BHCT

Bernard Herrmann Composer Toolkit
USER MANUAL

CONGRATULATIONS

Thank you for purchasing Bernard Hermann Composer Toolkit Spitfire's first dry scoring stage ensemble library, inspired by the electric genius of Bernard Herrmann. Renowned for his groundbreaking scores including Citizen Kane, Journey to the Centre of the Earth, Psycho, Vertigo and Taxi Driver, his legacy continues to inspire the work of composers today. We've worked exclusively with Bernard Herrmann's estate to curate and assemble a unique set of studio orchestra ensembles, informed directly by the composer's legendary orchestration aesthetic. Recorded at Studio 1 Air Lyndhurst by Simon Rhodes (Avatar, Grand Budapest Hotel, Spectre, Harry Potter, There Will Be Blood), we've captured players performing as Herrmann would have had them – boisterous, lively and upfront, with patches featuring selected groups, unusual instrumental combis, chords, effects and much more. Fire-up this versatile Toolkit for lively and distinctive scoring.

Quick Specs

- 186742 Samples
- 225 GB Uncompressed WAV
- 147.2 GB Disk space required
- **294. GB Disk space required during install**
- NKS Ready
- Compatible with Native Instruments hardware
- Free Kontakt Player Included
- New intuitive GUI with inline help
- Essential microphones (CTAO)
- 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:
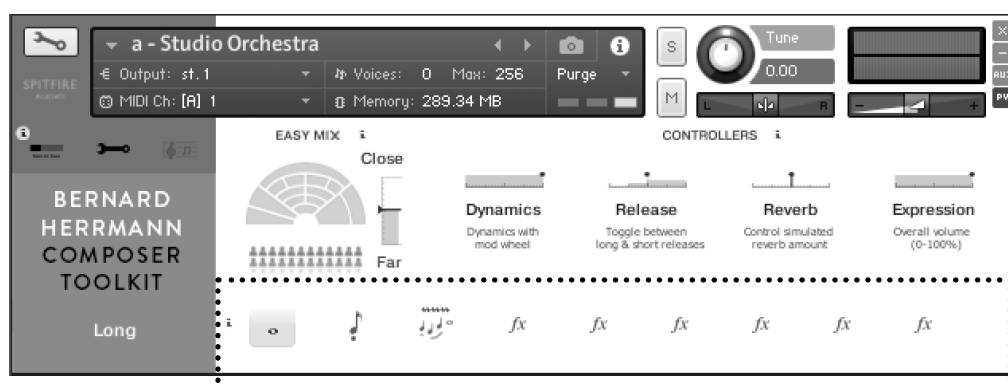
TOP TIP: The little 'i's on your GUI are 'inline' help. Click on these to find out stuff.

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

3.) If you don't know what something does and it has an 🔘 next to it, click on it to get some help!

WELCOME

This isn't an 'old style' library. We've worked closely with the Herrmann estate to examine his most famous scores and understand what makes his work so special. With that in mind, we set about curating a unique series of recording sessions in order to develop a modern library that captures the levels of vitality that you'd expect from a Herrmann score, but that works across genres/projects. Recorded at Air Studio 1, this toolkit packs an almighty punch; it offers a studio orchestra, combinations such as trumpet and xylophone, trombones and timpani, low strings and horns, harp and vibraphone, plus an ondes Martenot, synths, percussion, timpani and much more.

BACKGROUND

Bernard Herrmann is one of the great modern composers. His work for TV and film is nothing short of iconic, and is truly synonymous with mid-20th Century cinema. Collaborating with Orson Welles on Citizen Kane, Martin Scorsese on Taxi Driver, and in long-term partnership with Alfred Hitchcock for scores such as Vertigo, Psycho, The Birds, Marnie and beyond, the sheer magnitude of critical works produced is breathtaking. Not only did his work cause significant impact on culture at the time, but more recently those works have been used to invigorate contemporary scores, for example the use of the Twisted Nerve theme in Quentin Tarantino's Kill Bill - an eerie whistle which is now instantly recognisable worldwide.

Herrmann had a unique and trailblazing compositional style. His orchestrations were entirely original, daring and inventive; always appropriate for the context and subsequently incredibly influential in film scoring (Psycho is an obvious example of a totally new way to score a thriller). The bold selection of specific instrumental ensembles (his Psycho score was famed for being strings-only, and the infamous Torn Curtain featured 12 flutes) and choice of interesting combinations (harp and vibraphone in Vertigo, stopped horns and pizzicato strings in North by Northwest) challenged the status quo. Equally his experimentation of electronic instruments in scores was pioneering - the ondes Martenot in The Day The Earth Stood Still and amplified Moog synths in Sisters/Endless Nights brought sounds previously unheard to cinemas. He also went as far as to effect change in the performance style of players, requesting that players not play in the traditional, somewhat overblown nature that other Hollywood composers would traditionally employ.

He had a limitless curiosity and love of new music, championing the careers of several composers who became household names as a result of his hard work. His work as conductor of the CBS Symphony Orchestra, and the many radio broadcasts he made with them, helped to bring a huge and often little heard variety of music to a wide audience.

His was a truly individual voice and he stood firm against what he saw as the dilution of the art form and he continues to be massively respected and influential among film composers today.

So, of course, when the opportunity arose for Spitfire Audio to collaborate with his estate, we crumbled with excitement. We hope to have developed a unique library that provides working composers with a broad variety of new sounds and possibilities, albeit rooted in the genius of Herrmann and his approach to film scoring.
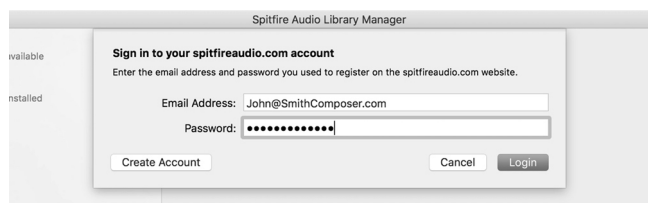
DOWNLOADING & INSTALLING

Thank you for buying this Spitfire product. 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 our 'Library Manager' app from this link: http://www.spitfireaudio.com/info/library-manager/
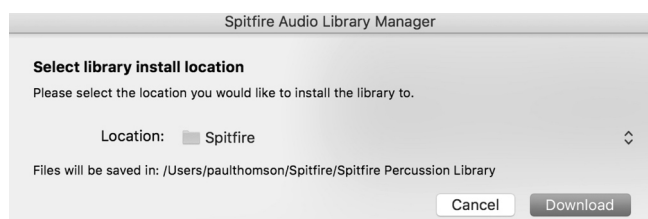This app will enable you to download the library

When you launch the app you will be prompted to login using the same details you use at our site. Then you'll see your available downloads:

Once you have selected what you wish to download on the left pane and clicked the 'download' button you will have the option to select a location.

A default location will be generated but you'll most likely want to change this. Here's how! Click on the two little vertical arrowheads to the right of the default location. You will be presented with the following options, and you'll want to click 'CHOOSE'.
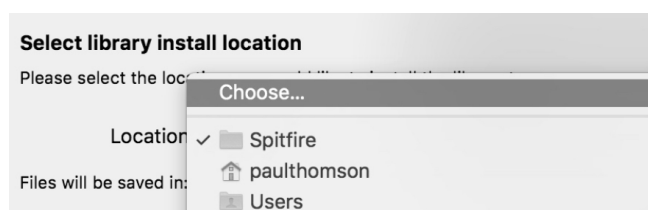
Once you've selected the location you can proceed with the download. NOTE THAT THE DOWNLOADER WILL CREATE A SUB-FOLDER FOR YOUR LIBRARY IN THE LOCATION SELECTED. This is important: if you have a multi part library, or an update, it means that the Library Manager app will look INSIDE the selected location for your library folder. If it's not there, it will create a new library folder. So, if you mistakenly select the actual library folder itself, when adding content or doing an update, instead of the location (one folder level up) that CONTAINS this library folder, you'll end up with a nested mess!!

TOP TIP: You will need approx TWICE the amount of hard drive space as the library uses (see the product page on our site for this info) to download: this is because the zip files are all downloaded, and then unzipped. This process takes a while so don't panic if it looks like it's frozen!

TOP TIP 2: If you get in a total mess you can reset the download of either the whole library or just the latest update from the 'Library' menu of the app. This is limited to a couple of downloads so please only do this if you actually need to.

You'll see an option also to Change Install Location, if you selected the wrong one, at any time you can hit the PAUSE button to pause the download, then select CHANGE INSTALL LOCATION and the app will move all the downloaded files to the new location. Once it has finished you'll be prompted if you want to proceed, THEN you can hit the RESUME button to continue the download in the new location.

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 (we know, very confusing!) go to *Appendix B*.

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

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 'add library' in the library browser window:
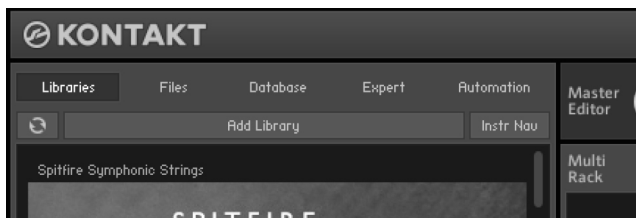
3. If you are using Kontakt 5.6.6 or lower, please go to step 7, if you are using Kontakt 5.6.8 or higher, please go to step 4.

4. At this point Native Access will open and you will need to log in or create an account if you do not have one already.

5. Enter the serial number that we have provided in your "ready to download" email

6. Once you have added this you will be asked to browse to the folder containing the library. For Spitfire libraries this is the folder where Library Manager downloaded to and in most cases will be named "Spitfire ... ... Library". Please go to step 10.

7. Navigate to and select the library folder, for example: the 'Spitfire xxx library' folder that contains your library's instruments and samples folders, and also contains the 'nicnt' file

8. Now you have added the library to Kontakt and you will be prompted to enter your serial number.

9. Enter the serial number in this format:

xxxxx-xxxxx-xxxxx-xxxxx-xxxxx

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

10. Your library is authorised. If the library does not add to the libraries pane or disappears when you re-open Kontakt, see *Ap-*

pendix 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
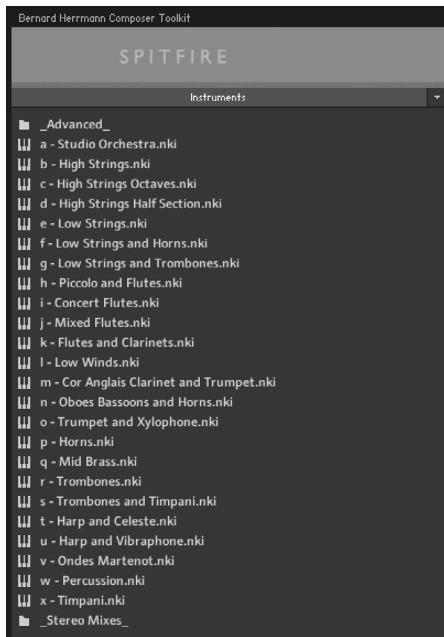
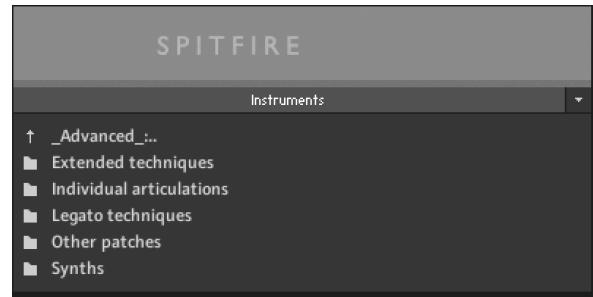If you click the 'instruments' bar to expand it you will see that you have a 'basic' startup palette for each instrument section, plus the Studio Orchestra. These are your basic patches which contain a selection of curated 'work-horse' articulations. At the bottom are two folders: an 'Advanced' folder that has more folders which contain more curated articulation sets, the different legato options and patches with advanced editing possibilities; and a 'Stereo Mixes' folder with mixes created by Simon Rhodes. There are two different mixes, one is a good overall balance of the mics with a good bit of the sound of the room, the other is an overall tighter sound.

If you click the 'Advanced' bar to expand it you will see that your instruments fall into 5 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', 'decorative' and other 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 - Has three types of patch: **Economic** - A pre-curated smaller selection of articulations which wont 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.

Synths - Inspired by Herrmann's use of synthesisers in combination with orchestral material, the synths we created with a combination of different classic synthesizers, reamped into the room. They allow you to add synth lines that instantly blend with the orchestral material.

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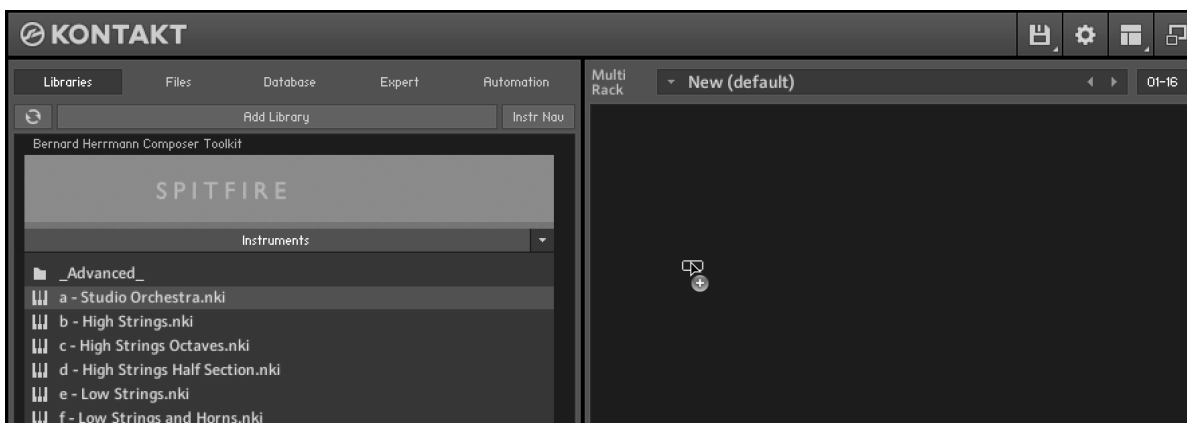
Simply double click an 'nki' file (this is Native Instruments' file extension for a Kontakt instrument) to load, or indeed drag the instrument (it'll have the little keyboard icon and the suffix .nki) from the left pane into the right pane.

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
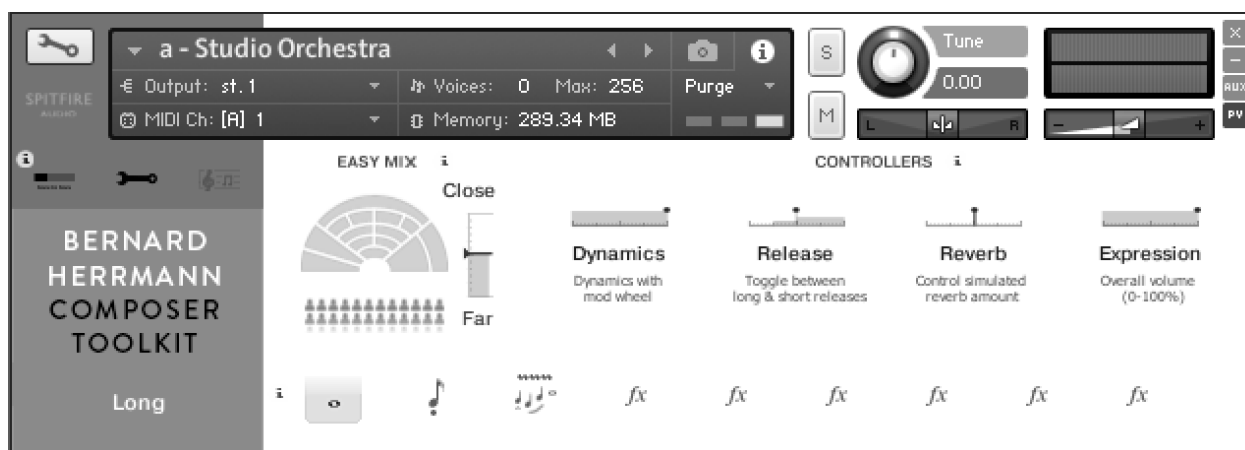
The instruments are presented in carefully orchestrated sections, sometimes in unison across the entire orchestral range sometimes in high, low and middle sections. Alongside many 'work horse' long and short articulations are expertly prepared legato patches; a number of effects and a selection of chords, trills, tremelos and other inspiring articulations. There are four mic positions (close, tree, outriggers & ambient) to load and mix to suit the type of music you're writing and the scale you want to achieve. Spitfire also provides a popular "ostinatum" designer that allows you to instantly create exciting, tense or action packed rhythmic passages.

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

ASSIGNING CONTROLS IN KONTAKT

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

You can then alter the controller parameters in the "Automation pane" 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.
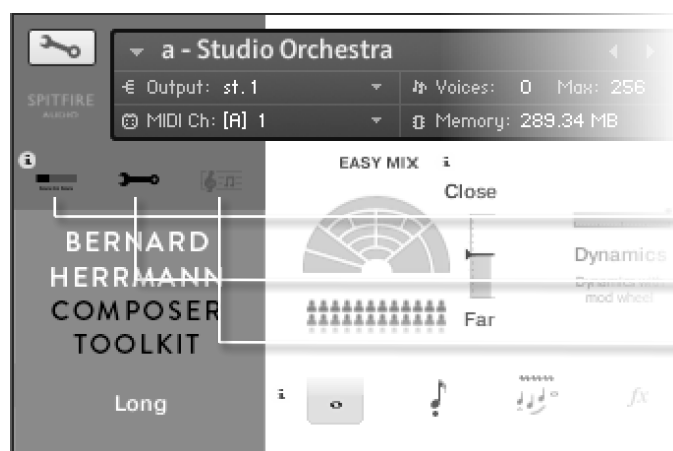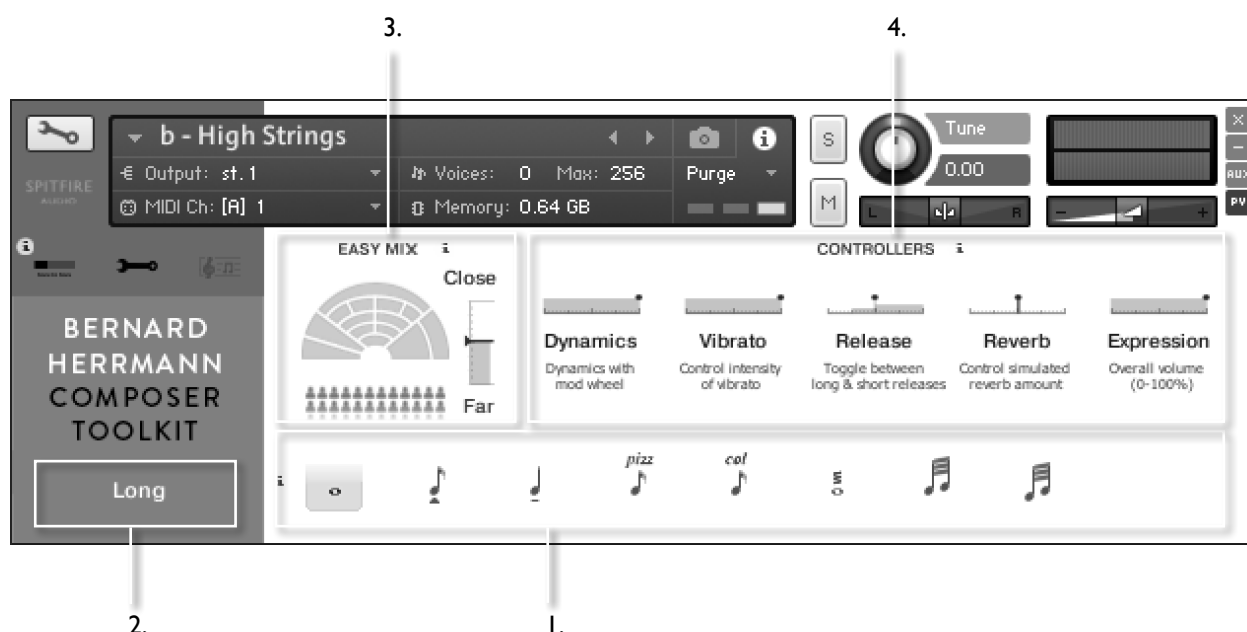

Click on these to switch views or pages:

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...

1. ARTICULATION SWITCHER

The notes 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, feels delayed or cuts out make sure everything is loaded, as some of these articulations are very deep sampled.

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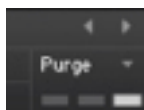
Make sure Kontakt displays the instrument load status as pictured. If the left hand bar is illuminated and red it's in a queue and hasn't started loading yet, if the middle bar is lit and yellow the instrument is still loading up. If you try to play before it's loaded it may not be nice!

ARTICULATIONS - Click on these notes to select the different articulations, whatever articulation is live is displayed in the 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 say 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 (senza) to lots (molto) of vibrato.

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

Reverb - adds reverb that has been set by Simon Rhodes to complement the room.

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

INSTRUMENTS

Some of the patches in this library have been specifically created with a film in mind - something that Herrmann used in one of his most famous works. Others are inspired by his work more generally. Here are some more details about the instruments and their ranges. For more information about articulations and instrumentation, please see appendix C.

STUDIO ORCHESTRA	C2	C7	Ensemble

An orchestra recorded together in the studio. Our own Herrmann-esque blend of Strings, Brass and WW.

HIGH STRINGS	G3	C7	8,6,6

An ensemble of High strings. Bernard Herrmnann's Psycho score was famed for being strings-only.

HIGH STRINGS OCTAVES	G3	G5	8,6

1st and 2nd Violins playing in octaves.

HIGH STRINGS HALF SECTION	G3	G6	4,3,3

Same as the High Strings but with half the players.

LOW STRINGS	C2	G#4	6,4

An ensemble of low strings.

LOW STRINGS AND HORNS	C2	G#4	6,4/8

An ensemble of strings and horns. Inspired by Herrmann's work on North by Northwest.

LOW STRINGS AND TROM	C2	G#4	6,4/2,2,1

An ensemble of low strings and trombones. Inspired by Herrmann's work on Citizen Kane and Jason and The Argonauts.

PICCOLO AND FLUTES	D4	G6	1,2

An ensemble of Piccolo and Flutes.

CONCERT FLUTES	C4	G6	a12

12 Concert Flutes playing together, inspired by Torn Curtain.

MIXED FLUTES	G4	G6	4, 4, 4

An ensemble of Concert Flutes, Alto Flutes and Bass Flutes.

FLUTES AND CLARINETS	C4	C6	3,3

An ensemble of 3x Flutes and 3x Clarinets.

LOW WINDS	D2	D4	2,2,2

An ensemble of low wind instruments. Clarinet, Bass Clarinet and Contrabass Clarinet. Inspired by Jason and The Argonauts.

All ranges given with middle C = C4

COR ANGLAIS, CLARINET, TPT	G3	G5	1,1,1

An ensemble of Cor Anglais, Clarinet and Trumpet inspired by Jason and The Argonauts.

OBOES, BASSOONS, HORNS	Bb3	Bb5	2,2,2

An ensemble of 2x Oboes, 2x Bassoons and 2x Horns.

TRUMPET AND XYLOPHONE	F#4	C6	1,1

An ensemble of Trumpet and Xylophone inspired by North by Northwest.

HORNS	G1	D#5	a8

8x French Horns playing together. Inspired by Cape Fear.

MID BRASS	G2	C#5	2,2,2

An ensemble of Trumpets, Euphoniums and French Horns.

TROMBONES	C2	F#4	2,2,1

Tenor Trombones, Bass Trombones and Contrabass Trombones playing together.

TROMBONES AND TIMPANI	C2	F#4	1,1

An ensemble of Trombones and Timpani.

HARP AND CELESTE	C4	G#7	1,1

Harp and Celeste playing together.

HARP AND VIBRAPHONE	F3	F6	1,1

An ensemble of Harp and Vibraphone, used by Herrmann on Vertigo.

ONDES MARTENOT	C1	C6	solo

An early electronic instrument, with resonators that create unique textures. Inspired by The Day The Earth Stood Still.

PERCUSSION			

A mix of percussion fully documented in appendix C2.

TIMPANI	C2	C4	solo

A collection of Timpani hits across 6 Timpani.

All ranges given with middle C = C4

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.)

LONG ARTICULATIONS

NORMALE

This is the most vanilla of the 'long notes' we have recorded. The basic standard playing style. 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').

FLAUTANDO

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

HARMONICS

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

CON SORD

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

SUL PONT

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

CON SORD SUL PONT

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

CS BLEND

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

SUL TASTO

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

MARCATO ATTACK

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

SHORT ARTICULATIONS

SPICCATO

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

SPICCATO CS

The same as above - with the mutes applied.

BRUSHED SHORTS

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

BRUSHED CS

As above, but with the mutes on.

COL LEGNO

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

PIZZICATO

Plucking the strings with the finger.

SHORT BARTOK

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

HARMONICS

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

0.5'

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

1.0'

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

TRILLS AND TREMS

TRILL Minor 2nd, Major 2nd, Minor 3rd, Major 3rd, Perfect 4th

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

TREMOLO

Tremolo is where the player rapidly moves the bow while keeping the left hand fingering a single note. The effect is a shimmering one when played softly, and a very aggressive one when played loud. Unmeasured means that there is no particular rhythm to the bow, just 'as fast as possible'.

FX

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

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 instrument will know that you want to trigger what we call a 'legato transition'. Speed detection within the patch will automatically adjust the speed of the legato based on your playing.

Legato - a slurred note creating an uninterrupted flow of breath (brass/woodwinds) or bow (strings).

Portamento - strings only: a sliding transition from one note to the next. This is achieved by literally sliding the finger on the fingerboard. It is necessary to cross the strings on larger intervals.

Attack - your velocity (how hard you hit the keyboard) controls the attack of the opening note: vel 1-9 is smooth, then 10-127 triggers a more assertive start to a phrase.

CHORDS

STUDIO ORCHESTRA
Dyn 0-63: Flutter Dyn 64-127: Swells

Chords – Common:

From	To	Chord type
C0	B1	Major (M)
C2	B3	Minor (m)
C4	B5	Flat 13
C6	B7	Dim

Chords – Major:

From	To	Chord type
C0	B1	Major (M)
C2	B3	6
C4	B4	Maj 7
C5	B6	Maj 7/9
C7	B7	add9

Chords – Minor:

From	To	Chord type
C0	B1	Minor (m)
C2	B3	m 6
C4	B4	m 7
C5	B5	m add 9
C6	B6	m 7/9
C7	B7	m add 11

Chords – Other:

From	To	Chord type
C-2	B-1	Major 6/9 (Pentatonic)
C0	B1	Dim
C2	B3	Flat 13
C4	B5	7/9 sus4
C6	B7	m flat13

MIXED FLUTES

Chords – Common:

From	To	Chord type
C1	B1	Major (M)
C2	B2	Minor (m)
C3	B3	b13
C4	B4	Dim

Chords – Major:

From	To	Chord type
C1	B1	Major (M)
C2	B2	6
C3	B3	Maj 7
C4	B4	Maj 7/9

Chords – Minor:

From	To	Chord type
C1	B1	Minor (m)
C2	B2	m 6
C3	B3	m 7
C4	B4	m 7/9

Chords – Other:

From	To	Chord type
C1	B1	Major 6/9 (Pentatonic)
C2	B2	Dim
C3	B3	b13
C4	B4	7/9 sus4
C5	B5	m b13

HORNS

Chords – Common:

From	To	Chord type
C1	B1	Major (M)
C2	B2	Minor (m)
C3	B3	b13
C4	B4	Dim

Chords – Major:

From	To	Chord type
C1	B1	Major (M)
C2	B2	6
C3	B3	Maj 7
C4	B4	Maj 7/9

Chords – Minor:

From	To	Chord type
C1	B1	Minor (m)
C2	B2	m 6
C3	B3	m 7
C4	B4	m 7/9

Chords – Other:

From	To	Chord type
C1	B1	Major 6/9 (Pentatonic)
C2	B2	Dim
C3	B3	b13
C4	B4	7/9 sus4
C5	B5	m b13

HARP AND CELESTE
Dyn 0-63: Flutter Dyn 64-127: Swells

Chords – Common:

From	To	Chord type
C0	B1	Major (M)
C2	B3	Minor (m)
C4	B5	-
C6	B7	Dim

Chords – Major:

From	To	Chord type
C0	B1	Major (M)
C2	B3	6
C4	B5	Maj 7
C6	B7	Maj 7/9

Chords – Other: (top right)

From	To	Chord type
C1	B1	Major 6/9 (Pentatonic)
C2	B2	Dim
C3	B3	b13
C4	B4	7/9 sus4
C5	B5	m b13

HORNS (right - Minor)

Chords – Minor:

From	To	Chord type
C0	B1	Minor (m)
C2	B3	m 6
C4	B5	m 7
C6	B7	m 7/9

Chords – Other:

From	To	Chord type
C0	B1	add 9
C2	B3	Dim
C4	B5	7/9 sus 4
C6	B7	m flat 13

HARP AND VIBRAPHONE

Chords – Common:

From	To	Chord type
C0	B1	Major (M)
C2	B3	Minor (m)
C4	B5	-
C6	B7	Dim

Chords – Major:

From	To	Chord type
C0	B1	Major (M)
C2	B3	6
C4	B5	Maj 7
C6	B7	Maj 7/9

Chords – Minor:

From	To	Chord type
C0	B1	Minor (m)
C2	B3	m 6
C4	B5	m 7
C6	B7	m 7/9

Chords – Other:

From	To	Chord type
C0	B1	add 9
C2	B3	Dim
C4	B5	7/9 sus 4
C6	B7	m b 13
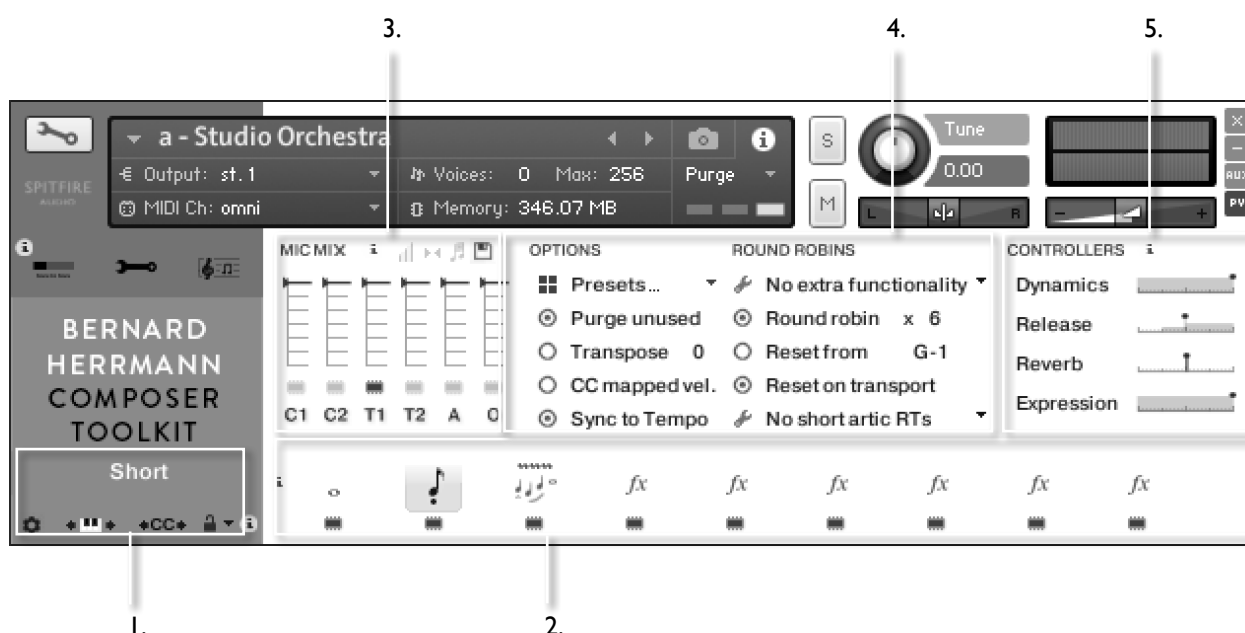
I. SIDE BAR
On the 'General Overview' page this simply displays the articulation being played. In the 'Expert View' there are some additional functions:
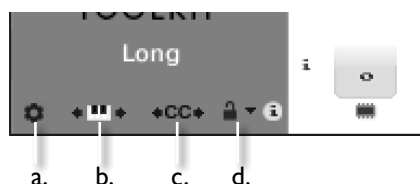
1a. THE COG - Awesome tool for fine tuning & tweaking your presets.
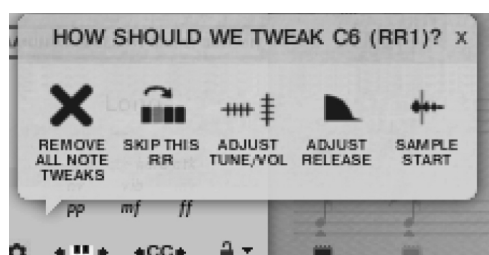
• **HOW SHOULD WE TWEAK?** - Then your last note played will be displayed, if this is correct get tweaking.
• **SKIP THIS RR** - Will simply make it always jump along to the next round robin in the cycle.
• **ADJUST TUNE/ VOL** - Will adjust the tuning and or volume of the last played note.
• **ADJUST 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/ keyswitcher. RIGHT or CTRL Click on "CC" and you can assign a controller to change articulations.

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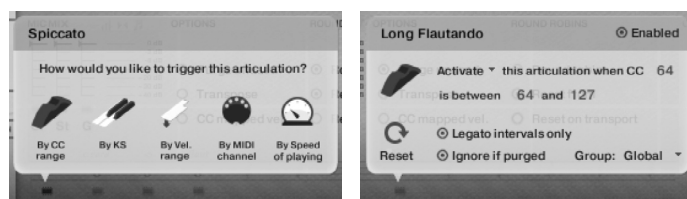
"By CC Range" - This will allow you to use a single controller channel to switch between artics. This allows you to fine tune on your MIDI event list, or to use a midi controller fader or indeed button with a single range assigned to select your desired artic'. Our default setting is guided by our UACC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

"By KS" - The default setting. It is scripted so it won't switch mid note but wait 'til 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 Ch. 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).
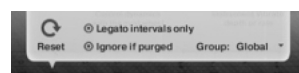
When an articulation has a 'trigger' assigned to it, it shows a little short-cut icon above to let you know that it has been customised.

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.
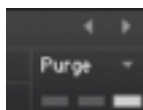
OTHER WAYS TO SWITCH ARTICULATIONS

Alongside switching your articulations manually by hand, via keyswitch 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).

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.

a. b. c. d.
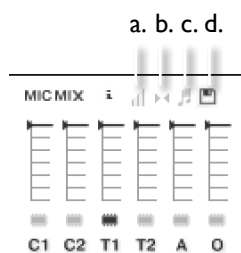
3a VELOCITY RESPONSE
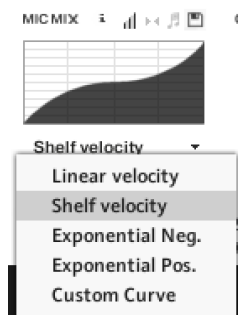
Pick from 4 different velocity curves to suit your controller.

3b CLOSE PAN MIC COLLAPSER

The close mics are a stereo mix and this collapser allows you to refine how the stereo image is handled. All our musicians are recorded in-situ, ie. 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.

Unique to the Bernard Herrmann library is the ability to set this *per microphone*. This is particularly useful if you are using the close mics on one of the combination patches and want to change one instrument and not the other.

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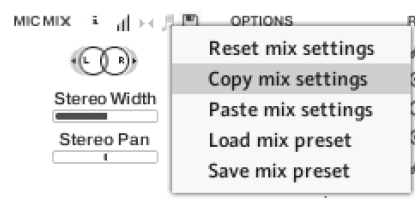
A new way to transfer mixer settings between patches, or save and load presets to disk.

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 tracklaying individual mics for your engineer to control in your final mix sessions.

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.

TRANSPOSE - 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.

SYNC TO TEMPO - When using time-based articulations like a Cluster Swell, use this option to lock all of the articulations to the same length.

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. eg, 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 cc's 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.

SPEED - CC#16 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 - CC#15 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.

RELEASE - CC#17 Dialled 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.
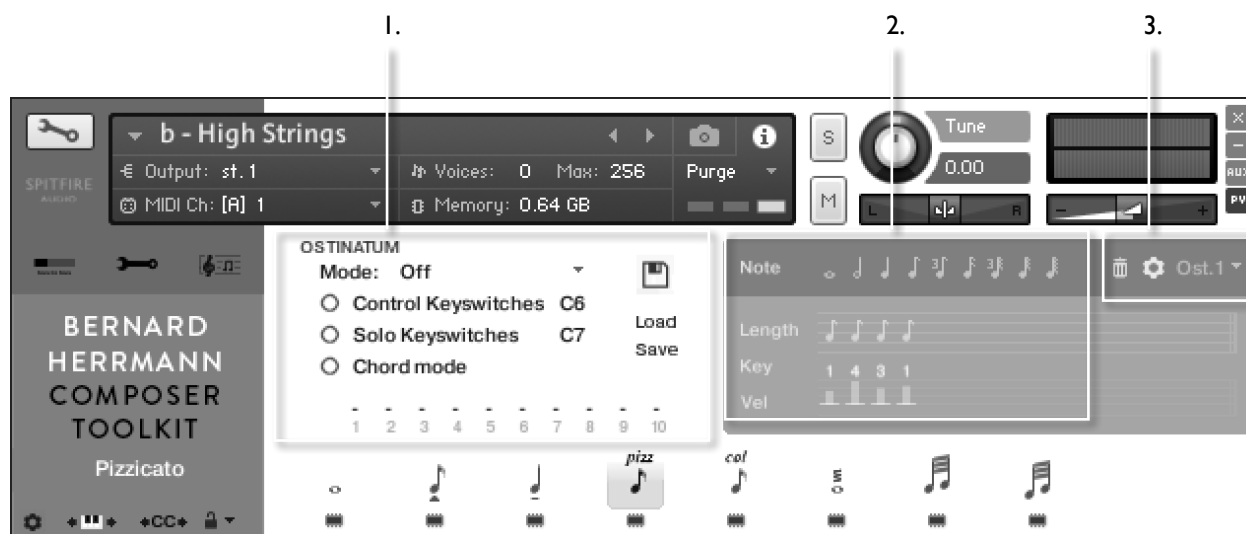
1. SETTINGS

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 dropdown 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 unmutes all tracks so that they play together. The next eight solo each individual track respectively. When you press them, everything but that keyswitch's track is muted.

The second image shows how you could programme crazy 16ths on track 1, lazy halves on track 2, and then keyswitch between them in your DAW.

THE SYNTHS

Inspired by Herrmann's use of synthesisers in combination with orchestral material, the synths we created with a combination of different classic synthesizers, reamped into the room. They allow you to add synth lines that instantly blend with the orchestral material. The synths are located in the "advanced" folder.
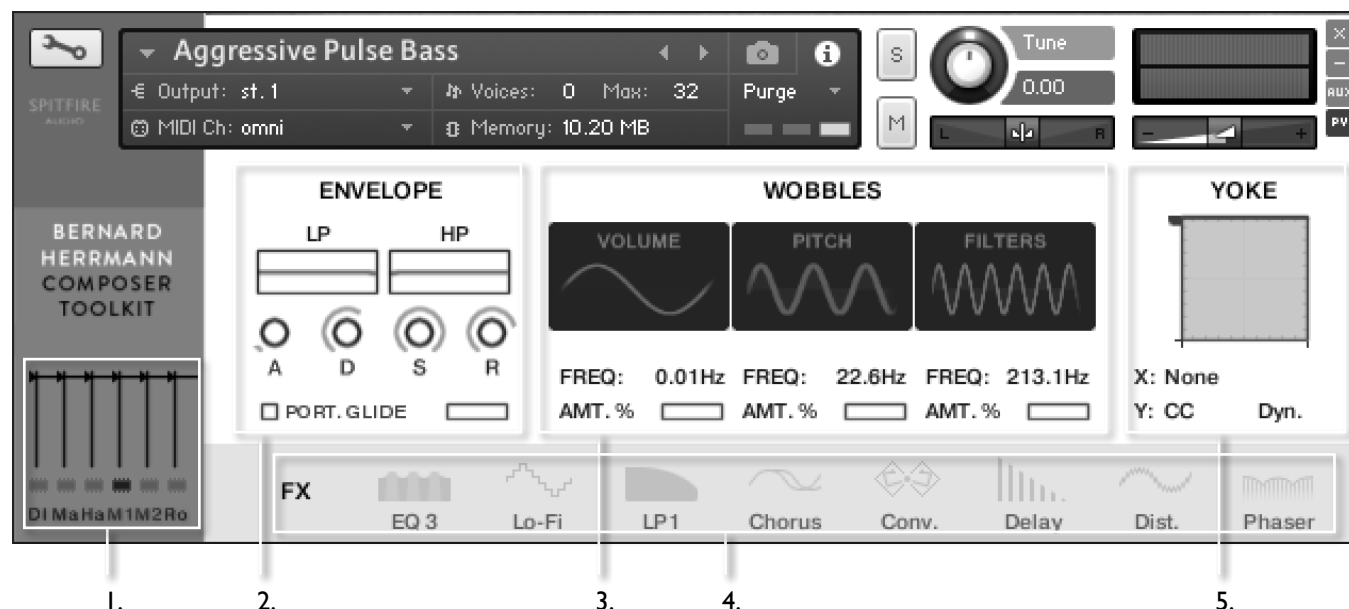
1. Mics & Mixes

This enables you to to load and mix these different mono signal paths.

Use the chips beneath the faders to load or unload different "microphones" or channels 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.

For more information regarding Kontakt audio channels & routing please consult your Kontakt User Manual.

2. General Controls

Lo & Hi Pass Filters
LPF = Low, HPF = Hi. For some, a counter intuitive industry standard in titling. Adjust the graph on the LPF to chop off the top end, HPF to chop off the bottom. So if you want to reduce your fizzing synth sound to a muted sub tone drag the LPF graph from right to left.

A.D.S.R.
Attack, Decay, Sustain Release envelope. These knobs will adjust the shape of the sound from a volume point of view. Adjust attack to make the sound come thudding in or gradually fade in. Adjust release to make the sound go from a sharp end or off to a gradual decay. For an 808 style bass pull up one of the subbier sounds and pull the attack all the way to the right. The release to about mid way (to taste) and play some short notes.

Portamento Glide On/ Off Toggle
Click this to make the sound monophonic (so you only can play one note at a time) and to activate the portamento glide function.

Portamento Glide Amount
Now that your Glide toggle is on hold one key down and whilst holding press another. Because you're in monophonic mode the sound will transition from the first pitch you depressed to the second, this fader controls the time this transition takes.

3. Wobbles

Three modulator windows that give you wobble, or sometimes, WAB WAB WAB! Adjust the AMT to effect the amount of WAB WAB.

Wobble Frequency
Adjust the graph to change the frequency or speed of your wobbles. For tempo sync'd modulators, this will tune coarsely to provide you with 8th triplet 16th, etc etc.

4. FX Parameter Display

We've pre-loaded a selection of FX. Activate by clicking the FX icons along this bar.
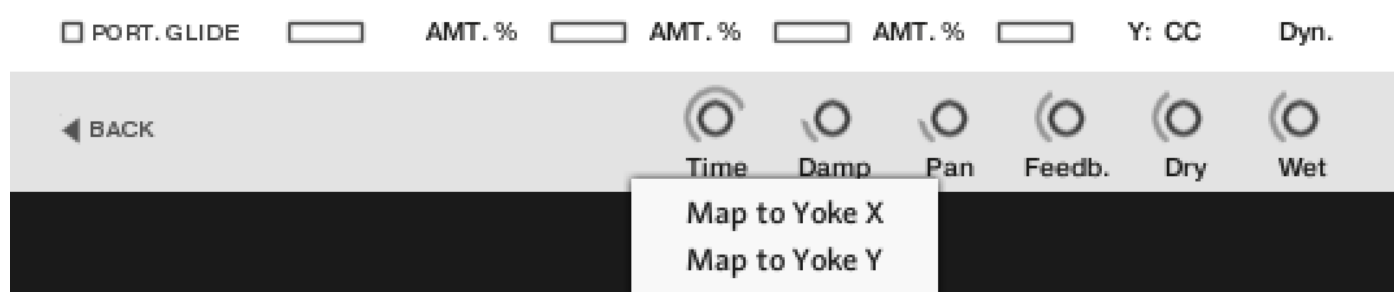
...and if you wish to have real-time control map CTRL click on the controllers to map to...

5. The Yoke

The yoke is a dual FX controller that adjusts your FX parameters in real time for fantastic sequencing options. Y = vertical controller, X = horizontal. Scroll down to select which FX you wish to control.

You can also alter the FX parameters further and map them direct to the Yoke controller. Command/ Right Click on the FX Icon you'd like to access additional parameters for. You can map them to the yoke by clicking on the name of the parameter or by selecting the parameter just under the yoke itself.

Yoke X&Y FX Parameter Selector
Determines which parameter from your selected FX you wish to map to the X or Y yoke controller.

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 5 INSTALLED.

RECOMMENDED SPEC:
The better your computer, the better the performance of any Spitfire module. But not to worry if you're not spec'd up to the hilt. All programs are provided with a set of parameters that enable you to dial back the CPU demands of any given patch. But moving forward, we're confident this module will keep your computer busy for many years to come! We recommend a combination of high processor speeds, a good chunk of memory and a devoted 7200rpm eSata, USB2 or 3, or Thunderbolt audio 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 recommended).

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

DRIVES:
USB2 or USB3, Thunderbolt, or eSata, 7200rpm. Ask your dealer for drives that are suitable for "AV use". If you can afford an SSD drive, this will massively increase the power of your system. Instead of 7-9ms seek time, the usual seek time is <0.1ms. These are fast enough to run a patch 'Purged' of all its samples, and they can load on the fly as you play the notes. You can also reduce your sampler's "pre-load" buffer 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! We heartily endorse Plogue Bidule (http://www.plogue.com) as a virtual rack/ routing system.

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, 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.

APPENDIX C1 - ARTICULATION LIST

STUDIO ORCHESTRA:
Chords (Common)
Chords (Maj)
Chords (Min)
Chords (Other)
FX 1 (Expand Contract Clusters)
FX 2 (Cluster Stabs)
FX 3 (Slides Up And Down)
FX 4 (Slides Up And Down Strings Only)
FX 5 (Cluster Swells)
FX 6 (Chatter)
Long
Short

HIGH STRINGS:
Long nv/v/mv
Long CS nv/v
Long div by desk normale/CS nv/v
Long Sul Pont
Long CS Sul Pont
Long Sul Tasto
Long Harmonics
Long Flautando
Long Marcato Attack
Tremolo
Tremolo CS
Tremolo Sul Pont
Tremolo CS Sul Pont
Trills (Min2, Maj2, Min3, Maj3, Perf4)
Short Spiccato
Short Spiccato CS
Brushed Spiccato
Brushed Spiccato CS
Short 0'5
Short 1'0
Pizzicato
Short Harmonics
Pizzicato Bartok
Col Legno

HIGH STRINGS OCTAVES:
Legato (fingered, portamento)
Long nv/v/mv
Long CS nv/v
Tremolo
Trill (Min2, Maj2)
Short Spiccato

HIGH STRINGS HALF SECTION:
Legato (fingered, portamento)
Long nv/v/mv
Long CS nv/v
Long Flautando
Tremolo
Tremolo Sul Pont
Short Spiccato
Short Spiccato CS
Pizzicato
Short 0'5
Short Harmonics
FX 1 (Cluster Slides)
FX 2 (Cluster Stabs)
FX 3 (Chatter)
FX 4 (Cluster Swells)

LOW STRINGS:
Legato (fingered)
Long nv/v/mv
Long CS nv/v
Long Sul Pont
Long CS Sul Pont
Long Flautando
Long Harmonics
Long Marcato Attack
Tremolo
Tremolo CS
Tremolo Sul Pont
Tremolo CS Sul Pont
Short Spiccato
Pizzicato
Short Bartok
Col Legno
FX 1 (Cluster Slides)
FX 2 (Chatter)
FX 3 (Cluster Swells)

LOW STRINGS AND HORNS:
Long
Long CS
Short
Col Legno/Stopped

LOW STRINGS AND TROM-BONES:
Legato
Long
Long CS
Long CS Sul Pont
Tremolo
Short
Short CS Sul Pont

PICCOLO AND FLUTES:
Legato
Long (nv/v)
Short

CONCERT FLUTES:
Legato
Long (nv/v)
Short
Trill (Min2, Maj2)
Long Flutter
FX 1 (Rips)
FX 2 (Upper Mordent Major)
FX 3 (Upper Mordent Minor)

MIXED FLUTES:
Legato
Long (nv/v)
Short
Trill (Min2, Maj2)
Long Flutter
Chords (Common)
Chords (Maj)
Chords (Min)
Chords (Other)
FX 1
FX 2

FLUTES AND CLARINETS:
Legato
Long (nv/v)
Long (Octave)
Short
Short (Octave)
Trill (Min2, Maj2)

LOW WINDS:
Legato
Long
Long (Octave)
Short
Short (Octave)

COR ANGLAIS, CLARINET AND TRUMPET:
Long (nv/v)
Short
Trill (Min2, Maj2)
FX (Chatter)

OBOES, BASSOONS AND HORNS:
Long (nv/v)
Short
FX

TRUMPET AND XYLOPHONE:
Long
Short
Short Muted
Long (Octave)
Short (Octave)
Short Muted (Octave)

HORNS:
Long (mf,ff)
Short (mf,ff)
Chords (Common)
Chords (Maj)
Chords (Min)
Chords (Other)
MID BRASS:
Long (nv)
Short
FX 1 (Chatter)
FX 2 (Falls)

TROMBONES:
Long (nv)
Long Muted (nv)
Short
Short Muted

TROMBONES AND TIMPANI:
Long
Short

HARP AND CELESTE:
Long
Short
Chords (Common)
Chords (Maj)
Chords (Min)
Chords (Other)

HARP AND VIBRAPHONE:
Long
Long Bowed
Short (Vibes On)
Short (Vibes Off)
Short Hotrods (Vibes Off)
Chords (Common)
Chords (Maj)
Chords (Min)
Chords (Other)

ONDES MARTENOT:
Long Ondes
Long Ondes Gong
Long Ondes Tutti
Long Ondes Wind Strings
Short
FX 1 (Trills)
FX 2 (Birds)
FX 3 (Clangers 1)
FX 4 (Clangers 2)
FX 5 (Clangers 3)

PERCUSSION:
Anvil
Bass Drum
Bongos
Bowed Cymbals
Brake Disks
Claves
Congas
Cymbals
Exhaust Pipe
Lion Roar
Ogororo
Quica
Snare Drum (brushes)
Snare Drum (snares off)
Snare Drum (snares on)
Steel Plate
Temple Block
Timbales
Trash Can
Woodblock

TIMPANI:
Hits Sustained
Hits Damped
Hits Super Damped
Rolls
Soft Stick - Hits Sustained
Soft Stick - Hits Damped
Soft Stick - Rolls
Hot Rods - Hits Sustained
Hot Rods - Hits Damped

SYNTHS:
Aggressive Pulse Bass
Aggressive Pulse Pad
Belly Of The Deep
Cheese Bass
Cheesy Lead
Clockwork Pulse
Detune Square Bass
Detune Square Lead
Eyeball Pad
Flute 1
Flute 2
Flute Sweep
Galactic Pad
Herrmann Detune
Hollow Bass Sustain
Hollow Bass
Obie Bass
Propa Bass
Propa Sub 1
Propa Sub 2
Propa Sub 3
Raucous Sweller
Sci Fi Sweep
Soft Pulse
Soft Sub Bass
Space Bass Sustain
Space Bass
Space Lasers
Square Pad
Square Sound
Squelch Pulse Bass
Squelchy Moog
Sub Bass
Triangle Pad
Weird Noises (FX)
Wind
Wobbles In Space

APPENDIX C2 - INSTRUMENTATION

STUDIO ORCHESTRA:
8x Violin 1
6x Violin 2
4x Viola
6x Cello
4x Double Bass
2x Flutes
2x Clarinet
1x Oboe
1x Bassoon
1x Contrabass Bassoon
2x Trumpets
2x Trombones
2x Bass Trombones
1x Contrabass Trombone
1x Tuba
4x French Horns

HIGH STRINGS:
8x Violin 1
6x Violin 2
4x Viola

HIGH STRINGS OCTAVES:
8x Violin 1
6x Violin 2

HIGH STRINGS HALF SECTION:
4x Violin 1
3x Violin 2
2x Viola

LOW STRINGS:
6x Cello
4x Double Bass

LOW STRINGS AND HORNS:
8x Horns
6x Cello
4x Double Bass

LOW STRINGS AND TROM-BONES:
2x Trombones
2x Bass Trombone
1x Contrabass Trombones
6x Cello
4x Double Bass

PICCOLO AND FLUTES:
1x Piccolo
2x Flutes

CONCERT FLUTES:
12x Flutes

MIXED FLUTES:
4x Concert Flutes
4x Alto Flutes
4x Bass Flutes

FLUTES AND CLARINETS:
3x Flutes
3x Clarinets

LOW WINDS:
2x Clarinet
2x Bass Clarinet
2x Contrabass Clarinet

COR ANGLAIS, CLARINET AND TRUMPET:
1x Cor Anglais
1x Clarinet
1x Trumpet

OBOES, BASSOONS AND HORNS:
2x Oboes
2x Bassoons
2x French Horns

TRUMPET AND XYLOPHONE:
1x Trumpet
1x Xylophone

HORNS:
8x French Horns

TROMBONES:
2x Trombones
2x Bass Trombones
1x Contrabass Trombone

TROMBONES AND TIMPANI:
2x Trombones
2x Bass Trombones
1x Contrabass Trombone
1x Timpani

HARP AND CELESTE:
1x Harp
1x Celeste

HARP AND VIBRAPHONE:
1x Harp
1x Vibraphone

ONDES MARTENOT:
1x Ondes Martenot

PERCUSSION:

Bass Drum - Hits	C2
Bass Drum - Rolls	D2
Snare Drum (snares on) - Hits	F2
Snare Drum (snares on) - Rim Shots	G2
Snare Drum (snares on) - Flams	A2
Snare Drum (snares on) - Rolls	B2
Trash Can - Body Hits	C3
Trash Can - Lid Hits	D3
Timbales - Hits	F3 - G3
Timbales - Rolls	A3 - B3
Congas - Hits	D4 - E4
Congas - Rims	F4 - G4
Congas - Soft Stick Hits	A4 - B4
Steel Plate (small) - HardBeater Hits	D5
Steel Plate (small) - SoftBeater Hits	E5
Steel Plate - HardBeater Hits	F5
Steel Plate - SoftBeater Hits	G5
Bongos - Hits	A5 - B5
Anvil	F6 - A6
Claves	C7 - F7

TIMPANI:
6x Timpani

APPENDIX D - MIC & MIX ACRONYMS

STANDARD ARRAY:
(available as part of the 'core' product)

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.

C2 - Close mic 2. Where it is an individual section this will often be two different options to play with for the sound of the close mic. Where it is a combination of two instrument groups, they will be a sum of close mics for each group (e.g. in _Low Strings and Horns_, C1 is the close signal for the Low Strings and C2 is the close signal for the Horns).

T - Tree. This refers to the "Decca" tree of three mics placed above the conductor's 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.

T2 - Tree 2. An alternative decca tree option

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:

MX1 - Mix 1 Created by Simon Rhodes, this is a good overall balance of the mics, with a good bit of the sound of the room.

MX2 - Mix 2 Created by Simon Rhodes, this is a overall tighter sound.

SYNTHS:

DI - Direct Injection

Ma - Marshall Amplifier with a close mic

Ha - Hammond Leslie Cabinet

M1 - Mix 1

M2 - Mix 2

Ro - Room Mics - a mix of the Tree, ambient and outriggers

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 (sustain)
1	Generic
2	Alternative
3	Octave
4	Octave muted
5	Small (1/2)
6	Small muted
7	Muted
8	Soft (flaut/hollow)
9	Hard (cuivre/overb)
10	Harmonic
11	Temolo/flutter
12	Tremolo muted
13	Tremolo soft/low
14	Tremolo hard/high
15	Tremolo muted low
16	Vibrato (molto vib)
17	Higher (sultasto/bells up)
18	Lower (sul pont)
19	Lower muted

Legato
20	Generic
21	Alternative
22	Octave
23	Octave muted
24	Small
25	Small muted
26	Muted
27	Soft
28	Hard
29	Hramonic
30	Tremolo
31	Slow (port/gliss)
32	Fast
33	Run

34	Detache
35	Higher
36	Lower

Short
40	Generic
41	Alternative
42	Very short (spicc)
43	Very short (soft)
44	Leisurely (stacc)
45	Octave
46	Octave muted
47	Muted
48	Soft (brush/feather)
49	Hard (dig)
50	Tenuto
51	Tenuto Soft
52	Marcato
53	Marcato Soft
54	Marcato Hard
55	Marcato Long
56	Plucked (pizz)
57	Plucked hard (bartok)
58	Struck (col leg)
59	Higher
60	Lower
61	Harmonic

Decorative
70	Trill (minor2nd)
71	Trill (major 2nd)
72	Trill (minor 3rd)
73	Trill (major 3rd)
74	Trill (perfect 4th)
75	Multitongue
76	Multitongue muted

80	Synced - 120bpm (trem/trill)
81	Synced - 150bpm (trem/trill)
82	Synced - 180bpm (trem/trill)

Phrases & Dynamics
90	FX 1
91	FX 2
92	FX 3
93	FX 4
94	FX 5
95	FX 6
96	FX 7
97	FX 8
98	FX 9
99	FX 10
100	Up (rips/runs)
101	Downs (falls/runs)
102	Crescendo
103	Decrescendo
104	Arc
105	Slides

Various
110	Disco up (rips)
111	Disco down (falls)
112	Single string (Sul C/G/etc.)

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.

Q: HOW DO I AUTHORISE A KONTAKT PLAYER LIBRARY ON A MACHINE NOT CONNECTED TO THE INTERNET?

You have to use the Native Instruments Service Centre. There is an offline system. Copy it over to the offline machine, add the library as usual, then run Service Centre - it will generate a file that they can copy back to the online machine. Its explained as you do it. NB this is not possible in Kontakt 5.6.8 and all libraries must be authorised on a internet connected machine.

Q: HOW DO I DOWNLOAD AND AUTHORISE A KONTAKT FULL LIBRARY ONTO MY MAIN RIG IF IT ISN'T CONNECTED TO THE INTERNET?

Simply use our download manager on a computer that IS connected, transfer over either over your LAN or via a shuttle drive. No further authorisation is required.

Q: THE LIBRARY KEEPS DISAPPEARING FROM MY KONTAKT 'LIBRARIES' PANE OR I CAN'T ADD THE LIBRARY - IT FAILS EACH TIME I TRY?

This is a known Kontakt bug. Please contact our support team to obtain a small file which should enable you to work around the problem.

Q: "NO LIBRARY FOUND" ERROR MESSAGE

If you are getting the error message "No Library Found" in Kontakt when trying to add a new library, it's because the product you have purchased isn't a "Player" library (also see appendix B) You will therefore need to load the files manually into Kontakt to load them. This can be done via the 'Files' browser, top left hand side of Kontakt, or by simply dragging the instrument files over the Kontakt window to load them.

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 Library Manager 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 Library Manager app. To reset both your entire library download or the latest update;

Open up the Library Manager 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 (journalled) on Mac.

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

• Library Manager 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 Library Manager downloader aims to use as much of the available bandwidth as possible to give you the quickest possible speeds, and may take several minutes to reach its peak.

Q: CAN I INSTALL ON MORE THAN ONE COMPUTER?

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

Q: CAN I TRY BEFORE I BUY?

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

Q: MY LIBRARIES ARE NOT SHOWING UP IN MY LIBRARY MANAGER

A handful of customers may find that when they log into their Library Manager, 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 library manager 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 library manager 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 library manager 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 Library Manager app, we have incorporated the ability to reset your own downloads. This can easily be done via your Library Manager app.

Open up the Library Manager 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 > 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 Library Manager App, we would advise downloading the latest version of the library manager 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 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 DO I DOWNLOAD PRODUCTS ON MAC OSX 10.6.8?

Our Library Manager only supports Mac OSX 10.7 and upwards. If you do not have a system with 10.7 upwards installed, or do not wish to update your system there is a way of creating an external boot drive that will work with our Library Manager app. Alternatively, you can download the library to any other Mac or PC that is compatible with the Library Manager and then simply copy everything over to your own machine. We suggest doing this via an External Hard drive.

Q: NON PLAYER INSTRUMENT OPENING IN 'DEMO' MODE?

If you are seeing the 'demo' button and your patches are timing out, it means you are trying to run a non-player library in the Kontakt Player software. You need to upgrade your Player to the full version of Kontakt. We try very hard to ensure at all stages of our website that everyone understands which libraries need full Kontakt and which need the Player only. Essentially our Player libraries don't need the full Kontakt because we have paid the license fee on our customers' behalf. This is more financially viable on our higher priced libraries. If you have any of our Player libraries you can qualify for a discount on the full version of Kontakt. See the following page for more information: https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/pricing/crossgrade-offer/

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.

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 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.

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. This is usually 2-4 days after you order.

Q: I'VE FORGOTTEN MY PASSWORD?

If you have forgotten your password, please go to 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.