

CONGRATULATIONS

Thank you for purchasing Spitfire Symphonic Woodwinds. We are sure they'll bring you many years of pleasure. Often neglected by modern media composers, the Woods are your secret weapon to add real power to your productions. Spitfire Audio has taken its decade of experience making virtual woodwind instruments and for this product, has spent the last five years recording the best of the best at one of the most sought-after locations in the world: The Hall at Air Studios, London for this, a definitive compendium of orchestral woodwinds.

Quick Specs

•	72504	Samples	(48k	recorded	at	96k)	١
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- 102.8 GB uncompressed WAV
- 71.7 GB disk space required
- 143.4 GB disk space required during install
- NKS Ready
- Compatible with Native Instruments hardware
- Free Kontakt Player Included
- 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



WELCOME

After a decade of exhaustive sampling, and four years spent capturing our finest woodwind players, Spitfire are proud to present Symphonic Woodwinds. It is a definitive collection of orchestral woods recorded and in detail at Air Studios, London. Featuring multiple dynamics, vibrato control, numerous round robins and a variety of traditional and more esoteric articulations (clarinet flutter tongue? tick!). Not only does SSW feature the usual suspects, our detailed approach has been extended through the extraordinary lesser used areas of the wood choir, alto and bass flutes, contrabass clarinets to name but three!

Originally released in modules as part of the BML (British Modular Library) project, Spitfire Symphonic Woodwinds is a rationalisation of these numerous, detailed components, along with many improvements, including a host of new articulations and new instruments. We've created a more affordable entry into what we believe to be the finest orchestral woodwinds library available today.

To justify these claims we cite this small list of contributing factors:

- British players are arguably the best in the world.
- Spitfire has cherry picked the best of the best.
- Recorded to tape at Air via an unparalleled signal path.
- Extremely detailed with many articulations, dynamics, and round robins.
- Produced by an award winning team of composers, producers & engineers.
- Presented in an intuitive interface based on a decade of award-winning sampling experience and a quarter century as working composers.

With playing styles from heart rending oboe lyricism to thunderous contrabassoon making noises that you get in a room like the hall at Air studios. Whether you're an aspiring John Williams or Alexandre Desplat, we're sure this compendium of wind will keep you busy for many happy years to come.

BACKGROUND

London woodwind players are considered amongst the best in the world. Where film music sessions are concerned it could be argued that you wouldn't want to go anywhere else. Woodwinds are commonly under-represented in modern orchestral scoring, and yet are an essential part of your orchestral palette. They can add genuine power to your productions.

For the more traditional and 'popular instruments' (say oboes, C flutes, clarinets, and bassoons) these fine players have been recorded solo, and two are recorded in unison. They are seated exactly in situ so combine the a2 patches with the solo ones for a slightly larger section whilst maintaining spectral integrity.

But it is also the spirit and diversity of our music scene in London that breeds a diversity of skill sets and broadens our palette beyond the standard symphonic woodwind hegemony. So also to be found within SSW is a colourful palette of bass and contrabass clarinets, alto and bass flutes to enrich your compositions with the diverse zeitgeist being created near the shores and mud-banks of the Thames!

FEATURES

- A broad band covering both solo, and a2 sections. Combine both and create your a3 sections.
- Traditional piccolos, flutes, oboes, clarinets and bassoons across to modern 'zeitgeist' selection of instruments from alto, bass flutes, bass clarinet, contrabass clarinet and a thunderous contrabassoon.
- Super deep sampled, many articulations, dynamic layers and round robins
- Most comprehensive selection of articulations, and additional techniques available today
- Entry level core pack has full functionality of BML offering
- Core pack shipped with 3 distinct mic positions
 - C(lose)
 - T(ree)
 - A(mbient)
- Additional mics and mixes can be found in the professional version of Symphonic Woodwinds

DOWNLOADING & INSTALLING

Thank you for buying Symphonic Woodwinds. 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 behavours as described on the next page.

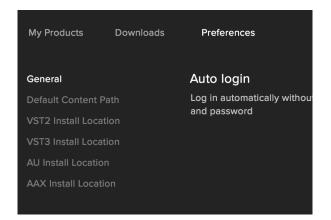
FILTERS clicking these filters will quickly display products you've yet to install, those already installed, and any available updates. Clicking again will remove the filter.

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



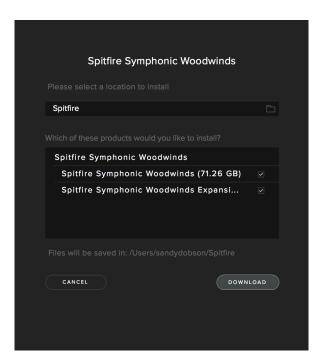
LIBRARY All libraries and plugins in your collection will appear with their artwork on the My Products tab. Clicking this artwork will open the product page. This is a great place to find information such as system requirements and insructions as well as where to find Reset and Repair options.

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 epxects to find VST files.

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

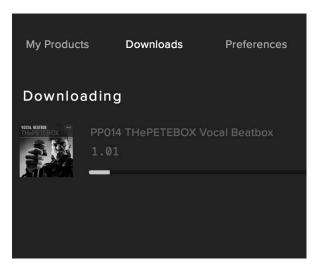


Once you are happy with your preferences, simply click the Install button, either directly on My Products tab, or by clicking on the library image you wish to install and then clicking the install button on the page that appears.

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.

If you own the professional version, then you will also 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.

REGISTERING WITH KONTAKT PLAYER

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

- ...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 Woodwinds 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/

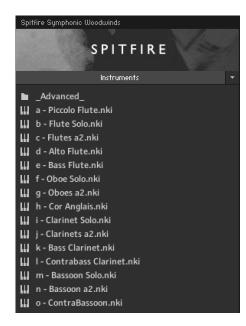
If you are an established Kontakt user please make sure you absolutely have the latest version of it downloaded via the NI service centre or the NATIVE ACCESS apps. Our libraries are frequently updated and often simply won't work on any previous versions. We cannot describe the multitude of painful symptoms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

FOLDER STRUCTURE



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 top 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 wont break you RAM bank.

 $\mbox{\sc Light}$ - $\mbox{\sc Stripped}$ 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.

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.. 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 Symphonic Woodwinds 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 ore 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, not all controls are available for all instruments:

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.

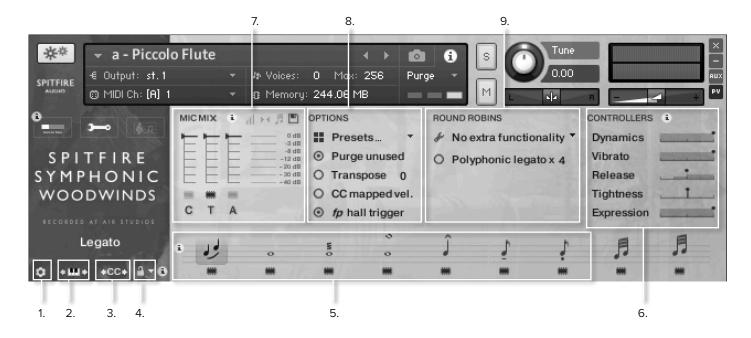
Tightness - the start of a note is often not the start of the 'sound' of the instrument. This cuts further into the note to make it tighter. But does detract from realism. Worth tightening up when playing in, then loosening and putting a negative delay into your DAW to compensate for ultimate reality!

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

Variation - Some articulations such as the mutlitongue, rip and fall, have fast, slow or rhythmic varitions, adjusting this control will select between these.

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.

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.



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).

 $\ensuremath{\mathsf{REMOVE}}$ 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 dright 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 ARTICULA-TIONS

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-assinging 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

5. ARTICULATION SWITCHER

This works in he 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 articultion 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 say 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 artics 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 inculded 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.

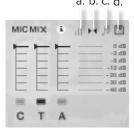
Intensity - This is a great way to vary and humanise the legato articulations. Dial it all the way up for a more pronounced emotional start to each note, dial it back for a more transparent transition. Only used in legacy Legato patches, this is governed by velocity in performance legato patches. (see 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 sider will affect which legato transiton is triggered instead of velocity in this mode.

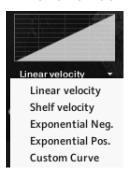
7. MIC MIX

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. 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.

TRANSPOSE - 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.

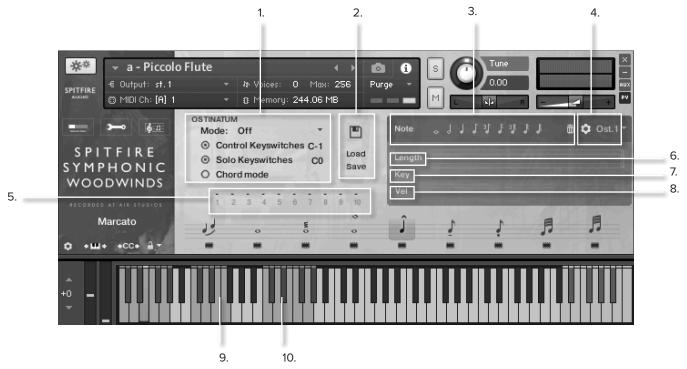
RESET ON TRANSPORT - As above but resets every time you press play in the DAW.

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.

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 dispayed 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 woodwinds. Here's a quick crib sheet of the instruments that we've recorded with some quick facts. We've sampled the 'staples' (C Flute, Oboe, Clarinet, Bassoon) both as solo instruments *and* with two different players as a pair (A2). Combine the solo and A2 to get a trio section. We've curated ranges that fit within the reasonable demands of professional players in London. If you're going to work with live players, the main catch with both brass and woodwinds is that they are often transposing instruments. This means the note you write on the stave is different to the note that sounds? This is because players will often switch between different sizes of instruments (say the C Flute and the Alto Flute), by transposing for them it means the same fingerings apply to what they read. So a flautist sees a C on the stave, he plays a C, even if, on an Alto flute, it sounds the G below (we've illustrated transposing instruments in brackets with the note that sounds when they play a C).

PICCOLO

D5

G#7

SOLO

or Piccolo Flute, is a half sized flute that plays an octave higher than written. The loudest and highest instrument in the orchestra, this little bastard can help you take it beyond epic.



ALTO FLUTE (G)

G3

G6

SOLO

A larger version of the C Flute with mellow undertones, no less dynamic or versatile than its smaller brother. A transposing instrument sounding a perfect 4th bellow written.



OBOE Bb3 G6 SOLO & A2

A double reed instrument that is less dynamic than other wood cousins. The oboe is an awesome lyrical top liner with 'period' connotations, also good as a bright section texture.



CLARINET (Bb) D3 F6 SOLO & A2

A single reed woodwind with a very regal tone. When used solo it can have a very period drama sound to it. Fantastic also as part of a section. Plays a whole tone lower than written.



CONTRABASS CLARINET (Bb) Bb0 C4 SOLO

Less common and difficult to play, this immensely rich instrument can sit under your double basses adding complexity in undertones. Plays 2 octaves & whole tone lower than written.



CONTRABASSOON Bb0 Bb3 SOLO

Producing the lowest tones in the orchestra, this beast can go from producing rich bass qualities to barking pure low end horror that shakes the room.



FLUTE C C4 C7 SOLO & A2

or Western Concert Flute. This size, the most common variant of the flute family. It is a massively dynamic and versatile instrument suitable for lyrical and section work.



BASS FLUTE C3 C6 SOLO

the less common bass flute offers up low and rich undertones. Arranged well it has other-worldly qualities. Difficult to play, keep it simple, it sounds an octave lower than written.



COR ANGLAIS (F) E3 Bb5 SOLO

the Cor or 'English Horn' is oft mistaken for an Oboe. Handling top lines just as well, but with richness, the cor is less refined and predictable at times. Sounds 5th lower than written.



BASS CLARINET (Bb) Bb1 F5 SOLO

This stunner has an extraordinary sonic 'switch' when played quiet; smooth and rich, played loud and short it rasps almost like a synth. Plays 1 octave & whole tone lower than written.



BASSOON Bb1 D5 SOLO & A2

Yet another versatile instrument that is often painted into a staccato comedy corner. As Stravinsky proved with "The Rite Of Spring" it can be hauntingly melodic.



WHICH CLEF?

Extraordinarily, pretty much all the woodwinds in SSW read from the treble clef. Even the monstrously low contrabass clarinet (which sounds 2 octaves and a whole tone lower than written!) only the Bassoon and Contrabassoon read from the bass clef.

ARTICULATIONS

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' the in-between sounds, you must make sure that you hold down the first note while pressing 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 what we call a 'legato transition'.

LONG ARTICULATIONS

We've separated this list into Longs and Shorts as they are operated to slightly different principles. Namely the dynamic layer of the longs articulations are controlled by CC1 (your modulation wheel). Imagine this as a kind of mixer / toggle hybrid. When you hit a note, all the different volumes we sampled play. You simply use the modwheel to fade between them.

NORMALE - This is the most vanilla of the 'long notes' we have recorded. The basic standard playing style, recorded with and without vibrato. Occasionally you'll see 'senza vib' which means 'without vibrato'. You can use the Modwheel, or a slider set to CC1, to control the 'dynamic' of the sound, this smoothly crossfades 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.

OVERBLOWN - Played with much more air than is usual - an aggressive sound - hence, it is usually louder!

FLUTTER - The player rolls a silent 'R' with the mouth while playing, giving a throbbing airflow that create a very characteristic sound.

HARMONICS - Harmonics can be produced on wind instruments. These vary by instrument so have a play and investigate!

HOLLOW - A characterful and slightly mournful technique particular to the flute family. Produced by varying the embouchure.

TRILL Minor 2nd, Major 2nd - A Trill is where the player alternates between two notes 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.

A general note on looping: We have looped all of these long notes, so that you don't have to worry about the note running out when the player runs out of breath. However! Please do note that for example on the lowest woods playing at the bottom of the range at FF you can not get huge long notes in one breath. So it's worth noting that some of these are very hard to loop without you hearing the loop points. And we'd say: if you can hear the loop point, you are holding the note down too long and will have an unrealistic part!

SHORT ARTICULATIONS

Unless specified on the expert panel. Short articulations have their dynamic layer controlled by how hard you play your keyboard.

STACCATO / STACCATISSIMO - The shortest note style, a nice tight staccato - or an even shorter staccatissimo.

TENUTO - The intermediate short length - literally it means 'hold the note for its full duration or even slightly longer' and implies some form of accent. We think of this as a nice rounded attack.

MARCATO - The longest of our short notes, this has a slightly harder attack while still keeping a round shape to the note start. Think of this as the longest note in a fanfare passage.

MULTITONGUE - Unique to Spitfire and one of our favourite tools! We have recorded double, triple and quadruple tongued notes. You select which one using the 'variation' slider. If you hit the keyboard hard, you get an accented final note, if you hit more softly, you get a tight 'snatched away' final note. This combination of controls make this patch incredibly useful!

BASIC ORCHESTRATION PRINCIPLES

Whilst we wouldn't dream of trying to sum up the principles of orchestral woodwind 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 woodwind 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 what an instrument can do with a human at one end and some air (and spit) at the other.

- 1. WHICH INSTRUMENT TO CHOOSE Well a good starting point with woodwinds is a lyrical top line... Something woods do so well. There are three main players here Flute, Oboe and Clarinet. They have distinct qualities and it'll simply be down to what you like. So similar to a lead synth patch the flute will offer you a breathy sine wave, the clarinet a smoother more muted triangle wave, with the Oboe offering you a slightly raspier square wave. They're all very old instruments that a lot of people have made and played, so they're good at playing beautiful vocal style melodies. Stick within the range and you'll be fine.
- 2. RANGE Unlike strings (where it is commonly accepted 1sts play above 2nds, violas play above cellos and the bass are always at the bottom) it is not so clear with woods. So another good guide of what should play where is the range that they can play in. There are a good couple of principles here. The outer edges of an instrument's range tend to be trickier to play, with the top end generally being slightly harder than the bottom. However the expertise around these outer limits will vary depending on where they sit within the orchestral pitch range. So piccolo players are experts at playing high, along with flautists, however the lower range of flutes are incredibly soft so can be totally drowned out. Oboe's and clarinets enjoy playing the full range of their instruments, however they're more tricky to play softly in the upper reaches. Right down to Contrabassoonists who will be used to playing at the very bottom of their pitch range. Therefore a good guide of who should play where and what will sound best is to try and aim for the middle of their ranges... This will always be the sweet spot.
- 3. AGILITY These tricky outer limits of any wood instrument require a greater degree of breath control. At the lower ends just getting the note to sound can be a challenge of steady breathing. At the upper ends, pitch seems to be the hardest aspect of note production. But there is also one very basic principle of a wind instrument and that is short notes, short pipe, less air, long notes, lots of pipe, more air. So with a piccolo the length of the shaft that the air has to travel down is minuscule compared to the serpentine lengths of tubing found within a contrabassoon. So the further the air has to travel the longer it takes to make the note. Which is why you hear incredibly complex fast passages played on a piccolo and not so much on a bass flute. Another consideration are the number of keys on the instrument. With the flute you often simply cover holes on the shaft with your fingers to make different notes. Whereas a bassoon is by comparison festooned with metal keys that make impossible fingering possible. The mechanical nature of these instruments add to the cumbersome mechanical nature of playing them. So again be wary of writing a sea shanty for a contrabass clarinet!
- **4. SOLO OR SECTION?** Like with all good orchestration think of your orchestra as a choir. Ask yourself, is this a line I would get a soloist to sing, or want a whole chorus. If you're using your

woods to reinforce or colour in unison with other sections of the orchestra (say flutes together with the 1st violins) we'd recommend going with the sections.

5. WHICH OTHER SECTIONS SHOULD THEY DOU-

BLE? - Whatever ones you like! Flutes sitting on top of a sweeping string line is awesome... A bass clarinet can add all sorts of threat to your low string parts... and a Contrabassoon can add all sorts of malignant menace to your double basses. The Contrabass Clarinet and Contrabassoon actually go LOWER than the lowest note playable on a String Contrabass (or 'Double Bass') - these two instruments in particular can add massive power to the low end of your productions when doubling the string Basses. But also, remember these are voices. So when you increase the voice count of your harmony, instead of getting everyone to play everything (and in turn divisi, or divide the sections) use woodwinds to provide the additional inner harmonies. Another great trick is to pass the melodic baton in order to keep your audience engaged. Start with a beautiful strings top line, switch to the flutes for that reflective version, then to clarinets for that more regal take, then end up on the Oboe for a bit of sorrow!

6. KEEP AN OPEN MIND AND TRY STUFF OUT - So

you're sure it's an Oboe you want / need? Really, sure you're sure? Many film works that contain solo passages played by what you think are Oboes are in fact Cor Anglais. Did you also know that the most heart wrenching top lines can be delivered by a Bassoon? Why use a bass clarinet when it is well within the normal Bb clarinet's range? Well because you may want to have a more statesmen like chocolatey richness. Your flute sounds a bit exposed playing up in the gods? A bit shrill. Well try sticking an oboe under it an octave down? Woods give you the broadest possible colour palette to your writing, so give them a bit of time to bed in and you'll feel like a painter who has been handed a room full of brushes!

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 Spit-fire 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 (quadcore), 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 "preload" 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!

APPENDIX B - KONTAKT VS. KONTAKT PLAYER

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, Harp, Harpsichord, 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.

APPENDIX C1 - ARTICULATION LIST

PICCOLO FLUTE:

Legato
Long
Long Flutter
Long Harmonics
Multitongue
Short Marcato
Short Staccato
Short Tenuto
Trill (Major 2nd)
Trill (Minor 2nd)

FLUTE SOLO:

Legato
Long
Long Flutter
Long Harmonics
Long Hollow
Multitongue
Short Marcato
Short Marcato Sfz
Short Staccato
Short Tenuto
Trills (Major 2nd)
Trills (Minor 2nd)

FLUTES A2:

Legato
Long
Long Flutter Tongued
Long Harmonics
Long Hollow
Long Overblown
Multitongue
Short Marcato
Short Marcato Sfz
Short Overblown
Short Staccato
Short Tenuto
Trills (Major 2nd)

ALTO FLUTE:

Trills (Minor 2nd)

Legato
Long
Long Flutter
Long Harmonics
Long Overblown
Short Marcato
Short Overblown
Short Staccato
Short Tenuto
Trill (Major 2nd)
Trill (Minor 2nd)

BASS FLUTE:

Legato
Long
Long Flutter
Long Overblown
Short Marcato
Short Staccato
Short Tenuto

OBOE SOLO:

Legato Long Long Flutter Multitongue Short Marcato Short Staccato Short Tenuto Trill (Major 2nd) Trill (Minor 2nd)

OBOES A2:

Legato Long Long Flutter Short Marcato Short Staccato Trill (Major 2nd) Trill (Minor 2nd)

COR ANGLAIS:

Legato Long Short Marcato Short Staccato Short Tenuto

CLARINET SOLO:

Legato Long Long Flutter Multitongue Short Staccato Trill (Major 2nd) Trill (Minor 2nd)

CLARINETS A2:

Legato
Long
Multitongue
Short Marcato
Short Staccato
Short Tenuto
Trill (Major 2nd)
Trill (Minor 2nd)

CONTRABASS CLARINET:

Legato Long Short Marcato Short Staccato Short Tenuto

BASS CLARINET:

Legato Long Short Staccato Short Tenuto Trill (Major 2nd) Trill (Minor 2nd)

BASS FLUTE:

Legato
Long
Long Flutter
Long Overblown
Short Marcato
Short Staccato
Short Tenuto

BASSOON SOLO:

Legato
Long
Long Flutter
Long Harmonics
Multitongue
Short Marcato
Short Staccato
Short Tenuto
Trill (Major 2nd)
Trill (Minor 2nd)

BASSOON A2:

Legato Long Short Marcato Short Staccato Short Tenuto

CONTRABASSOON:

Long Short Marcato Short Staccato Short Tenuto

Legato

APPENDIX D - MIC & MIX ACRONYMS

- C Close mics, a selection of valve mics placed for optimum focus close to the instruments. This mic control is great to add in 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 the case of Sable; 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 fed to your Ls & Rs speaker sends for true surround information.

APPENDIX E - UACC

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 (sus	tain)	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	00	201101	02	cynicca icospin (acin, am)
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	Temolo/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	Decorati	ve		
27	Soft	70	Trill (minor2nd)		
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 (\triangle) 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.

APPENDIX F - FAQS & TROUBLESHOOTING

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 emailand 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 (journaled) 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 passsord 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.

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 COMPUT-FR?

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 Spit-fire 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: 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 from 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 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.

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 <u>HERE</u>, 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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