

# Studio Woodwinds Professional

SPITFIRE - STUDIO WOODWINDS PROFESSIONAL  
USER MANUAL

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# CONGRATULATIONS

Thank you for purchasing Spitfire Studio Woodwinds Professional. Spitfire Studio Woodwinds is the third and final release in our vital Studio Orchestra range. By choosing the crisp and vibrant setting of Air Studio One – a smaller, more controllable space than the opulent Lyndhurst Hall – we offer our fellow composers a woodwind library that captures every grain in depth and detail. As with our other Professional Studio libraries, we have pursued less frequently heard relatives of the section – from the guttural, knotted depths of the contrabassoon to the gleaming sounds of the piccolo – solo and section performances, and an abundant range of articulations. The Professional edition gives you extra instruments, such as the contrabass clarinet and cor anglais, two mixes from renowned engineer Simon Rhodes, and extra mic positions – move from intimate microphones through to outriggers and ambients, or mix and match for absolute tonal control. Boasting the widest emotional range of performance in pin-sharp detail, Spitfire Studio Woodwinds Professional will breathe new life in to your orchestra.

## Quick Specs

- 101.1 GB DISK SPACE REQUIRED
- 202.2 GB DISK SPACE REQUIRED DURING INSTALL
- NKS Ready
- Compatible with Native Instruments hardware
- Free Kontakt Player Included
- Minimum Kontakt Version 5.6.8
- Intuitive GUI with inline help
- Multiple microphone positions
- 2 Stereo mixes by Simon Rhodes
- Detailed sampling:
  - Multiple Instruments
  - Multiple Articulations
  - Multiple dynamics
  - Multiple round robins
  - Release Triggers
  - True Legato

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# PRECAUTIONS

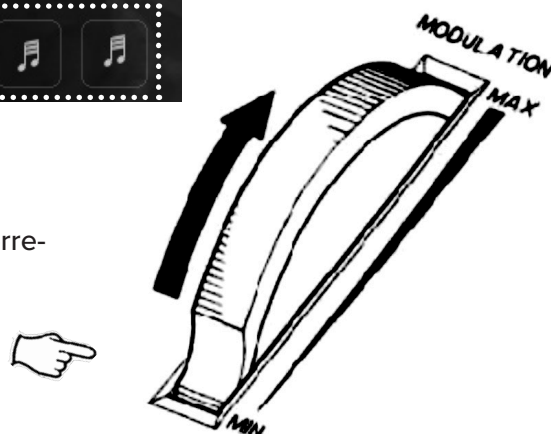
If you've never used a Spitfire instrument before there are two very basic principles to grasp. Once you've got these, you'll be up and running and ready to go. By all means read on, but the first two rules are:



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 modwheel



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# WELCOME

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## THE FINAL CHAPTER

Two years in the making, Studio Woodwinds is the third section in our new Studio Orchestra series. It has all the treasured Spitfire hallmarks: A-list London session players, the best instruments and an unparalleled signal path recorded to tape by Grammy award-winning engineer Simon Rhodes – in a room perfectly suited to capturing the granular detail and velvet sonority of the woodwind family. As with our existing symphonic and chamber ranges, we have applied a “no stone unturned” approach: an encyclopaedia of articulations, dynamic layers and round-robins for seamless, nuanced realism.

## SPITFIRE STUDIO WOODWINDS PROFESSIONAL

Spitfire Studio Woodwinds takes you straight to the section’s roots for instant results: 143 articulations across 11 instruments, including 5 solo – all recorded to a Decca tree rig featuring Schoeps microphones. The Professional edition offers you all of this and more, giving you 15 instruments – from the dazzling piccolo, down to the underbelly of the section: contra-bassoon, contrabass clarinet and bass flute. Extensive control of the sound is available, with the inclusion of two ready-to-go mixes, two close-mic arrangements, two Decca tree setups, ambients and outriggers. You can access and personalise your own mix of Simon’s microphone armoury – from pin-sharp to super-wide, picked up by the best from Neumann, Schoeps and Sennheiser. This peerless detail and control extends to the articulations, which fulfil all the traditional requirements, but include extended techniques such as multitongue, air and key FX, staccatissimo and swells. Instantly usable, and immediately musical, whatever stage you are at.

Spitfire users now have a comprehensive range of orchestral manoeuvres. We believe Studio Woodwinds suits users of our existing Lyndhurst Hall ranges as an essential sonic alternative. It is also perfect for those looking to buy a woodwinds library that will give them the most bang for their buck – being usable in the widest range of musical settings, ready for your own favourite reverbs and FX. With the versatility we have engineered into this library, we have no doubt that Spitfire Studio Woodwinds will be a cherished part of your music-making over the next decade.

## RECORDED BY SIMON RHODES

Simon Rhodes was an obvious choice for our entirely new Studio Orchestra range – a microphone magician with multiple Grammy awards to his name, and a senior engineer at Abbey Road Studios. Simon has worked at the highest level in film score recording, having been James Horner’s go-to engineer for 18 years. Blockbuster movies such as Avatar, Skyfall and Spectre have also had the Rhodes treatment.

“For the Spitfire Studio Woodwinds sessions, the approach echoes what we did with the Studio Strings and Brass, so there is complete consistency between the libraries. The main Schoeps room mics were the same, and I captured two flavours of spots.”

You can choose Simon’s mix, or, with the Professional edition of the library, customise from the various mic options, from close to ambient, as well as two ‘Tree’ setups, both using Schoeps microphones. “The second uses Schoeps MK 21 wide cardioids (or sub-cardioids), which are great for keeping the room sound at bay while allowing you to get a sense of distance and perspective.”

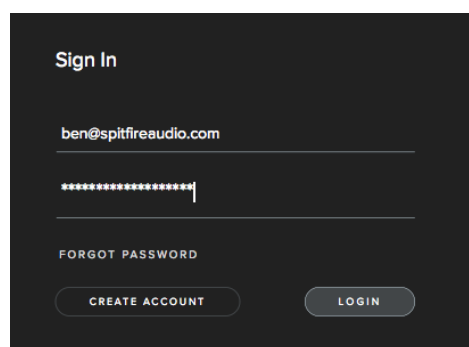
# DOWNLOADING & INSTALLING

Thank you for buying Studio 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: <http://www.spitfireaudio.com/info/library-manager/>

## THE SPITFIRE AUDIO APP

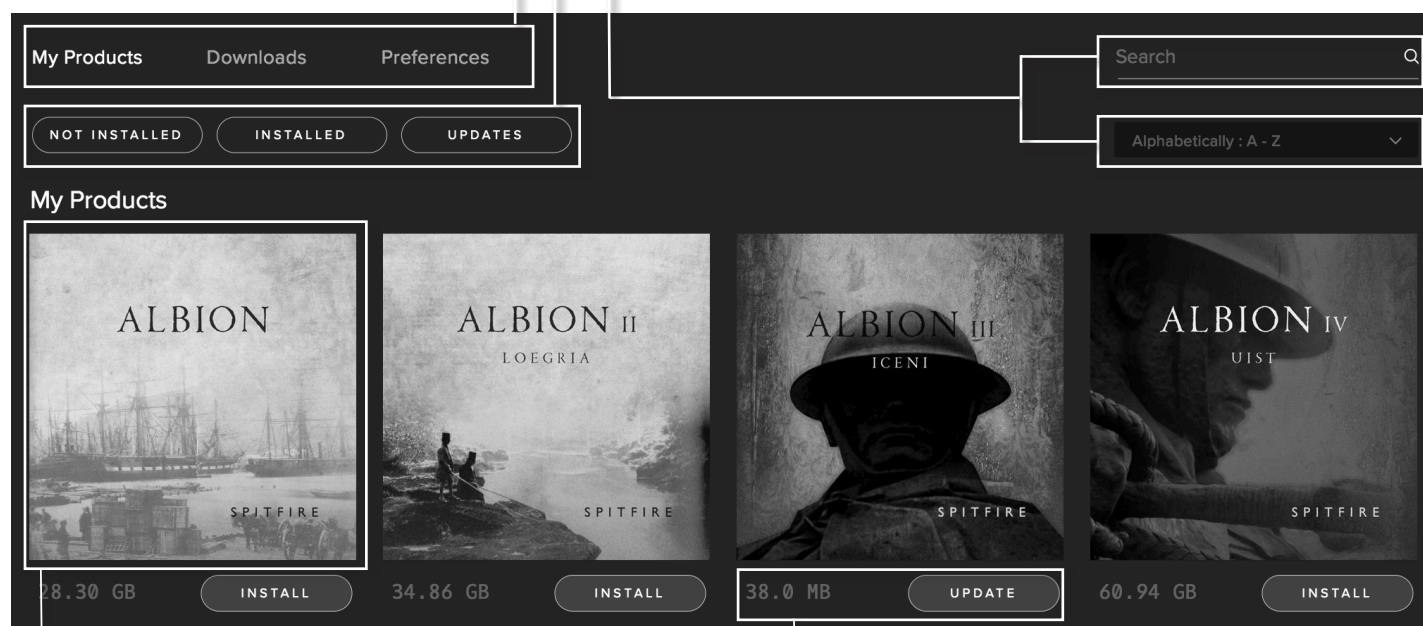


When you launch the app you will be prompted to login using the same details you use at our site. Then you'll see the page pictured below:

**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.

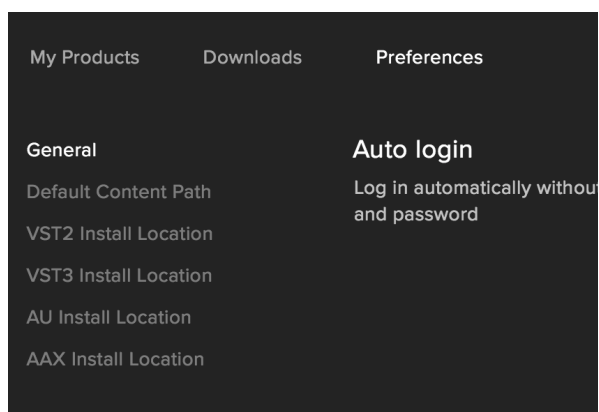
**FILTERS** clicking these filters will quickly display products you've yet to install, those already installed, and any available updates. Clicking again will remove the filter.

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



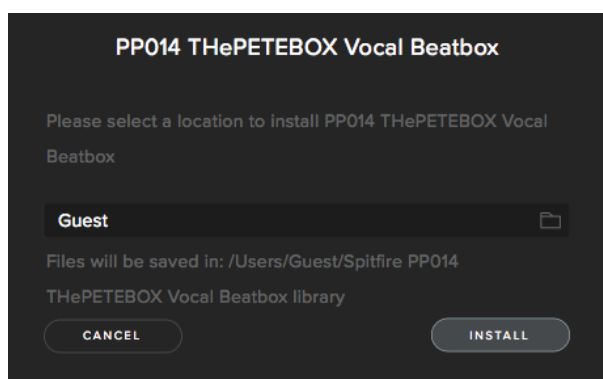
**LIBRARY** All libraries and plugins in your collection will appear with their artwork on the **My Products** tab. Clicking this artwork will open the product page. This is a great place to find information such as system requirements and instructions as well as where to find **Reset** and **Repair**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

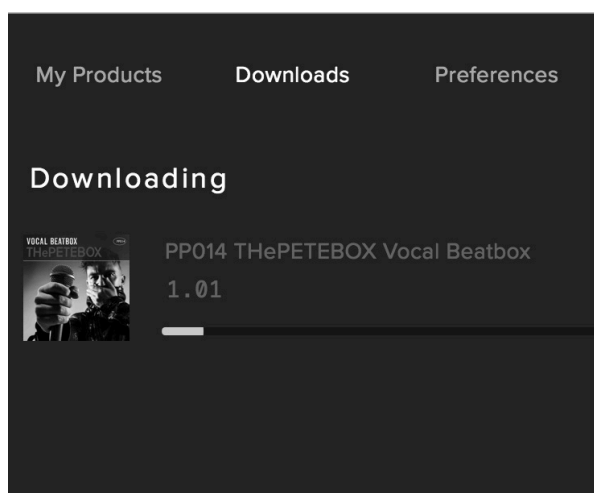
Here you can also enable **Auto Login** to save time in future.



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.

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:

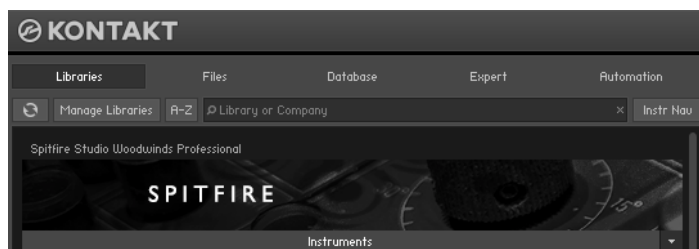
<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-6/downloads/>

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 Audio - Spitfire Studio Brass' 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:

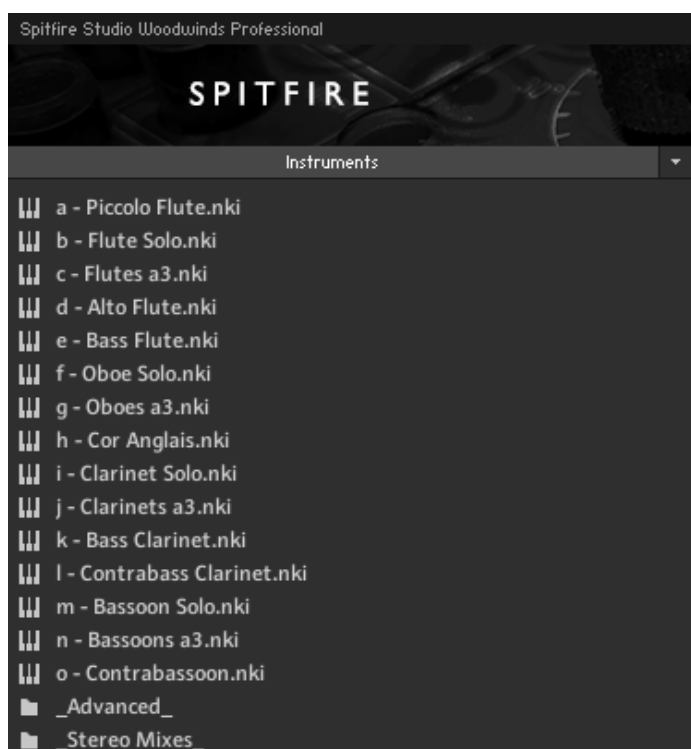
<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-6/downloads/>

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!

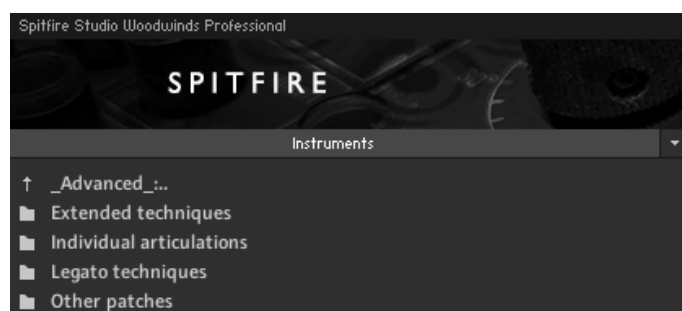
For more information about NKS and integration with Native Instruments hardware controllers and keyboards please checkout their online instructions:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-6/downloads/>

# FOLDER STRUCTURE



When you select the 'Instruments' bar you will see that you have a 'basic' startup palette for each instrument. These are the main basic patches which contain a selection of curated 'work horse' articulations.



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' 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.

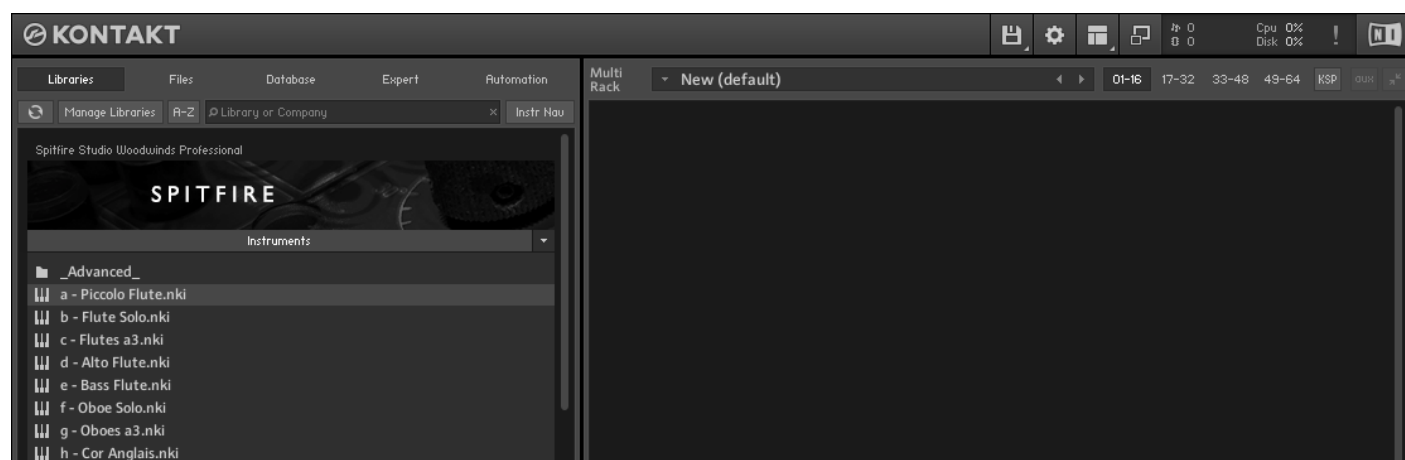
**Other Patches** - Have another three sub-folders:

**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.

## 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



### 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” if for example you want your mod wheel to go all the way from top to bottom but the control to have restricted bandwidth change from the default of 0-127 to 20-100. Or if you want the controller to make the GUI control in the reverse direction change from the default of 0-127 to 127-0.

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



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’ PANEL



## 1. ARTICULATION SWITCHER

These icons denote key articulations, display the current articulation playing and act as switches between them (alongside their associated keyswitches at the bottom of your keyboard).

If what you're playing stutters, or feels delayed or cuts out make sure everything is loaded, as some of these articulations are very deep sampled.

### LOAD STATUS:



Make sure Kontakt displays the instrument load status as pictured. If the left hand bar is illuminated and red it's in a queue and hasn't started loading yet, if the middle bar is lit and yellow the instrument is still loading up. If you try to play before it's loaded it may not be nice!

**ARTICULATIONS** - Click on these notes to select the different articulations, whatever articulation is live is displayed in the yellow sidebar on the left. You can also select different articulations by hitting key switches, you can do this whilst you're playing so if you want to switch from a "long" articulation to a short, hit the key whilst you're playing your last long and the next note will be a short. For details of articulations recorded go to Appendix A.

**POWER TIP:** SHIFT > CLICK to select and play multiple articulations!

## 2. SIDE BAR

Tells you what articulation you're playing.

## 3. EASY MIX

The orchestra was recorded with several different mic perspectives. Move this slider up or down to change the perceivable distance from the band. NB: the first time you use this it will need to load in the samples, so give it a moment!

## 4. EXPRESSIVE CONTROLLERS

**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.

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

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# 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.)

## LONG ARTICULATIONS

### LEGATOS

Legato in the context of a sample instrument refers to the technique of capturing the sound of an instrument moving from one note to the next. This detail is extremely beneficial in adding realism, but also means that you will need to play monophonically.

**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.

**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!

**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.

## SHORT ARTICULATIONS

Unless specified on the expert panel. Short articulations have their dynamic layer controlled by Velocity, which is 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!

**SWELLS** - Swells will begin soft and gradually increase in dynamics. All the way from pp to ff! Use the 'Variation' fader to alter the between the different recorded lengths.

**FX** - A collection of various FX. Have an explore through these patches!


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!

# 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 group (A3). 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 staff 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 staff, 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 FLUTE	D5	C8	SOLO
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A half sized flute that plays an octave higher than written. The loudest and highest instrument in the orchestra, and used sparingly can help you take it beyond epic!




FLUTE	C4	C7	SOLO & A3
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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.




ALTO FLUTE (G)	G3	G6	SOLO
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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 below written.




BASS FLUTE	C3	C6	SOLO
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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.




OBOE	Bb3	G6	SOLO & A3
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A double reed instrument that is less dynamic than other woodwind cousins. The Oboe is a great lyrical top liner with 'period' connotations, also good as a bright section texture.




COR ANGLAIS (F)	E3	Bb5	SOLO
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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.




CLARINET (Bb)	D3	F6	SOLO & A3
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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.




BASS CLARINET (Bb)	Bb1	F5	SOLO
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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.




CONTRABASS CLARINET (Bb)	A0	C4	SOLO
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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.




BASSOON	Bb1	D5	SOLO & A3
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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.



CONTRABASSOON	A0	Bb3	SOLO
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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.



## WHICH CLEF?

Extraordinarily, pretty much all the woodwinds in this library 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.

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# BASIC ORCHESTRATION PRINCIPLES

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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 DOUBLE?

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

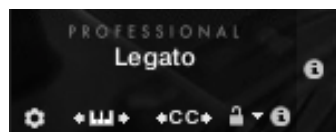
So you're sure it's an Oboe you want / need? Really, sure you're sure? Many film works that contain solo passages played by what you think are Oboes are in fact Cor Anglais. Did you also know that the most heart wrenching top lines can be delivered by a Bassoon? Why use a bass clarinet when it is well 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!

# THE EXPERT VIEW



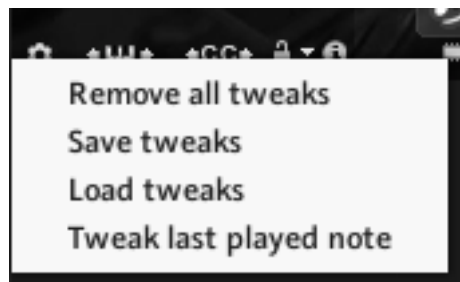
## 1. SIDE BAR

On the 'General Overview' page this simply displays the articulation being played. In the 'Expert View' there are some additional functions:



a. b. c. d.

**1a. THE COG** - a. The Cog - Awesome tool for fine tuning & tweaking your presets.



- **HOW SHOULD WE TWEAK?** - Then your last note played will be displayed, if this is correct get tweaking.
- **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 (NB this is only available in full "cog" patches).
- **REMOVE ALL NOTE TWEAKS** - This removes all custom changes you have made with the Cog.

**1b. "KEYBOARD SHIMMIER"** - This shifts your bank of keyswitches left or right to suit your needs, preference or performance. Simply click on the icon and drag your cursor left or right and you'll see the pink bank of keyswitches follow! Wherever you stop, those will be the new keyswitches.

**1c. "KEYSWITCH TO CC SELECTOR"** - Use this to assign a CC controller to act as articulation switcher. RIGHT or CTRL Click on "CC" and you can assign a controller to change articulations.

**1d. "ARTICULATION LOCKER"** - We all like to select articulations and use our templates in different ways. Many composers like to have a single articulation loaded to each instance of an instrument for example. So it's worth locking off the articulation switching once you've selected one so you don't have sounds disappearing from slaves way off in your machine rooms!

**Unlocked Artic'** - Is the standard setting, select articulations via the front panel or associated keyswitch.

**Locked Artic'** - This locks your articulation so it doesn't change either via front panel or keyswitch.

**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 by right/CTRL clicking on the padlock.

**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 (according to UACC standards) changes articulation.

**Shared Keyswitches** - In larger libraries, this setting allows you to spread keyswitches across multiple palettes of articulations.

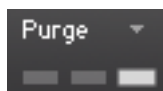




## 2. ARTICULATION SWITCHER

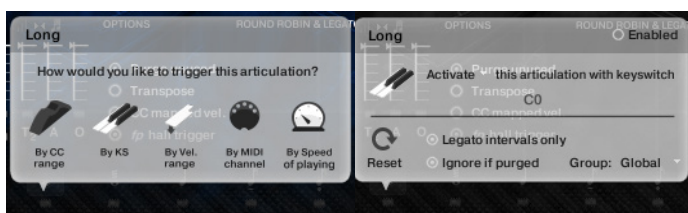
This works the same as it does in the 'General Overview' panel, with the addition of 'load chips' beneath each articulations. These load them in and out of memory as you wish... Remember before playing an articulation you've loaded in make sure it's fully loaded!

### LOAD STATUS



**LAYERING ARTICULATIONS** - To layer sounds within the articulation set simply 'SHIFT' click on your next articulation. Rather than introducing a multitude of more confusing 'layered articulation' options, the front panel shows (and edits) only the most recently layered articulation.

**TRIGGERING** - For triggering options CTRL or COMMAND click on the articulation icon:



**"By CC Range"** - This will allow you to use a single controller channel to switch between artics. This allows you to fine tune on your MIDI event list, or to use a midi controller fader or indeed button with a single range assigned to select your desired artic'. Our default setting is guided by our UACC protocol.

**"By KS"** - The default setting. This is scripted so it won't switch mid note but wait until the next note-on event before switching. This means you're able to play the key switch say whilst playing a long note and have it switch to a staccato on your next note.

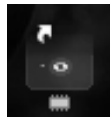
**"By Velocity Range"** - This is great for designing intelligent staccato patches that say become staccatissimo when you hit the keyboard really hard. A second menu will open up giving you options for this function.

**"By MIDI Channel"** - Ingeniously turns your single instance into a multi timbral instrument. MIDI channel lets the instrument change articulation based on the incoming MIDI channel. To use, pop the instrument Midi Channel to 'Omni' mode in Kontakt. The single instance can now be configured to play based on the incoming MIDI channel. For example. Set staccatos to channel 1, longs to channel 2, legato to channel 3.

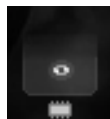
**"By Speed Of Playing"** - A revolutionary new function that allows you to switch articulations based on the playing speed of your performance. When selected, it provides options to specify a triggering time-range in milliseconds. (See right hand menu above). For example, you could specify that 'fast legato' should be activated if the time between playing each interval is between 0 and

250ms (pictured above). Fully configurable to suit the user's playing style and needs and can be deactivated by unchecking 'Enabled' (or if not in the artic switching screen, simply holding ALT and clicking the articulation icon on the stanza).

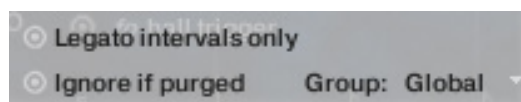
When an articulation has a 'trigger' assigned, it shows a little short-cut icon above to let you know that it has been customised.



Holding down ALT and clicking an articulation with this short-cut above it will toggle the trigger between enabled and disabled.



It's a handy way to quickly turn off legato speed/velocity switching if the user doesn't want it.



**TRIGGER PANEL** - Reset will clear the trigger for this articulation, allowing you to set it to a different type or disable it permanently. Legato intervals will only activate this trigger if the notes played are legato intervals. Ignore if purged means that this trigger will only occur if the articulation is not purged.

Group allows you to group together triggers. When set, the trigger only occurs when an articulation in the same group is currently active. For example, use this if you wanted to set up speed triggers on legato articulations, but don't want them to trigger if you have staccatos/marc/shorts selected.

Alongside switching your articulations manually by hand, via key-switch or via the advanced methods mentioned above you may also want to try a new system we've dubbed UACC (universal articulation controller channel). Whereby each and every possible style of articulation has been given a unique CC data number. Simply use CC#32 and the table found in Appendix E to see how this can work for you.

**POWER 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).*

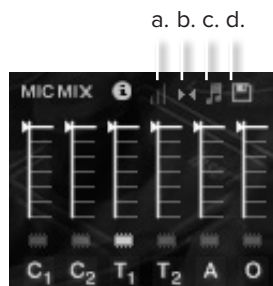
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## 3. MICROPHONE MIXER

Giving you greater control over the blends of microphone positions for your work.

Use the chips beneath the faders to load & 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, conversely turning the fader back up will reload. Right click on the faders to assign CC controllers so you can mix these live for fantastic shifts in the spacial nature of the samples. Left click on the mic letters to change Kontakt channel/output assignment.

On the top right of the mixer controller section are some deeper mixing options.



### 3a VELOCITY RESPONSE



Pick from 4 different velocity curves to suit your controller.

### 3b STEREO WIDTH AND PANNING



The mics are a stereo mix and this collapse 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, which helps define the detail. This panning tool helps you to manage and tweak this to your own tastes/ needs.

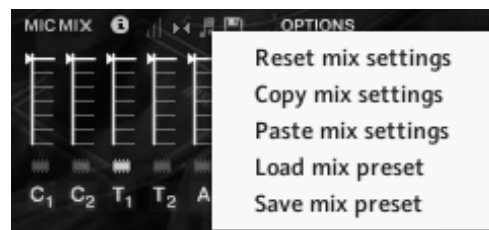
**STEREO WIDTH** - Allows you to control how far the stereo image reaches. All the way to the right would be like having your two pan pots panned hard. All the way to the left would be like having both pots centre,

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

### 3c 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.

### 3d MIXER PRESETS



A way to transfer mixer settings between patches, or save and load presets to 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.



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## 4. GENERAL CONTROLS

### OPTIONS

**PRESETS** - This allows you to load predetermined sets of articulations affectionately called articulation sets (see General Overview Panel) quickly and easily to optimise your system quickly for essential articulations or to start building templates using empty “shells”.

**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 tweak 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 a user has customised the dynamics slider, that same customised CC will control velocity now.

### ROUND ROBINS & LEGATO

**NO EXTRA FUNCTIONALITY(NEIGHBOURING ZONES)**- Next to this lies a pop-down menu with some amazing new 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! Genius!

**SHORT ARTICULATIONS RT** - This new 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.

## 5. EXPRESSION CONTROLS

We curated some of these for the general controls view, here is the full complement, dial these CCs into your midi controller for an infinite choice of emotional and human responses.

**DYNAMICS** - CC#1 This slider displays and controls which dynamic layer is live. Also controlled via the modulation wheel.

**VIBRATO** - CC#21 This mixes between vibrato and non, or senza vibrato.

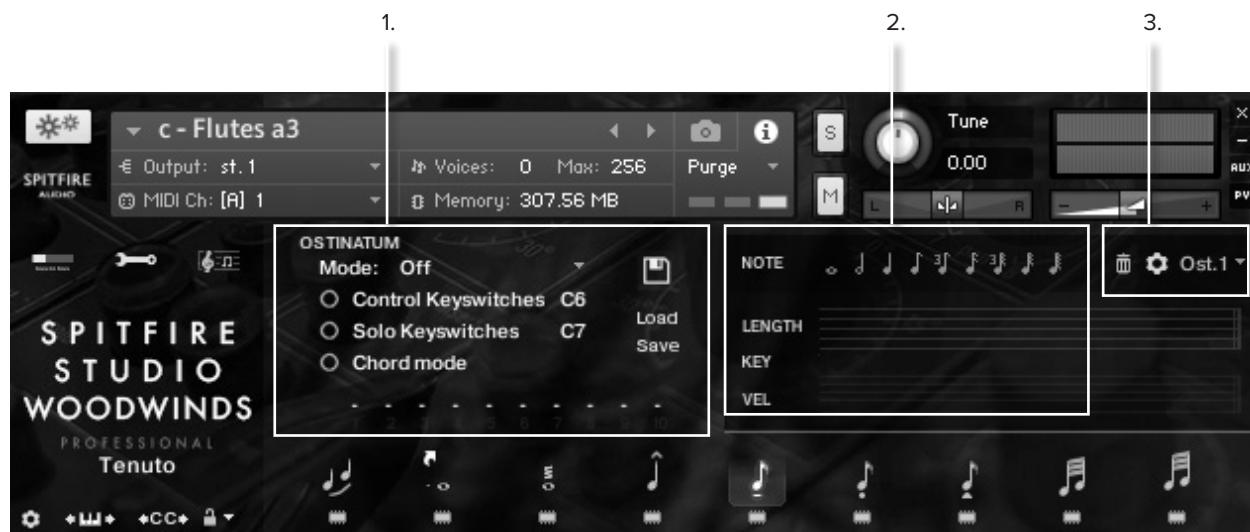
**RELEASE** - CC#17 Dialed in all the way, this helps blur the transitions when using long articulations in slow passages in a natural and musical way. Dial back for more focus and detail.

**TIGHTNESS** - CC#18 We proudly cut our samples from the true beginning of the note, as the bow engages the string and the rosin begins to weave its magic. The net effect of this is laggy and sometimes very small inconsistencies in timing. Which we love! It Sounds real! But it’s not to everyone’s taste. This ingenious device allows you to tighten and loosen to your heart’s content. An excellent use of this is to dial it all the way to the right in order to play your part in. Once you’re happy, adjust to taste and put a negative delay in the track header of your DAW which is the same amount as the Tightness setting.

**EXPRESSION** - CC#11 Displays the overall instrument volume (0-100%). Remember you can also trim your instrument volume with CC#7.

# THE OSTINATUM

Best 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. SETTINGS

**MODE** - Selects how the Ostinatum will interpret your playing. Ostinatum will sequence a maximum of 10 notes (one for each of your fingers). It needs to arrange them into a note order "1-10" and this determines how it does that.

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

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

**ASCENDING** - From bottom to top.

**DESCENDING** - From top to bottom.

**CONTROL KEYSWITCHES** - Allows you to set up a section of the keyboard that controls the state of the ostinatum. These keyswitches let you turn it off, or set the mode.

**SOLO KEYSWITCHES** - Allows you to dedicate a section of the keyboard to keyswitches that solo each ostinatum track. The first keyswitch turns all tracks on, the following keyswitches solo each individual track.

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

## 2. RHYTHM COMPUTER

**NOTE MENU** - Click these to place a note into the computer at the length you desire. Click the trash can to delete, or choose a preset from the drop down on the right. The cog allows you further fine tuning and configuration tools.

**LENGTH** - This displays the note lengths in the sequence that you have selected from the Note Menu. Drag down here to create rest versions of the note length.

**KEY** - Under each note you can then select which key (displayed in real time in the Transport) this note is attached to. Scroll up and down to select.

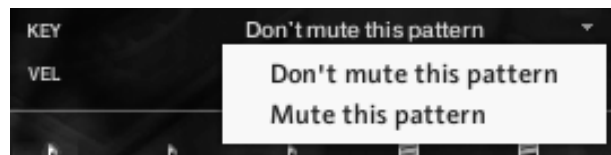
**LEVEL** - Adjust these bars up and down to adjust the velocity levels of each notes, this will bring your rhythm sequence to life and provide you with all sorts of surprising syncopated accents.

**LOAD/ SAVE** - Allows you to store your previously made Ostinati.

## 3. PATTERN SELECTOR

With the Ostinatum machine, there's a drop-down on the rhythm computer allowing you to switch between (and create) up to 8 different patterns.

By default these layer on top of each other, but you can also configure them to be solo using either the Ostinatum track options:



Or using the 'solo keyswitch' option. With Solo Keyswitch, 9 new (customisable) keyswitches are added to the keyboard:



The very first one un-mutes all tracks so that they play together. The next eight solo each individual track respectively. When you press them, only the corresponding track will play.

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## APPENDIX A - RECOMMENDED TECH SPECS

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THIS LIBRARY IS ONLY COMPATIBLE WITH KONTAKT 5.6.8 OR HIGHER.

### 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.

### PCs:

We recommend Windows 7 or later (latest Service Pack, 32/64 Bit), Intel Core Duo or AMD Athlon 64 X2, 4 GB RAM (8 GB minimum).

### MACs:

We recommend Mac OS X 10.10 or later (latest update), Intel Core 2 Duo, 4 GB RAM (8 GB minimum).

### DRIVES:

USB3, Thunderbolt, or eSata SSDs. Ask your dealer for drives that are suitable for "AV use". If you can USE 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 tenfold meaning you'll be able to load enormous orchestral palettes into a single machine.

### HOST:

The Kontakt 5 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-6/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 C - ARTICULATION LIST

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## INSTRUMENTS:

Piccolo Flute  
Flute Solo  
Flutes a3  
Alto Flute  
Bass Flute  
Oboe Solo  
Oboes a3  
Cor Anglais  
Clarinet Solo  
Clarinets a3  
Bass Clarinet  
Contrabass Clarinet  
Bassoon Solo  
Bassoons a3  
Contrabassoon

## EXTENDED TECHNIQUES:

Piccolo Flute - Core techniques  
Piccolo Flute - Decorative techniques  
Flute Solo - Core techniques  
Flute Solo - Decorative techniques  
Flutes a3 - Core techniques  
Flutes a3 - Decorative techniques  
Alto Flute - Core techniques  
Alto Flute - Decorative techniques  
Bass Flute - Core techniques  
Bass Flute - Decorative techniques  
Oboe Solo - Core techniques  
Oboe Solo - Decorative techniques  
Oboes a3 - Core techniques  
Oboes a3 - Decorative techniques  
Cor Anglais - Core techniques  
Cor Anglais - Decorative techniques  
Clarinet Solo - Core techniques  
Clarinet Solo - Decorative techniques  
Clarinets a3 - Core techniques  
Clarinets a3 - Decorative techniques  
Bass Clarinet - Core techniques  
Bass Clarinet - Decorative techniques  
Contrabass Clarinet - Core techniques  
Contrabass Clarinet - Decorative techniques  
Bassoon Solo - Core techniques  
Bassoon Solo - Decorative techniques  
Bassoons a3 - Core techniques  
Contrabassoon - Core techniques

## INDIVIDUAL ARTICULATIONS:

### PICCOLO FLUTE:

Piccolo Flute - Falls  
Piccolo Flute - FX 1 Keynoise  
Piccolo Flute - FX 2 Air  
Piccolo Flute - Long Flutter  
Piccolo Flute - Long Hollow  
Piccolo Flute - Long Sfx  
Piccolo Flute - Long  
Piccolo Flute - Multitongue  
Piccolo Flute - Rips  
Piccolo Flute - Short Marcato  
Piccolo Flute - Short Staccatissimo  
Piccolo Flute - Short Staccato  
Piccolo Flute - Short Tenuto  
Piccolo Flute - Swell  
Piccolo Flute - Trill (Major 2nd)  
Piccolo Flute - Trill (Minor 2nd)

### FLUTE SOLO:

Flute Solo - Falls  
Flute Solo - FX 1 Keynoise  
Flute Solo - FX 2 Air  
Flute Solo - Long Flutter  
Flute Solo - Long Hollow  
Flute Solo - Long Sfx  
Flute Solo - Long  
Flute Solo - Multitongue  
Flute Solo - Rips  
Flute Solo - Short Marcato  
Flute Solo - Short Staccatissimo  
Flute Solo - Short Staccato  
Flute Solo - Short Tenuto  
Flute Solo - Swell

Flute Solo - Trill (Major 2nd)  
Flute Solo - Trill (Minor 2nd)

## FLUTES A3:

Flutes a3 - Falls  
Flutes a3 - FX 1 Keynoise  
Flutes a3 - FX 2 Air  
Flutes a3 - Long Flutter  
Flutes a3 - Long Hollow  
Flutes a3 - Long Sfx  
Flutes a3 - Long  
Flutes a3 - Multitongue  
Flutes a3 - Rips  
Flutes a3 - Short Marcato  
Flutes a3 - Short Staccatissimo  
Flutes a3 - Short Staccato  
Flutes a3 - Short Tenuto  
Flutes a3 - Swell  
Flutes a3 - Trill (Major 2nd)  
Flutes a3 - Trill (Minor 2nd)

## ALTO FLUTE:

Alto Flute - Falls  
Alto Flute - FX 1 Keynoise  
Alto Flute - FX 2 Air  
Alto Flute - Long Flutter  
Alto Flute - Long Hollow  
Alto Flute - Long Sfx  
Alto Flute - Long  
Alto Flute - Multitongue  
Alto Flute - Rips  
Alto Flute - Short Marcato  
Alto Flute - Short Staccatissimo  
Alto Flute - Short Staccato  
Alto Flute - Short Tenuto  
Alto Flute - Swell  
Alto Flute - Trill (Major 2nd)  
Alto Flute - Trill (Minor 2nd)

## BASS FLUTE:

Bass Flute - Falls  
Bass Flute - Long Flutter  
Bass Flute - Long Hollow  
Bass Flute - Long Sfx  
Bass Flute - Long  
Bass Flute - Multitongue  
Bass Flute - Rips  
Bass Flute - Short Marcato  
Bass Flute - Short Staccatissimo  
Bass Flute - Short Staccato  
Bass Flute - Short Tenuto  
Bass Flute - Swell  
Bass Flute - Trill (Major 2nd)  
Bass Flute - Trill (Minor 2nd)

## OBOE SOLO:

Oboe Solo - Falls  
Oboe Solo - Long Sfx  
Oboe Solo - Long  
Oboe Solo - Multitongue  
Oboe Solo - Rips  
Oboe Solo - Short Marcato  
Oboe Solo - Short Staccatissimo  
Oboe Solo - Short Staccato  
Oboe Solo - Short Tenuto  
Oboe Solo - Swell  
Oboe Solo - Trill (Major 2nd)  
Oboe Solo - Trill (Minor 2nd)

## OBOES A3:

Oboes a3 - Long Sfx  
Oboes a3 - Long  
Oboes a3 - Multitongue  
Oboes a3 - Short Marcato  
Oboes a3 - Short Staccatissimo  
Oboes a3 - Short Staccato  
Oboes a3 - Short Tenuto  
Oboes a3 - Swell  
Oboes a3 - Trill (Major 2nd)  
Oboes a3 - Trill (Minor 2nd)

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# APPENDIX C - ARTICULATION LIST (CONT.)

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## COR ANGLAIS:

Cor Anglais - Long Sfx  
Cor Anglais - Long  
Cor Anglais - Multitongue  
Cor Anglais - Short Marcato  
Cor Anglais - Short Staccatissimo  
Cor Anglais - Short Staccato  
Cor Anglais - Short Tenuto  
Cor Anglais - Swell  
Cor Anglais - Trill (Major 2nd)  
Cor Anglais - Trill (Minor 2nd)

## CLARINET SOLO:

Clarinet Solo - Long Flutter  
Clarinet Solo - Long Sfx  
Clarinet Solo - Long  
Clarinet Solo - Multitongue  
Clarinet Solo - Short Marcato  
Clarinet Solo - Short Staccato  
Clarinet Solo - Short Tenuto  
Clarinet Solo - Swell  
Clarinet Solo - Trill (Major 2nd)  
Clarinet Solo - Trill (Minor 2nd)

## CLARINETS A3:

Clarinets a3 - Long Flutter  
Clarinets a3 - Long Sfx  
Clarinets a3 - Long  
Clarinets a3 - Multitongue  
Clarinets a3 - Short Marcato  
Clarinets a3 - Short Staccato  
Clarinets a3 - Short Tenuto  
Clarinets a3 - Swell  
Clarinets a3 - Trill (Major 2nd)  
Clarinets a3 - Trill (Minor 2nd)

## BASS CLARINET:

Bass Clarinet - Long Flutter  
Bass Clarinet - Long Sfx  
Bass Clarinet - Long  
Bass Clarinet - Multitongue  
Bass Clarinet - Short Marcato  
Bass Clarinet - Short Staccato  
Bass Clarinet - Short Tenuto  
Bass Clarinet - Swell

## CONTRABASS CLARINET:

Contrabass Clarinet - Long Flutter  
Contrabass Clarinet - Long Sfx  
Contrabass Clarinet - Long  
Contrabass Clarinet - Short Marcato  
Contrabass Clarinet - Short Staccato  
Contrabass Clarinet - Short Tenuto  
Contrabass Clarinet - Swell

## BASSOON SOLO:

Bassoon Solo - Long Flutter  
Bassoon Solo - Long Sfx  
Bassoon Solo - Long  
Bassoon Solo - Multitongue  
Bassoon Solo - Short Marcato  
Bassoon Solo - Short Staccato  
Bassoon Solo - Short Tenuto  
Bassoon Solo - Swell  
Bassoon Solo - Trill (Major 2nd)  
Bassoon Solo - Trill (Minor 2nd)

## BASSOONS A3:

Bassoons a3 - Long Sfx  
Bassoons a3 - Long  
Bassoons a3 - Short Marcato  
Bassoons a3 - Short Staccato  
Bassoons a3 - Short Tenuto  
Bassoons a3 - Swell  
Bassoons a3 - Trill (Major 2nd)  
Bassoons a3 - Trill (Minor 2nd)

## CONTRABASSOON:

Contrabassoon - Long Flutter  
Contrabassoon - Long Sfx  
Contrabassoon - Long  
Contrabassoon - Short Marcato  
Contrabassoon - Short Staccato  
Contrabassoon - Short Tenuto  
Contrabassoon - Swell

## LEGATO TECHNIQUES:

Piccolo Flute - Legato  
Flute Solo - Legato  
Flutes a3 - Legato  
Alto Flute - Legato  
Bass Flute - Legato  
Oboe Solo - Legato  
Oboes a3 - Legato  
Cor Anglais - Legato  
Clarinet Solo - Legato  
Clarinets a3 - Legato  
Bass Clarinet - Legato  
Contrabass Clarinet - Legato  
Bassoon Solo - Legato  
Bassoons a3 - Legato  
Contrabassoon - Legato

## OTHER PATCHES:

Economic Longs  
Economic Shorts  
Light resources  
Time machine

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# APPENDIX D - MIC & MIX ACRONYMS

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## STANDARD ARRAY:

(Available in Studio Woodwinds Core)

**T1 - Tree.** This refers to the “Decca” tree of three mics placed above the conductor’s podium. In the case of Studio Woodwinds Professional; 3 priceless vintage Neumann M50s. These are placed to give the ultimate sound of the band, the studio and are the default mic position that loads in with each patch.

## EXTENDED ARRAY:

(Available in Studio Woodwinds Professional)

**C1 & C2 - Close.** 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. C2 acts as a ‘Leader’ microphone.

**T1 & T2 - Tree.** This refers to the “Decca” tree of three mics placed above the conductor’s podium. In the case of Studio Woodwinds; 3 priceless vintage Neumann M50s. These are placed to give the ultimate sound of the band, the studio and are the default mic position that loads in with each patch. T2 is positioned differently to T1, and utilizes a “ball” on the microphone.

**A - Ambient.** A set of condenser mics placed high up in the 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.

**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.


## STEREO MIXES

(Available in Studio Woodwinds Professional)

2 extraordinary mixes from Abbey Road engineer Simon Rhodes to save your system resources.

# 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 correlate 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 Hramonic	72	Trill (minor 3rd)		
30 Tremolo	73	Trill (major 3rd)		
31 Slow (port/gloss)	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 (ie. 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's 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 toolbar under Library > 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. It will ensure you will get all of the content you are missing

### **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 Amazon S3 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!

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#### **Q: MY LIBRARIES ARE NOT SHOWING UP IN MY 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: 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.

- Navigate to the page of the product you wish to reset.
- Next to the "installed" icon is a cog wheel. Under this you have an option to "Reset". Choose "latest update".
- This will reset your latest update ready to install.

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 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 your library on a drive with just under the minimum necessary amount of space to install the library (remembering 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. It 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 question above.

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

There are two main reasons to batch resave: Firstly it greatly speeds up the loading of patches once you have batch resaved them. 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.

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**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 on the Spitfire Audio Website: <https://www.spitfireaudio.com/my-account/serial-numbers> Alternatively, log into your Native Instruments account here: <https://www.native-instruments.com/en/>, and traverse to the My Products, Serials, And Downloads section. Under there you will find all of your serial numbers, including your Spitfire Audio serial numbers. 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 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.

<https://spitfireaudio.zendesk.com/hc/en-us>

**Q: WHAT IS THE NCW COMPRESSED FORMAT?**

This is Native Instrument's new 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: 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.

**Q: I'VE FORGOTTEN MY PASSWORD?**

If you have forgotten your password, please go to [spitfireaudio.com/my-account/login](https://spitfireaudio.com/my-account/login), 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.

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