Broad (B) stereo mixes, mixed by Jake Jackson, for instant great sounding mixes, with low CPU/RAM usage.

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## OPENING YOUR FIRST INSTRUMENT.



Simply double click an 'nki' file (this is Native Instruments' file extension for a Kontakt instrument) to load, or indeed drag the instrument (it'll have the little keyboard icon and the suffix .nki) from the left pane into the right pane.

If you can't hear anything double check first that the midi channel you are transmitting on with your keyboard is the same as the one in the Kontakt Instrument!



# A QUICK LOOK

## SWITCHING VIEWS



All of the libraries that we track at AIR Studios are recorded via priceless ribbon and valve mics via Neve Montserrat pre-amps, the largest 88R Neve console in the world and onto pristine 2" tape before being converted with the top-of-their-class Prism AD converters at 96k. The orchestra is presented in carefully orchestrated sections, sometimes in unison across the entire orchestral range sometimes in high low and middle sections. Alongside many 'work horse' long and short articulations are expertly prepared legato patches; a menu of effects and a huge selection of string runs. There are four mic positions (close, tree, outriggers & ambient) to load and mix to suit the type of music you're writing and the scale you want to achieve. Spitfire also provides a popular "ostinatum" designer that allows you to instantly create exciting, tense or action packed rhythmic passages.

When you first load up a Spitfire Orchestral preset you'll be greeted with this GUI. This is one of 3 pages that you can switch between using the panel switcher...

## ASSIGNING CONTROLS IN KONTAKT

All GUI controls can be assigned a unique controller number so you can automate or adjust via an external controller (vital when playing in virtual Orchestral parts). To un-assign, assign or just to see what CC number is assigned to any control RIGHT or CTRL CLICK.

You can then alter the controller parameters in the "Automation pane" want your mod wheel to go all the way from top to bottom but the control to have restricted bandwidth change default of 0-127 to 20-100 say. Or if you want the controller to make the GUI control in the reverse direction change from default 0-127 to 127-0.



Click on these to switch views or pages:

1. General Overview (the view shown above)
2. Expert View
3. Ostinatum.

All of which are discussed in more detail over the next few chapters...

# THE GENERAL OVERVIEW



## 1. KONTAKT HEADER

This area at the top of each instrument is where to set your audio and MIDI routing as well as see whether the patch is loaded, loading or purged. On the right you can solo, mute, pan, tune and adjust volume.

## 2. SIDEBAR

The sidebar displays the name of the currently selected articulation and is also where you change views (as described on page 8).

## 3. ARTICULATION SWITCHER

These musical note icons are the available articulations in your patch, you can change articulations by clicking on the icons and select multiples by shift clicking. These icons also correspond to the red keys in the Kontakt keyboard (see point 5.)

## 4. EASY MIX

The orchestra was recorded with several different mic perspectives. Move this slider up or down to change the distance from the players. Note that moving this fader will load and unload samples so it is best to “set and forget”

## 5. KONTAKT KEYBOARD

With the Kontakt keyboard displayed you should see a red range of keys and a blue range. The red range is your Keyswitch range for selecting articulations, holding more than one red key will select multiple articulations. The blue range is the playable range of the selected articulation.

## 6. CONTROLLERS

The following controls are included in this library to allow you to control and automate various parameters:

**Dynamics** - probably the most important controller you have. This crossfades between the different dynamic layers recorded.

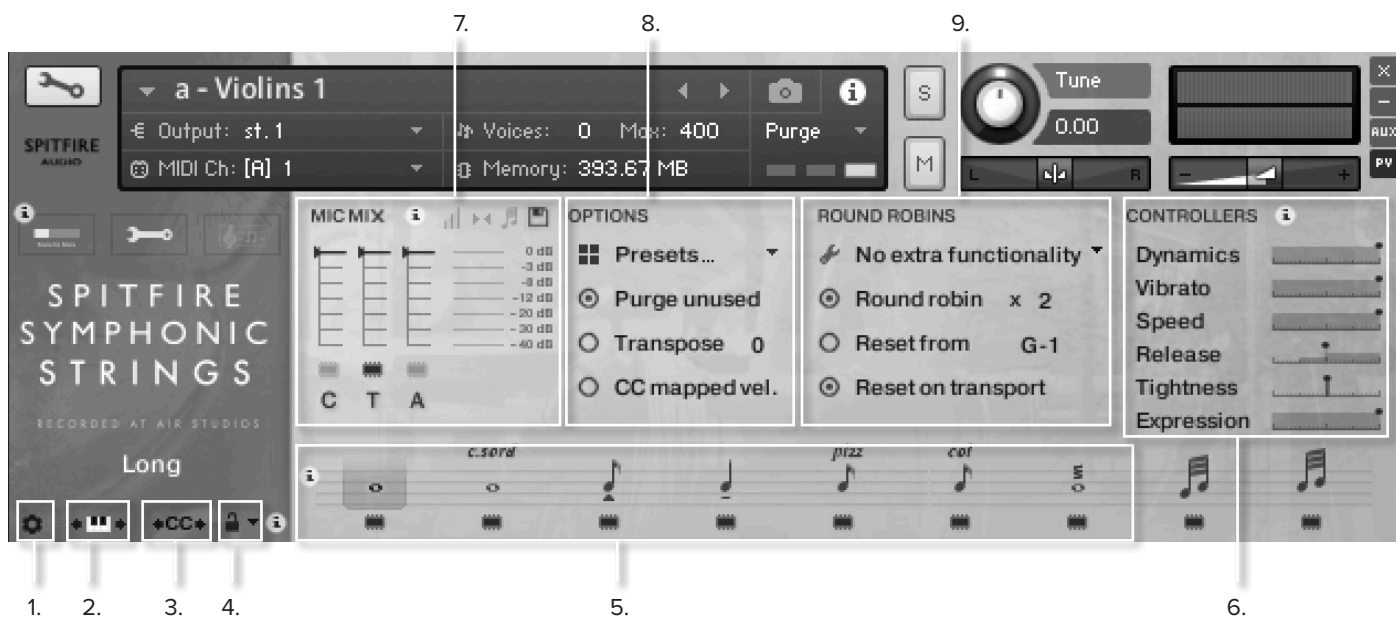
**Vibrato** - where appropriate this crossfades from no (or senza) to lots (molto) vibrato.

**Release** - allows you to change the amounts of release trigger you and your listener hears.

**Tightness** - the start of a note is often not the start of the ‘sound’ of the instrument. This cuts further into the note to make it tighter. But does detract from realism. Worth tightening up when playing in, then loosening and putting a negative delay into your DAW to compensate for ultimate reality!

**Expression** - ostensibly instrument trim (CC11), so this adjusts the volume within the instrument volume (CC7) great when used in conjunction with expression.

## THE EXPERT VIEW



## 1. THE COG

Clicking this cog allows you to tweak (change) the last played round robin (RR). You will have the option to tweak the last note you played, save the tweaks you've made, load tweaks and clear all of the tweaks to return to the default configuration.

The options you will have for each RR are:

**SKIP THIS RR** - Will simply make it always jump along to the next round robin in the cycle.

**ADJUST TUNE/VOL** - Will adjust the tuning and or volume of the last played note.

**ADJUST RELEASE** - This will alter the level of the release trigger (which will affect the perceived decay of that note).

**SAMPLE START** - If it feels loose adjust to the right, tight adjust to the left (Note that this is only available in full “cog” patches).

**REMOVE ALL NOTE TWEAKS** - This removes all custom changes you have made with the Cog for this note..

## 2. KEYBOARD SHIMMIER

This allows you to move/transpose the default key switches (the red keys) simply click and drag left to move the range left and drag right to move the range right. Note that this also transposes the key switch used for UACC KS described on point 4.

### 3. CC FOR SWITCHING ARTICULATIONS

When using UACC (described in point 4. and appendix E.) the default is CC#32 , right clicking this icon allows you to re-assign this value, just like re-assigning any of the controllers).

#### 4. ARTICULATION LOCK

There are multiple ways to select articulations in our libraries, the simplest of these is to use the default key switches but by selecting different options from this menu you can use the others:

Unlocked Artic. - Is the standard setting, select articulations via the front panel or key switches.

Locked Artic' - This locks your articulation so it doesn't change at all.

Locked Keyswitch - This locks your articulation via keyswitch but you're free to switch via the front panel.

Locked to UACC - This is a standard developed by Spitfire and detailed in appendix E. The default controller channel is #32 but this can be changed as described in point 3.

Locked to UACC KS - The functionality of UACC with the flexibility of a keyswitch. When activated, a single keyswitch is available. Pressing this key at varying velocities (corresponding to the UACC standard) changes articulation. Unlike standard UACC this allows for layering of articulations.

Shared Keyswitches - This allows you to load the core and decorative patches and the keyswitches will be spread across a larger range for both..

Points 5-9. continue on Pages 11-13

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## 5. ARTICULATION SWITCHER

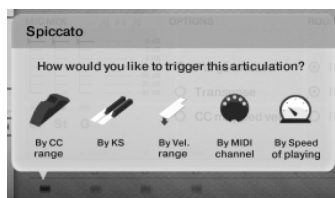
This works in the same way as the Articulation Switcher described on page 9 (point 3.) but with some additional features.

### Loading/Unloading articulations

First you will notice there is now a “microchip” icon under each articulation, clicking this will load or unload the articulation from memory. Unloading unused articulations can help with memory load but bear in mind that an unloaded articulation will produce no sound. Also when loading an articulation make sure it is loaded (in the Kontakt Header) before playing back.

### Custom triggers for switching articulations

In the expert view, Command+Clicking on an articulation (Control+Click on Windows) will pop up a menu with some options for customising how articulations are triggered or switched:



**By CC Range** - This will allow you to use a single MIDI CC message to switch between articulations. Set each articulation to a specific range and use a MIDI controller fader or indeed button with a single CC value assigned to select your desired articulation. Our default setting CC used is CC#32 as per our UACC protocol.

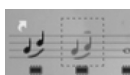
**By KS** - This allows you to create your own custom Key Switch for the articulation, please note that this is not as fully featured as the default KS range and does not allow for layering. This is only advisable if you have a specific KS layout you prefer.

**By Velocity Range** - This is great for designing intelligent staccato patches that can become staccatissimo when you hit the keyboard hard.

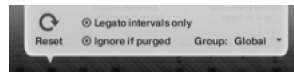
**By MIDI Channel** - This option turns your single instance into a multi-timbral instrument. MIDI channel lets the instrument change articulation based on the incoming MIDI channel. To use, place the instrument MIDI Channel to ‘Omni’ mode in the Kontakt Header. The single instance can now be configured to play based on the incoming MIDI channel. For example, set one articulation to channel 1, the next to channel 2, and then to channel 3 and so on.

**By Speed Of Playing** - This function allows you to switch articulations based on the playing speed of your performance. When selected, it provides options to specify a triggering time-range in milliseconds. For example, you could specify that ‘fast legato’ should be activated if the time between playing each interval is between 0 and 250ms.

Once a custom trigger is set you will see a small white arrow above the articulation to indicate this, Alt+Clicking on this will toggle the trigger on or off:



Each of the different trigger options has a trigger panel which allows you to specify if you want this trigger to apply only to legato intervals:



You will also see an option to specify a group for the triggers, this means that a trigger will only activate when another articulation in the same group is already activated. An example of this might be velocity triggers for shorts only, or playing speed for legato articulations only.

### A quick tip

Whilst there are many ways to switch between articulations, many pros still prefer to have a different articulation in a single instance per track on their DAW. This enables them to assign different reverb levels and bake helpful stems that can be used in conjunction with live instruments (to work like this it's best to load up articles from the individual articulations sub folder).

## 6. CONTROLLERS

These are essentially the same as the controllers in the general overview but all controllers for the instrument are present. The following controls are included in this library to allow you to control and automate various parameters:

**Dynamics** - probably the most important controller you have. This crossfades between the different dynamic layers recorded.

**Vibrato** - where appropriate this crossfades from no (or senza) to lots (molto) vibrato.

**Release** - allows you to change the amounts of release trigger that you hear.

**Expression** - This is instrument trim (CC11), so this adjusts the volume within the instrument volume (CC7) great when used in conjunction with expression.

**Tightness** - the start of a note is often not the start of the ‘sound’ of the instrument. This cuts further into the note to make it tighter. But does detract from realism. Worth tightening up when playing in, then loosening and putting a negative delay into your DAW to compensate for ultimate reality!

**Speed** - Controls legato interval speed. Great to use when playing the lines into your DAW for more responsive less laggy control. Dial back on playback for greater realism. Only used in legacy Legato patches, this is governed by speed of playing in performance legato patches.

**Intensity** - This is a great way to vary and humanise the legato articulations. Dial it all the way up for a more pronounced emotional start to each note, dial it back for a more transparent transition. Only used in legacy Legato patches, this is governed by velocity in performance legato patches. (see page 17)

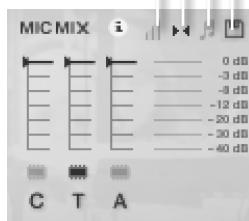
**Legato Type** - This is only present with Polyphonic Legato enabled (see page 13). Since velocity is used to separate the voices in polyphonic legato mode this slider will affect which legato transition is triggered instead of velocity in this mode.

## 7. MIC MIX

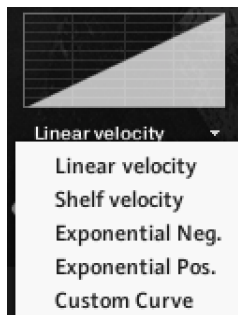
This is a more advanced mixer than the easy mix in the General Overview, with individual faders for each mic. Like the Articulation Switcher the chips beneath the faders load and unload different microphones and the faders above to tweak the balance of them. Turning a fader all the way down will also unload the mics and turning the fader back up will reload.

Right clicking the faders allows you to assign CC controllers so you can mix these live for shifts in the spacial nature of the samples. Click on the mic letters to assign a different output for each mic. On the top right of the mixer controller section are some extra mixing options:

a. b. c. d.

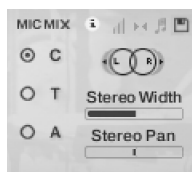


### a. VELOCITY RESPONSE CURVE



Pick from 4 different velocity curves to suit your controller.

### b. STEREO IMAGE CONTROLS



The mics are a stereo mix and this menu allows you to refine how the stereo image is handled. All our musicians are recorded in situ, i.e. where they would be seated on a standard scoring session, giving you a fantastic spectral spread when putting all the elements together. This panning tool helps you to manage and tweak this to your own tastes/ needs.

**STEREO WIDTH** - Allows you to control how far the stereo image reaches. All the way to the right would be like having your two pan pots panned hard. All the way to the left would be like having both pots centre,

**STEREO PAN** - Then allows you to control where in the pan field the centre of this image is placed.

### c. MIC MIX TO ARTICULATION LINKER

The small notation symbol locks the microphone mix or tweak you've made to the articulation selected. This means if you want to boost any perceived inconsistencies in volume between say pizzicato and col legno you can. Or indeed if you want to roll off some of the hall ambience for a short versus the long articulations this is how to fine tune.

### d. MIXER PRESETS

Reset mix settings  
Copy mix settings  
Paste mix settings  
Load mix preset  
Save mix preset

This menu is a way to transfer mixer settings between patches, or save and load presets to or from disk.

### AUTOMATING MIXER FADERS

Each mixer fader has a dedicated #CC. To change this to suit your MIDI controller or surface, simply RIGHT or CTRL click on the fader itself to "learn" the new controller.

### ROUTING MIC MIXES

To route each mic mixer channel to unique Kontakt channels simply click on the mic letter. Great for putting your ambient mics in the surround for example. Also good for track-laying individual mics for your engineer to control in your final mix sessions.

## 8. OPTIONS

**PRESETS** - These are memory presets which will load and unload both mics and articulations, this can be useful if you are concerned about memory load - on a travel rig for example.

**PURGE UNUSED** - This control keeps unloading any samples you are not using to keep your memory usage as low as possible.

**TRANPOSE** - Toggle this on and adjust the number to the right to transpose your instrument. Note this is not the same as tuning, the instrument will actually offset the samples to the selected pitch.

**CC MAPPED VEL(OCITY)** - Click this to control note velocity with the Dynamics slider. If you have re-assigned the dynamics slider, that same CC will control velocity now.

---

## 9.ROUND ROBINS & LEGATO

**NO EXTRA FUNCTIONALITY(NEIGHBOURING ZONES)-** This is the menu for RR behaviour. Next to this lies a drop-down menu with some useful functions:

- **“No extra Functionality”** - Is the standard default where round robins are used as they were intended.
- **“Neighbouring Zones”** - pulls from neighbouring zones, so for an ‘8RR’ instrument, you effectively cycle through up to 24 different sounding notes when pressing a key. It’s still just playing the one RR at a time, though giving you more of them. In legato mode this also alternates between 3 legato intervals to give a fake round robin.
- **“2x Round Robin With Skip”** - plays two RR simultaneously, so you get a thicker sound, it’s the equivalent of plopping two notes on top of each other in your DAW (and it drops the overall volume ~6db so that the levels remain the same but it just sounds thicker). NB THIS IS NOT AVAILABLE TO LEGATO TRANSITIONS. This plays the pairs and moves ahead by 2 RR. In this mode RR is effectively halved. E.g., if you press a note it would play RR1/RR2 then RR3/RR4 ,etc.
- **“Layer 2x Round Robins With No Skip”** - As above but this plays a pair but doesn’t move ahead by 2 so that RR isn’t halved. So if you press a note it would play RR1/RR2, then RR2/RR3, then RR3/RR4.

**ROUND ROBINS** - This refers to the number of round robins (multiple recordings of the same notes that cycle around as you repeatedly play a note) your instrument uses, the number can be dragged up and down (1-8) to save you memory.

**RESET FROM F0** - This enables you to control the round robin cycle (so it sounds identical every time you play) toggle on & play the key selected (default F0) to reset.

**RESET ON TRANSPORT** - As above but resets every time you press play in the DAW.

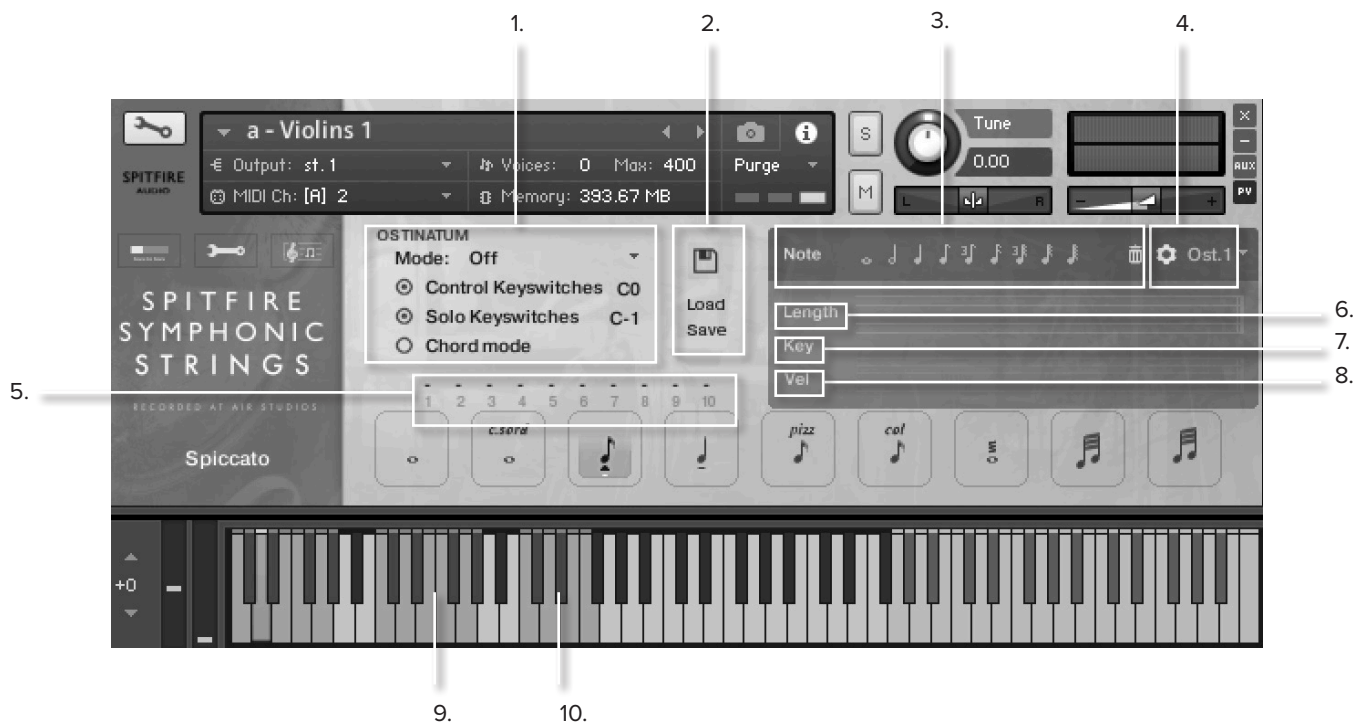
**SHORT ARTICULATIONS RT** - This option allows you to toggle whether staccato/tenuto/marcato notes have a release trigger that plays on release. This lets you tighten up staccatos or end marcatos/tenutos earlier than they were recorded.

**POLYPHONIC LEGATO x4** - With this option enabled the velocity range is divided equally into a number of ranges matching the number of voices selected, this allows you to write multiple legato lines with one instrument. For Legato techniques with velocity triggers these will not be controlled via the legato type controller (page 11, point 6.)



# THE OSTINATUM

Designed to be used with short articulations, this ever evolving device can offer instant chaotic inspiration or be used to create scientifically designed rhythms, ostinati and arpeggiated sequences as well as shimmering tremolando effects.



## 1. OSTINATUM SETTINGS

This section has controls for selecting how the ostinatum handles incoming notes and for enabling and disabling keyswitches. The mode options are as follows:

**OFF** - The default position Ostinatum remains dormant.

**ORDER PRESSED** - This will number the notes in the order you pressed them.

**ASCENDING** - This will number the notes from lowest to highest.

**DESCENDING** - This will number the notes from highest to lowest.

The other options are as follows:

**CONTROL KEYSWITCHES** - Allows you to set up a section of the keyboard that controls the state of the ostinatum (point 10.)

**SOLO KEYSWITCHES** - Allows you to dedicate a section of the keyboard to keyswitches that solo each ostinatum pattern (point 9.)

**CHORD MODE** - This ignores any note order and simply plays everything polyphonically, great for measured trem style effects.

## 2. LOAD/SAVE PATTERN

These buttons allow you to save and load the currently selected pattern to disk.

## 3. NOTE INPUT

By clicking on the different note values will add note to the end of the pattern that is this long, for instance clicking a crotchet/quarter-note will add a note of this length to the pattern. Clicking the bin/trashcan icon will remove the most recently added note.

## 4. PATTERN SETTINGS

The “cog” icon reveals a drop down menu with the following options:

### Wrap around if less notes held (or don't)

If the notes in the current pattern are using Key values of 1-10 but there less than 10 notes held the values will wrap around to 1 again. For example, if the pattern contains Key values 1-6 and only 4 notes are held, then Key values 5 and 6 will trigger 1 and 2 respectively. With this disabled, the notes will be skipped instead of played.

### Mute this pattern (or don't)

This pattern will not play when muted, this is overridden by keyswitches in point 9.

### Ignore chord settings (or don't)

With chord mode enabled this pattern will behave as though it is disabled.

To the right of the cog is a drop down menu for selecting the currently displayed pattern.

## 5. KEY DISPLAY

This displays the currently held notes numbering 1-10 arranged from left to right, this display changes based on the Mode setting.

## 6. NOTE LENGTH DISPLAY

This area displays all of the notes in the currently selected pattern.

---

## 7. KEY

This value will affect which note is played for this step in the sequence, the number corresponds to the value displayed in the Key Display (point 5.) Click and drag up or down on the numbers to adjust.

## 8. VELOCITY/NOTE OFFSET

By default the velocity of each note is based on the note played, this allows you to offset this velocity for a particular step, either making it harder or softer. Clicking the word Vel will change this to pitch offset instead. Click and drag up or down on the bars to adjust.

## 9. SOLO KEYSWITCHES

The first keyswitch turns all patterns on, the following keyswitches solo each individual pattern. These keyswitches override the mute settings in point 4.

## 10. CONTROL KEYSWITCHES

These keyswitches arranged chromatically allow you to change the mode of the Ostinatum, including switching it off entirely.

---

## GETTING STARTED WITH THE OSTINATUM

The easiest way to get a feel for how the Ostinatum works is to create a few patterns and experiment with the different settings. Try the following steps to get up and running:

1. Select a short articulation and navigate to the Ostinatum page
2. Change the mode to Ascending (point 1.)
3. Enter a few note values with the Note input (point 3.)
4. Change a few of the Key and Velocity values (points 7. and 8.)
5. Hold a few different chords and hear the results.

Next try the following:


6. Change to a second pattern with the drop down menu (point 4)
7. Repeat steps 3-5 for this new pattern and continue adding patterns


You can now try changing the Mode to see how this affects your patterns, if you're happy with these settings consider saving the various patterns for use in future!





# INSTRUMENTS


Welcome to the wonderful world of orchestral strings. Here's a quick crib sheet of the instruments that we've recorded with some quick facts. We've curated ranges that fit within the reasonable demands of professional players in London. If you're looking for further reference sources for string writing we recommend 'Orchestration' by Walter Piston and 'The Study Of Orchestration' by Samuel Adler which both have a very easy "at a glance" approach to taking you through the orchestra.

|  |    |     |            |
|--|----|-----|------------|
| 1st Violins (or Vn)  | G3 | C#7 | 16 players |
| Usually the largest of the string sections with the widest expected range. They sit to the left of the conductor and their principal player is referred to as the orchestra 'leader' |    |     |            |
|   |    |     |            |

|   |    |     |            |
|---|----|-----|------------|
| 2nd Violins (or Vn)   | G3 | C#7 | 14 players |
| Exactly the same instruments as the 1sts, but in a slightly more 'supportive' role sitting to the right of the 1sts and next to the violas. |    |     |            |
|   |    |     |            |

|  |    |     |            |
|--|----|-----|------------|
| Violas (or Va)   | C3 | F#6 | 12 players |
| Similar in shape, but much larger in size than a violin. These sit straight ahead and slightly to the right of the conductor. They often play the simpler more 'pedalling' harmonic lines. |    |     |            |
|    |    |     |            |

|  |    |     |            |
|--|----|-----|------------|
| Cellos (or Violoncello or VC)  | C2 | Bb5 | 10 players |
| Arguably the most versatile of the string instruments with a huge range from very low to heartbreaking highs. They sit to the right of the conductor and in front of the basses. |    |     |            |
|   |    |     |            |

|  |    |     |           |
|--|----|-----|-----------|
| Basses (or Contrabass or CB)   | C1 | F#3 | 8 players |
| Huge and monstrous instruments that sit to the right of the conductor and behind the cellos. CBs recorded for Spitfire all had the low C extension, hence the range. |    |     |           |
|   |    |     |           |

## WHICH CLEF?



A. B. C.

Violins read from the treble clef (A.), violas from the 'viola' (C.) or 'alto' clef (where the middle line is middle C). Cellos play from the bass clef (B.) as do the basses. However the basses sound an octave lower than written. Want cellos and basses to play in unison octaves? Give them both the same music and it will happen!

---

# ARTICULATIONS

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The following is an explanation of all of the terms used when naming our 'articulations' in the library. (An Articulation is basically a way of playing the instrument, captured as a standalone 'patch' like you might have on a synth.)

## LEGATO

Legato in the context of a sample instrument refers to a technique of capturing the sound of an instrument moving from one note to the next. Capturing this detail gives a lot of added realism, but means that you need to play monophonically (one note at a time).

To trigger these transitions, you must make sure that you hold down the first note while playing the key of the second note. As long as you overlap the notes in this way, the engine will know that you want to trigger a legato transition.

We have recorded a number of different types of transition, to help you play really expressively and musically using the library.

**Fingered** - this is the most basic kind: simply adding or removing a finger on the left hand while the bow continues without change.

**Bowed** - this is when the bow changes direction while changing note with the left hand - this produces a slightly more defined and strong change.

**Portamento** - this is a sliding transition from one note to the next. This is achieved by literally sliding the finger on the finger-board. It is necessary on larger intervals to cross the strings as well.

**Runs** - these short transitions are recorded for semitone, tone, and minor third intervals to allow you to play very fast stepwise runs.

**Sul G/C** - the expression 'Sul G' means 'played on the G string' - on the Violin, the G string is the lowest string. Playing a melody solely on this string gives a very characteristic 'throaty' sound that can be very expressive. The lowest string on the Viola and Cello is tuned to a 'C'.

## PERFORMANCE LEGATO

In the latest version of the Symphonic strings we have developed special patches called 'Performance Legato Patches'. Using the legato transitions above to help you play really expressively and musically using the library in a ground breaking and intuitive way.

These patches are designed so that you can forget about key-switching - and just play. The patch will follow your playing and attempt to select the most appropriate sound. You can play short notes, long, loud, soft, trills, runs, arpeggios, you name it. Here is how it works in practice:

**ATTACK** - your velocity (how hard you hit the keyboard) controls the opening attack of the phrase: vel 1-9 is smooth, then 10-127 goes through 3-4 dynamic layers of spiccato/staccato attack, with 6 RR (round robins - alternating recordings to avoid the 'machine gun effect' or hearing the same sample again and again!)

**SLOWER** transitions - if you are playing slowly, the velocity of the note you move to in the phrase affects the type of note transition you hear: 1-19 gives you the portamento, 20-84 is the standard slurred 'fingered' transition, and 85-127 the bowed heavier transition.

**FASTER** transitions - if you play faster, vel 1-84 gives you a slurred 'fingered' fast transition, while 85-127 gives you a faster fingered legato with a slight accent.

**RUN** transitions - if you play very fast, you enter this mode, where vel 1-84 gives a fingered 'runs' style for fast realistic runs, and vel 85-127 a more accented transition.

Your playing speed will automatically select the correct set of transitions. Check out this video tutorial:

<https://www.youtube.com/watch?v=dLvPstdnnSs>

---

## LONG ARTICULATIONS

### NORMALE

This is the most vanilla of the 'long notes' we have recorded. The basic standard playing style, recorded with and without vibrato, and sometimes with 'molto vibrato' or a lot of vibrato! Occasionally you'll see 'senza vib' which means 'without vibrato'. You'll sometimes see 'dolce' which means 'sweetly' and this refers to a tasteful amount of vibrato. You can use the Modwheel, or a slider set to CC1, to control the 'dynamic' of the sound, this smoothly cross-fades between very soft (or 'pp') recordings, through to very loud (or 'ff'). Also you can use a slider set to CC21 to control the amount of vibrato, smoothly crossfading between no vibrato all the way up to the maximum vibrato.

### FLAUTANDO

This refers to a soft 'flute-like' way of performing on a stringed instrument. Often the bow will be near or over the fingerboard, which gives a very different character to the sound from the usual bow position. Sometimes we describe this to the players as 'harmonic like' and this gives them a steer toward a more 'glassy' and delicate, often non vibrato sound.

### HARMONICS

If the player holds down lightly on the string a perfect 4th interval up from the note they are fingering, you hear what is called an 'artificial harmonic' sound - two octaves up from the note being fingered. This is called 'artificial' to distinguish it from the natural harmonic series of the open string. These 'natural' harmonics can be heard by moving the finger up and down the string lightly while bowing.

### CON SORD

This is short for 'con sordino' which means 'with the mute'. A small rubber mute is attached onto the bridge, and this has a damping effect on the strings, that produces an extremely beautiful sound. This is softer than the 'open' sound, but still very dynamic in range.

### SUL PONT

Short for 'sul ponticello' - meaning 'on the bridge' - here the player bows very close to the bridge which produces a brittle and edgy sound, always reminding us of nails on a chalk board!

### CON SORD SUL PONT

This combines the 'on the bridge' bowing with the mute attached - and has a very nice and unusual sound.

### CS BLEND

A very beautiful sound - we asked the players to divide themselves 'by desk' and half of them to apply their mutes. So, of a 'desk' of two players, one will be muted, and one 'normale'. This gives you the beauty of the Sordino sound, with the full body of the unmuted sound. A great combination!

### SUL PONT DISTORTED

Playing on the bridge, but really grinding the bow hard onto the strings to produce a more distorted sound. This varies over the range, you'll hear where it makes the most difference.

### SUL TASTO

Playing with the bow over the fingerboard, to produce a thinner more delicate tone. This is different from 'Flautando' in that it is not specifically required to be 'flute like' or 'harmonic like' and therefore is more of a very very soft delicate but yet 'normale' sounding tone.

### SUPER SUL TASTO

Taken to the extreme! The players asked to play as softly as humanly possible, so that a large proportion of the sound is the lovely 'hiss' of the rosin on the bows. A very exciting and delicate sound.

### RACHMANINOFF MOLTO VIB

This is taking the molto vib to its logical conclusion, a super ap-passionata sound, with a lovely wide vibrato, played in the late-romantic style!

### MARCATO ATTACK

Played with a very heavy accented and abrupt start to the note.

## SHORT ARTICULATIONS

### SPICCATO

Spiccato techniques can create extremely heated discussions! For Spitfire, we define our Spiccs as having a nice very tight sound, with the bow bouncing on the string. This creates a sound that can be used either as a nice short staccatissimo, but also as part of a sequence of fast short notes.

### SPICCATO CS

The same as above - with the mutes applied.

### CON SORD

A staccato muted note - not as short or tight as the Spiccato.

## BRUSHED SHORTS

A more delicate sound, brushing the strings with the bow in a leisurely fashion, that reminds us of soft baroque period playing.

## BRUSHED CS

As above, but with the mute on.

## COL LEGNO

Literally, 'With Wood' and short for 'Col Legno Battuto' or 'hit with the wood'. This style of playing is to turn the bow over and strike the string with the wood of the bow. Usually players will bring a practice bow or a less expensive one for this, as their main bows can cost tens of thousands!

## PIZZICATO

Plucking the strings with the finger.

## PIZZICATO BARTOK

In this technique, the player plucks so hard that the string 'snaps' back onto the fingerboard producing a characteristic percussive noise almost like the 'col legno battuto' sound. To be used sparingly unless you want your players to all develop blisters!

## HARMONICS

The short version of the artificial harmonic described earlier in the Long notes section.

### 0.5'

This is a staccato played to the length of half a second (approx!)

### 1.0'

A longer staccato. Having these differing lengths gives you more options. Very useful to combine with the 'Time Machine' version of the short notes in their own patch, where you can shorten or lengthen the actual recording to get an infinitely variable set of shorts!

## TRILLS AND TREMS:

### TRILL Minor 2nd, Major 2nd, Minor 3rd, Major 3rd

A Trill is where the player alternates between two notes with the left hand very quickly, we've recorded a number of options for this interval. These can be used as accented performance embellishments, or you can play them very softly and create a lovely 'cloud' texture with them.

### TREMOLO MEASURED 150bpm / 180bpm

This Tremolo is where the player rapidly moves the bow while keeping the left hand fingering a single note. The effect is a shimmering one when played softly, and a very aggressive one when played loud.

The "measured" tremos are played strictly to a tempo, as sixteenth notes (or 'semiquavers'). You can lock these to tempo on the GUI so that they will be in time with your piece. You can use them in a lot of different ways, one way is to perform a sequence of 8th notes ('quavers') with them, and if you get the timing right you'll hear that very characteristic 'John Williams' style that produces a 'scattery' effect and can be incredibly exciting in a track.

### TREMOLO MEASURED CS 150bpm

As above - but muted.

### TREMOLO SUL PONT

Played unmeasured and close to the bridge to get that nice 'edgy' and slightly crunchy sound.

### FX:

A collection of various FX, from slides through to unusual 'chattering' and 'cluster' sounds. Have an explore through these patches.

---

# BASIC ORCHESTRATION PRINCIPLES

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Whilst we wouldn't dream of trying to sum up the principles of string orchestration in a single page of a technical user manual, we also understand that the choice can be overwhelming and therefore want to help you dive in as much as we can. The principle of electronic orchestration is simple. Traditional orchestration has evolved to get the best out of the instruments, so if you empathise with what an instrument can do best electronically, and in a way that sounds familiar, it will sound realistic and believable. There are no rules, save that of plausibility. So if you listen to good music and are honest with your own efforts, cast away pre-conceptions you may have built, and approach things with an open and experimental mind you'll be well on your way. If you're not familiar with each string instrument and what does which best beyond "I like the sound of that". Then here are a few very general guidelines and principles, mostly conditioned from physics and how the culture of the string orchestra has evolved over the centuries.

**1. WHICH INSTRUMENT TO CHOOSE** - Strings tend to keep to a very strict pitch hierarchy, 1st, 2nd violins up top down to the basses at the bottom. So you'd rarely have an instance where you have violins playing a low-ish drone on G below middle C with the basses taking a top line above them. So the first thing to do is to work out who is playing what by how high you want the melody or top harmony to be coupled with how rich you want the rest of the harmony. If you want nothing but shimmering super high violins with a searing high cello melody great! But if you want that same melody in the same range to have a rich lower harmonic accompaniment you should probably reconsider using cellos as the melody makers.

**2. RANGE** - It is fair to say that the virtuosos, or rather the people expected to play virtuosic passages are the 1st violins and cellos. So you'll probably find both sound very familiar and comfortable. If you start writing lines that are in the gods (or very high) for violas and basses this will give you a less familiar sound, and arguably won't help the believability of your demos. HOWEVER the string players in an orchestra, play the most. They do the most film sessions, and sight read more than any other 'choir' (ie Brass & Winds). So don't think because it sounds high they won't be able to do it. String players have had to practise from a very early age, so they will be used to playing on the very edge of what is physically possible!

**3. AGILITY** - As with range you'll find the most demanding writing historically is for the 1sts and the cellos. But you'll probably find that all the violins and cellos will handle anything you throw at them. A lot of agility is down to simply what they're used to doing. So writing enormously complicated rhythmic ostinatos for just the violas may reap slightly more surprising results than having the violins play them. Conversely getting the basses to play a lead line using harmonics may be just what you're looking for, provided you're looking for something very... urm.... honest sounding? If you're writing super fast runs try and stick to scales, as this is what the players practise. When switching from arco (or with the bow) to pizzicato (or plucked) allow a good half bar for them to adjust, and don't be surprised if these are looser than you may expect. They're not easy! Conversely when switching to mutes (Con Sordino, Con Sord, or CS) allow them time or a re-take to do this.

**4. DIVISI OR NOT DIVISI** - When writing for strings it is always worth remembering that you really only have 5 'voices' to play with. If you write any more harmonic lines the sections are going to have to divide up or play 'divisi'. The result of this is a smaller, thinner, and quieter harmonic line. This is why sampled strings sound so massive; 'hey listen to me I'm playing a different note with each of my fingers it sounds HUGE!'. Well ofcourse it does, you're likely to be producing the noise a band of 200 players would make! But don't be surprised if on the day it doesn't sound as rich and fat. Which is why we always recommend getting

samples to do what they do well (ie hold a high tremolando ad nauseum, or play complex pizzicato passages) so you can use your live forces for stuff that matters, like big sweeping melodies.

**5. OCTAVE DOUBLING** - Another very common technique is to have the 1sts and 2nds playing in octave unisons, it gives an emotional epic scale to top lines. It also helps each section tune against each other, which is why this can sound so strident and confident. Conversely basses usually play in unison with cellos albeit an octave down. You will find that doubling makes for less rich harmonic possibilities but with Symphonic strings the richness can be found in the sheer size of the band. Want a rich harmony between your bass and cello octave, well why not try a trombone or horn from our Symphonic Brass library?

**6. KEEP AN OPEN MIND AND TRY STUFF OUT** - Strings are the most wonderfully versatile voice in the orchestra. We're proud to have captured so many of the nuanced articulations for SSS, so dig deep and try them out. A first step into more nuanced string writing can be con sordino or con sord. This is where the players use a practice mute. This gives a slightly less dynamic but silkier and more tender feel. If you feel that your rich high string lines are screaming hysterically as opposed to sobbing quietly in a corner, mutes could be the way to go, or try flautando (flute like) harmonics even, or a mixture of articulations. String players will rarely lambast a composer for trying something new and different, provided it's playable.

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## APPENDIX A - RECOMMENDED TECH SPECS

---

IF YOU PLAN TO USE THIS LIBRARY WITH THE FULL VERSION OF KONTAKT PLEASE MAKE SURE YOU HAVE THE LATEST VERSION OF KONTAKT 6 INSTALLED.

### RECOMMENDED SPEC:

The better your computer, the better the performance of any Spitfire module. But not to worry if you're not spec'd up to the hilt. All programs are provided with a set of parameters that enable you to dial back the CPU demands of any given patch. But moving forward, we're confident this module will keep your computer busy for many years to come! We recommend a combination of high processor speeds, a good chunk of memory and a devoted SSD eSata, USB3, or Thunderbolt drive. The more memory you have, the less demand placed on your drive, and having a totally devoted drive gives you the chance to load less into memory and reduce load times. The higher the speed of your CPU, the more capable your computer will be to deal with some of the amazing, but complicated scripts we've written.

### PC SYSTEM REQUIREMENTS

Windows 7, Windows 8, or Windows 10 (latest Service Pack, 64-bit) Minimum: Intel 2.8 GHz i5 (quad-core) or AMD Ryzen 5. Recommended: Intel 2.8 GHz i7 (six-core) or AMD R7 2700. Machine must be connected to the internet during install.

### MAC SYSTEM REQUIREMENTS

Mac OS X 10.10 to OS X 10.15 Minimum: 2.8GHz i5 minimum (quad-core), 8GB RAM. Recommended: 2.8GHz i7 (six-core), 16GB RAM. Apple Silicon/ARM not yet supported but available via Rosetta 2. Machine must be connected to the internet during install.

### DRIVES:

USB3, Thunderbolt, or eSata SSDs. Ask your dealer for drives that are suitable for "AV use". If you can afford an SSD drive, this will massively increase the power of your system. Instead of 7-9ms seek time, the usual seek time is <0.1ms. These are fast enough to run a patch 'Purged' of all its samples, and they can load on the fly as you play the notes. You can also reduce your sampler's "pre-load" buffer meaning you'll be able to load enormous orchestral palettes into a single machine.

### HOST:

The Kontakt 6 platform should work comfortably on most commonly found platforms and DAWs. As always make sure you're as up-to-date as you can afford! If your main DAW is not a newish machine, or has a limited spec, and you're planning on building or adding Spitfire to an already large orchestral palette, you could consider running your library independently of your DAW, either on your host computer (e.g. via Re-Wire) or on a slave device (e.g. via Midi or MOL). This will assist your loading times, and will allow your DAW to do what it does best, sort out all your note ons and note offs!

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## APPENDIX B - KONTAKT vs. KONTAKT PLAYER

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Kontakt Player is a free version of the Kontakt sample playback engine available to download:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/downloads/>

It works with libraries that the developer has paid a license fee for. Essentially, you've bought this playback engine along with your library.

The Kontakt player gives you full access to all the sounds and all the editable parameters on the front panel. Also, unlike non-Player libraries, these libraries will also have a banner that appears on the Kontakt Libraries pane.

If you want to go deeper into editing you'll need a full version. As you will already own the free Kontakt player and have bought one of our 'player' libraries you will be eligible for a discount upgrade to Kontakt via the NI website. See here for more details:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/pricing/crossgrade-offer/>

If the library you want to use is NOT a 'Player' library then you need to buy the full retail version of Kontakt.

Then you can also load 'non-Player' libraries like some of our other ranges, Spitfire LABS, Harp, Piano, Harpsichord, Solo Strings etc. Please note that non-Player library instruments will not appear on the Kontakt libraries pane and so can't be added as a library as Player libraries need to be. Instead, these libraries will simply need to be loaded via the Kontakt files browser or alternatively you can add the library as a favourite to the Kontakt Quick Load window.

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# APPENDIX C1 - ARTICULATION LIST

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## VIOLINS 1:

FX  
Long CS Blend  
Long CS Sul Pont  
Long CS  
Long Flautando  
Long Harmonics  
Long Rachmaninoff Molto Vib  
Long Sul G  
Long Sul Pont Distorted  
Long Sul Pont  
Long Sul Tasto  
Long Super Sul Tasto  
Long  
Marcato Attack  
Short 0'5  
Short 1'0  
Short Brushed CS  
Short Brushed  
Short Col Legno  
Short CS  
Short Harmonics  
Short Pizzicato Bartok  
Short Pizzicato  
Short Spiccato  
Tremolo Measured (150bpm)  
Tremolo Measured (180bpm)  
Tremolo Measured CS (150bpm)  
Tremolo Sul Pont  
Tremolo  
Trill (Major 2nd)  
Trill (Major 3rd)  
Trill (Minor 2nd)  
Trill (Minor 3rd)

## VIOLINS 2:

FX  
Long CS Blend  
Long CS Sul Pont  
Long CS  
Long Flautando  
Long Harmonics  
Long Rachmaninoff Molto Vib  
Long Sul G  
Long Sul Pont  
Long Super Sul Tasto  
Long  
Marcato Attack  
Short 0'5  
Short 1'0  
Short Brushed CS  
Short Brushed  
Short Col Legno  
Short CS  
Short Harmonics  
Short Pizzicato Bartok  
Short Pizzicato  
Short Spiccato  
Tremolo CS  
Tremolo Measured (150bpm)  
Tremolo Measured (180bpm)  
Tremolo Sul Pont  
Tremolo  
Trill (Major 2nd)  
Trill (Minor 2nd)

## VIOLAS:

FX  
Long CS Blend  
Long CS Sul Pont  
Long CS  
Long Flautando  
Long Harmonics  
Long Rachmaninoff Molto Vib  
Long Sul C  
Long Sul Pont  
Long Super Sul Tasto  
Long  
Marcato Attack  
Short 0'5  
Short 1'0  
Short Brushed CS  
Short Brushed  
Short Col Legno  
Short CS  
Short Harmonics  
Short Pizzicato Bartok  
Short Pizzicato  
Short Spiccato  
Tremolo CS  
Tremolo Measured (150bpm)  
Tremolo Measured (180bpm)  
Tremolo Sul Pont  
Tremolo  
Trill (Major 2nd)  
Trill (Minor 2nd)

## CELLI:

FX  
Long CS Blend  
Long CS Sul Pont  
Long CS  
Long Flautando  
Long Harmonics  
Long Rachmaninoff Molto Vib  
Long Sul C  
Long Sul Pont  
Long Super Sul Tasto  
Long  
Marcato Attack  
Short 0'5  
Short 1'0  
Short Brushed CS  
Short Brushed  
Short Col Legno  
Short CS  
Short Harmonics  
Short Pizzicato Bartok  
Short Pizzicato  
Short Spiccato  
Tremolo CS  
Tremolo Measured (150bpm)  
Tremolo Measured (180bpm)  
Tremolo Measured CS (150bpm)  
Tremolo Sul Pont  
Tremolo  
Trill (Major 2nd)  
Trill (Major 3rd)  
Trill (Minor 2nd)  
Trill (Minor 3rd)

## BASSES:

FX  
Long Flautando  
Long Harmonics  
Long Sul Pont Distorted  
Long Sul Pont  
Long Super Sul Tasto  
Long  
Marcato Attack  
Short 0'5  
Short 1'0  
Short Bartok Pizz  
Short Col Legno  
Short Harmonics  
Short Pizzicato Bartok  
Short Pizzicato  
Short Spicc-Pizz  
Short Spiccato  
Short Staccato Dig  
Tremolo Measured (150bpm)  
Tremolo Measured (180bpm)  
Tremolo Sul Pont  
Tremolo  
Trill (Major 2nd)  
Trill (Minor 2nd)

## ENSEMBLES:

Long CS Blend  
Long CS  
Long Flautando  
Long Harmonics  
Long Sul Pont  
Long Sul String  
Long Super Sul Tasto  
Long  
Marcato Attack  
Short 0'5  
Short Brushed CS  
Short Brushed  
Short Col Legno  
Short Harmonics  
Short Pizzicato Bartok  
Short Pizzicato  
Short Spiccato CS  
Short Spiccato  
Tremolo CS  
Tremolo SulPont  
Tremolo  
Trill (Major 2nd)  
Trill (Minor 2nd)



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## APPENDIX C1 - ARTICULATION LIST CONT.

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### LEGATO TECHNIQUES:

Legato Sul G  
Legato Sul G  
Legato Sul C  
Legato Sul C

### LEGACY PATCHES:

CB - Legato Performance palette  
V1 - Legato Performance palette  
V2 - Legato Performance palette  
Va - Legato Performance palette  
VC - Legato Performance palette

### PERFORMANCE LEGATOS:

Violins 1  
Violins 2  
Violas  
Celli  
Basses  
Ensembles

### OTHER PATCHES:

Economic Longs  
Economic Shorts  
Light resources  
Time Machine  
Economic Longs  
Economic Shorts  
Light resources  
Time Machine  
Economic Longs  
Economic Shorts  
Light resources  
Time Machine  
Economic Longs  
Economic Shorts  
Light resources  
Time Machine  
Economic Core  
Economic Decorative  
Light resources  
Time Machine



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# APPENDIX D - MIC & MIX ACRONYMS

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## STANDARD ARRAY

**C - Close** mics, a selection of valve mics placed for optimum focus close to the instruments. This mic control is great for added definition and at times a bit of “rounding of sound”, in isolation it can be a way of achieving a more intimate or pop-music style sound.

**T - Tree.** This refers to the “Decca” tree of three mics placed above the conductors podium. In this case; 3 priceless vintage Neumann M50s. These are placed to give the ultimate sound of the band, the hall and are the default mic position that loads in with each patch.

**A - Ambient.** A set of condenser mics placed high up in the gallery away from the band. This mic position gives a massive amount of stereo spread and room sound over the band. Great mixed in with the other mics but also ideal for using in the surround channels when mixing in surround sound.

## ADDED IN CTAO ARRAY

**O - Outriggers,** a set of vintage mics placed wide apart to the left and right of the tree. These give a similar balance of room and band but with a broader stereo spread. The effect of this mic is somewhere between the tree and ambient mics.

## ALTERNATIVE ARRAY

**ST - Stereo Mic.** These are totally different mics in a totally different position to the tree (closer to ground level) and have a more direct and immediate sound than the tree.

**G - Gallery,** mics, three mics at the very furthest point from the band way up in the gallery. A true representation of AIR-Studios’ amazing ambience.

**CR - Close ribbons.** Placed next to the standard close mics but using a rarefied selection of vintage ribbon mics to add a warm and rounded tone.

**L - Leader,** a microphone placed close to the leader of each section

## STEREO MIXES

**B - Broad,** a cinematic/ symphonic mix that allow the hall to really speak out.

**M - Medium,** a more intimate but still very classic version of the mix above.


**F - Fine,** a much more detailed and immediate sound with less hall, great for pop!

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# APPENDIX E - UACC

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With the development of Spitfire's BML Sable it was proving quite difficult to standardise how to access the ever-growing number of articulations contained within instruments and libraries. While they worked adequately, Keyswitches and CC32 were inconsistent between sections and instruments and it could prove a pain to do something as simple as substituting a Viola for a Violin section.

To address the problem, Spitfire developed UACC, a specification that hopes to standardise articulation control between instruments and libraries. UACC is turned on via the Keyswitch locking option (  ) and utilises the same CC as above (and can be customised identically). When UACC is activated you can change articulation by setting CC32 to specific values that correlative with different articulations. Here's the latest (v2) spec:


|                               |            |                       |                    |                              |
|-------------------------------|------------|-----------------------|--------------------|------------------------------|
| Long (sustain)                | 34         | Detache               | 80                 | Synced - 120bpm (trem/trill) |
| 1 Generic                     | 35         | Higher                | 81                 | Synced - 150bpm (trem/trill) |
| 2 Alternative                 | 36         | Lower                 | 82                 | Synced - 180bpm (trem/trill) |
| 3 Octave                      |            |                       |                    |                              |
| 4 Octave muted                | Short      |                       | Phrases & Dynamics |                              |
| 5 Small (1/2)                 | 40         | Generic               | 90                 | FX 1                         |
| 6 Small muted                 | 41         | Alternative           | 91                 | FX 2                         |
| 7 Muted                       | 42         | Very short (spicc)    | 92                 | FX 3                         |
| 8 Soft (flaut/hollow)         | 43         | Very short (soft)     | 93                 | FX 4                         |
| 9 Hard (cuivre/overb)         | 44         | Leisurely (stacc)     | 94                 | FX 5                         |
| 10 Harmonic                   | 45         | Octave                | 95                 | FX 6                         |
| 11 Tremolo/flutter            | 46         | Octave muted          | 96                 | FX 7                         |
| 12 Tremolo muted              | 47         | Muted                 | 97                 | FX 8                         |
| 13 Tremolo soft/low           | 48         | Soft (brush/feather)  | 98                 | FX 9                         |
| 14 Tremolo hard/high          | 49         | Hard (dig)            | 99                 | FX 10                        |
| 15 Tremolo muted low          | 50         | Tenuto                | 100                | Up (rips/runs)               |
| 16 Vibrato (molto vib)        | 51         | Tenuto Soft           | 101                | Downs (falls/runs)           |
| 17 Higher (sultasto/bells up) | 52         | Marcato               | 102                | Crescendo                    |
| 18 Lower (sul pont)           | 53         | Marcato Soft          | 103                | Decrescendo                  |
| 19 Lower muted                | 54         | Marcato Hard          | 104                | Arc                          |
|                               | 55         | Marcato Long          | 105                | Slides                       |
| Legato                        | 56         | Plucked (pizz)        |                    |                              |
| 20 Generic                    | 57         | Plucked hard (bartok) | Various            |                              |
| 21 Alternative                | 58         | Struck (col leg)      | 110                | Disco up (rips)              |
| 22 Octave                     | 59         | Higher                | 111                | Disco down (falls)           |
| 23 Octave muted               | 60         | Lower                 | 112                | Single string (Sul C/G/etc.) |
| 24 Small                      | 61         | Harmonic              |                    |                              |
| 25 Small muted                |            |                       |                    |                              |
| 26 Muted                      | Decorative |                       |                    |                              |
| 27 Soft                       | 70         | Trill (minor 2nd)     |                    |                              |
| 28 Hard                       | 71         | Trill (major 2nd)     |                    |                              |
| 29 Harmonic                   | 72         | Trill (minor 3rd)     |                    |                              |
| 30 Tremolo                    | 73         | Trill (major 3rd)     |                    |                              |
| 31 Slow (port/gliss)          | 74         | Trill (perfect 4th)   |                    |                              |
| 32 Fast                       | 75         | Multitongue           |                    |                              |
| 33 Run                        | 76         | Multitongue muted     |                    |                              |

For example, turning on UACC and changing CC32 to 26 will change the current articulation to Legato - Muted. Setting it to 52 would change to Short - Marcato. You can set these manually in your DAW but it's much easier to utilise DAW functionality such as VST Note Expression, or a dedicate tablet app such as Lemur, TouchOSC, LiveControl, etc.

The advantages of UACC are that it's consistent between all supported libraries (i.e.. setting CC32 to 52 will change to Marcato regardless of the library or patch) and easily configurable on tablet apps such as Lemur. It remains consistent between updates (any product using v2 will have the articulations mapped to the above spec). It also takes up no space on the keyboard.

The disadvantages are that it's difficult to control for live playing (unless using a tablet) and it does not support articulation layering.

## UACC KEYSWITCH

UACC keyswitching is a new feature in Spitfire products and updates. It is a mixture of keyswitching and UACC to provide the advantages of both methods. When UACC Keyswitch is activated via the lock panel menu (  ) a single keyswitch is available. Using the UACC spec outlined above, this keyswitches velocity is used to switch articulation.

For example pressing the keyswitch at velocity 70 would switch to the Trill (minor 2nd) articulation while pressing at velocity 56 would switch to Short Pizzicato. As with UACC, you can manually input these velocity values but it's easier to use your DAW or tablet app's functionality.

The main advantage of UACC KS over UACC is that you can layer articulations by overlaying the keyswitch notes on the piano roll.

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# APPENDIX F - FAQs & TROUBLESHOOTING

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## Q: WHAT IS THE DIFFERENCE BETWEEN KONTAKT AND KONTAKT PLAYER?

See appendix B

## Q: HOW CAN I REDOWNLOAD A PRODUCT?

With the continuous improvements to our Spitfire App, we have incorporated the ability to reset your own downloads, be it the entire library or the most recent update! This can easily be done via your Spitfire App. To reset both your entire library download or the latest update; Open up the Spitfire App and log in with your account email and password.

- Select the download you wish to re-download
- In the cog menu choose Reset Download > Entire Download/Latest Update

- This will reset your whole download/your latest update

You can repeat this process for any of the libraries you own. Note that there is a limit to how many times you can reset your downloads in a certain time frame. If you do exceed your reset limit please get in touch.

## Q: DIFFICULTIES IN DOWNLOADING / INSTALLING

Customers may find that they have some difficulties in the downloading process. If you find that you are having some trouble, please check the list below for possible causes.

- The formatting of your drive, if it is FAT32 this will cause errors, because there is a maximum file size with this format of 4GB and our download files will exceed this limit. To solve this problem, reformat your drive to a more modern format, or use a different drive. We recommend NTFS on PC and Mac OS Extended (journalled) on Mac.

- Free space on your hard drive, please allow at least double the space for the respective library. This is because your library is downloaded compressed, then uncompressed into a separate location, then the original is deleted. So briefly during install, there are two copies of the library on disk. To solve this problem use a drive with more space (the size you'll need during install is listed on the website page of the product you bought).

Other issues;

- Spitfire App freezes in the "Extracting" stage for hours. This may be because our libraries are often very large files, and this is the stage where the compressed files are extracted and placed in their final locations on the hard drive. There could be hundreds of GB of content to unpack, so it really can take hours. If you're unsure whether it has crashed or is simply extracting files, visit the installation folder you chose when you started the install. If everything is working normally you'll see various files appearing in the folder (or one of its sub-folders).

- If you see a "Download interrupted" message, this may be caused by a change in IP, usually the case with people using a VPN, or people who for some reason started a download in one country and tried to resume it in another. In this case, please submit a support ticket and we can unblock you.

- If your download gets stuck and is continually cycling and not resuming, please get in touch with us, giving us as much detail as possible about your set up. It would be helpful if you can tell us: Your operating system, where you are downloading from (your country, and also whether you're at home or work), your ISP, and whether there are any proxy servers or firewalls between your computer and the internet.

## Q: I'VE LOST MY INSTRUMENT FILES

In some cases, instrument files may get lost when transferring libraries from one place to another, or if an update has gone wrong. If this happens, the best way forward is to re-download the library in question. This will ensure you will get all of the content you are missing.

## Q: WHAT IS YOUR REFUNDS / RETURNS POLICY?

If you have NOT completed the download / installation process, then we CAN refund/return your product, please contact support with your account email address and order number so we can handle this quickly. If you HAVE completed the installation process (even if you've not yet registered your serial number), please see our EULA in regards to why we do not accept refunds and returns. We can refund hard drive orders up until the point when the drive is dispatched from our office. This is usually 2-4 days after you order.

## Q: I'VE FORGOTTEN MY PASSWORD?

If you have forgotten your password, please see this link, and click 'Forgotten Password'. If at some point in the past you asked us to merge two or more accounts but have since forgotten, you MAY find that the forgotten password isn't working for the email address you asked us to merge FROM. In this case, please contact support with your name, and any email addresses you think we might know about, and we'll work out what has happened.

## Q: VEP - CONTROLS / GUI HAS DISAPPEARED!?

You need to 'connect' the instance of VEP to your sequencer, and send it some MIDI - then the controls will reappear. Unless the instance of VEP is 'booted up' by actually connecting it, Kontakt will not complete the setup of the instrument which includes drawing the GUI.

## Q: WHAT IS THE NCW COMPRESSED FORMAT?

This is Native Instrument's lossless compressed sample format – we have managed to reduce the sample data pool by around 55% and this also shows a benefit in streaming for you, along with reduced hard disk space required.

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### **Q: I HAVE FAST INTERNET, WHY IS MY DOWNLOAD SLOW?**

We have no direct influence on your actual download speeds, our libraries are hosted on Cloudfront servers which are normally very quick but it may well be that at certain times of the day when traffic is particularly busy, your ISP may throttle your connection speeds. We would advise you to leave your download running overnight as speeds should ramp up at less busy times. Our Spitfire App downloader aims to use as much of the available bandwidth as possible to give you the quickest possible speeds, and may take several minutes to reach its peak.

### **Q: CAN I INSTALL ON MORE THAN ONE COMPUTER?**

With our products you have two licenses. This means that you are allowed to download and install on two computers you own, say your main rig and your mobile rig. The best way to get your library on both of your machines is to copy it from one to another via an external HDD. It saves you from having to re-download the whole library again!

### **Q: CAN I TRY BEFORE I BUY?**

No - it is not currently possible to demo our products. If you go to our Youtube Channel you'll see many many walkthroughs containing detailed info about all our products -- you can hear them being played in real time with no smoke and mirrors!

### **Q: MY LIBRARIES ARE NOT SHOWING UP IN MY SPITFIRE APP?**

A handful of customers may find that when they log into their Spitfire App, some of their previous purchased products do not show up in the 'Installed' section or in the 'Download Ready' section either. It may be that you have purchased these under another email address. Checking other possible email addresses for your previous purchases may help to find these missing products. If this is not the case, and these missing products were purchased a few years ago, please create a support ticket telling us your account email address, and any serial numbers you may have to go with these missing products. Our support team can also merge one or more accounts together if you'd like to consolidate all your purchases in one place. The more information, the quicker we can get you back up and running!

### **Q: HOW DO I UPDATE MY PRODUCTS?**

The main premise of downloading our products is that our Spitfire App downloads into the folder you choose, so it is always good to choose the folder above where you want the download to go. The best file path for our products is something very simple, a long file path will cause errors as there is a character limit on how far the Spitfire App can read. We advise a file path of something along the lines of: Samples Drive > Spitfire Audio - always point the downloader to the folder 'Spitfire Audio' (the folder above the library) for all downloads and updates. When it comes to downloading/updating - if you have a folder called 'Spitfire Audio' always point the Spitfire App to the folder Spitfire Audio - never go into this folder and choose the actual library in question.

### **Q: I OWN THE CORE VERSION, HOW DO I INSTALL THE PRO VERSION?**

This can easily be done by selecting the existing folder for the Core version of the library. For example, the folder that will need to be selected is "Spitfire Audio - Symphonic Strings" when installing Symphonic Strings Professional. The app will then install the Pro content so that all of the content is in the same single location.

### **Q: HOW DO I REDOWNLOAD THE LATEST UPDATE?**

With the continuous improvements to our Spitfire App, we have incorporated the ability to reset your own downloads. This can easily be done via your Spitfire App.

- Open up the Spitfire App and log in with your account email and password.

- Select the download you wish to re-download

- In the cog menu choose Reset Download > Latest Update

- This will reset your latest update

You can repeat this process for any other updates you wish. If you do not see the option to reset your download in your Spitfire App, we would advise downloading the latest version of the Spitfire App from [spitfireaudio.com/info/library-manager/](http://spitfireaudio.com/info/library-manager/).

### **Q: I'VE BEEN WAITING AGES FOR MY DOWNLOAD LINKS?**

We run all our orders through a fraud checking process. The automatic fraud check takes 20 minutes (but can take up to an hour during a very busy period, eg. Black Friday), but if your order gets caught at this stage, we run a manual order check, and this can delay the processing of your order for up to 24 hours (though this would be a rare and exceptional case).

You should however receive an order confirmation email IMMEDIATELY upon placing your order. This confirms that your order has successfully been logged in our system and that your payment was successfully taken. Please check your junk folders before contacting our support. The message will come from [do\\_not\\_reply@spitfireaudio.com](mailto:do_not_reply@spitfireaudio.com) if you'd like to add us to your whitelist.

### **Q: CAN I DOWNLOAD ON A PC, THEN TRANSFER TO A MAC OR VICE VERSA?**

All of our libraries are compatible on both PC and Mac computers (as they run inside Kontakt). You can download all of our libraries on either PC or Mac and they will work if you need to transfer them across to the other operating system. We advise to do this by copying the library you want to move across to an external HDD and then copying it to and then copying it to your other machine.

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### **Q: 'SAMPLES MISSING' ERROR MESSAGES**

In some cases, samples files may get lost when transferring libraries from one place to another, or if an update has gone wrong. You may also get this error in some cases if you installed library on a drive with just under the minimum necessary amount of space to install the library (remember that you need **DOUBLE** the size of the final library to install successfully - see above). If this happens, the best way forward is to re-download the library in question. That will ensure you will get all of the content you are missing. For more information on how to re-download a product, please see the beginning of this appendix.

### **Q: HOW TO BATCH RESAVE A LIBRARY?**

There are two main reasons to batch resave: First it speeds up the loading of patches and secondly, it can help you find missing samples and relink them to the patches so that you don't need to search every time you load a patch. Bear in mind that it can sometimes take a few attempts to batch resave, and if Kontakt crashes the first time you try, you could go into the instruments folder and batch resave a bit at a time -- go by sub folders for example, just to lessen the load on Kontakt.

### **Q: I WANT TO BUY A COLLECTION, BUT I ALREADY OWN ONE OR MORE OF THE PRODUCTS IN IT?**

Our cart will intelligently deduct the proportional cost of any products you already own from the total price when you get to the checkout.

### **Q: I'VE LOST MY SERIAL NUMBER FOR PRODUCT ACTIVATION**

Emails get misplaced and you might find that you are out of luck when you need to find a past serial number. The best place to find all of your serial numbers would be to log into your Spitfire account [HERE](#). If you find that the serial number you are looking for is not there, please contact us with all of the relevant information.

### **Q: I THINK I HAVE FOUND A BUG**

In some cases we can't squash them all and bugs shamefully make their way through. If you think you have found a bug, please contact us with all the relevant information;

- A description of the bug you have found
- A screencast (video) of the bug happening, or an audio example
- The exact patch name (or patches) in question and also the library giving us as much detail as possible will help us get to the bottom of the issue.

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