

(X T E P N I D E N D O)

SONICCOUTURE

(U S E R G U I D E)

SONICCOUTURE

XTENDED PIANO

CONTENTS :

INSTALLATION

XTENDED PIANO XPLAINED

SAMPLING XTENDED PIANO

THE KONTAKT INSTRUMENTS

THE PRESETS

SUPPORT

E.U.L.A

INSTALLATION

TO UNPACK THE DOWNLOAD RAR FILES

1. You need all parts of the RAR fully downloaded to the same location.
2. **IMPORTANT** - Only double click the first RAR file to unpack the library files. (You cannot unpack part 2 by itself.)

You should now have a folder named "SC Xtended Piano".

Put this somewhere safe on your hard drive.

If you do not own Kontakt, you will need to download and install the free Kontakt player which you can do here ; [Kontakt Player Download Link](#)

TO ADD THE LIBRARY AND AUTHORIZE IN KONTAKT

1. In Kontakt or Kontakt Player open the Browser on the left (the folder Icon at the top).
2. In the Libraries tab at the top of the Browser go to "Add Library"
3. Click and use the dialogue window to navigate to and point Kontakt to the location of the *Xtended Piano* Library folder. This will add it to the Kontakt Library list AND to the Service Center.
4. If Kontakt asks you to Activate the library, the *NI Service Center* program will launch and you will need your serial number to authorize the software.

If Kontakt *doesn't* ask you to authorize, you can force it to by clicking the little "Activate" button in the upper right corner of our Xtended Piano Library logo, in the Browser/Libraries list. It will then prompt you to launch the Service Center.

(You will find your serial number in the email you were sent when you purchased. If for some reason you haven't received this yet, you can run your library in demo mode until it arrives.)

Note : After authorization, you should restart Kontakt.



XTENDED PIANO XPLAINED



WHAT IS "EXTENDED PIANO"?

"Extended" is a term usually used to describe unorthodox techniques used when playing a musical instrument in an unconventional way, to coax new timbres from a traditional instrument. Since the early 20th century, the piano has been at the forefront of this trend, with composers such as John Cage preparing the piano with nuts and bolts, and Henry Cowell composing pieces in which the performer reaches inside the piano and plucks or strums the strings. In fact, Cowell presented a collection of extended techniques for piano which included strumming the strings, plucking them, scraping them, and creating harmonics by lightly touching the string at precise points.

Other composers that have explored this territory further include [George Crumb](#) (muting the string at certain harmonics, plucking), Curtis Curtis-Smith and [Stephen Scott](#) (bowing the piano with specially designed bows).

This unorthodox approach to a musical instrument appeals to us at Soniccouture and, as most of you probably know, we released a bowed piano sampled instrument in 2008.

This new Xtended Piano collection expands on that concept, and now includes the following five extended techniques:

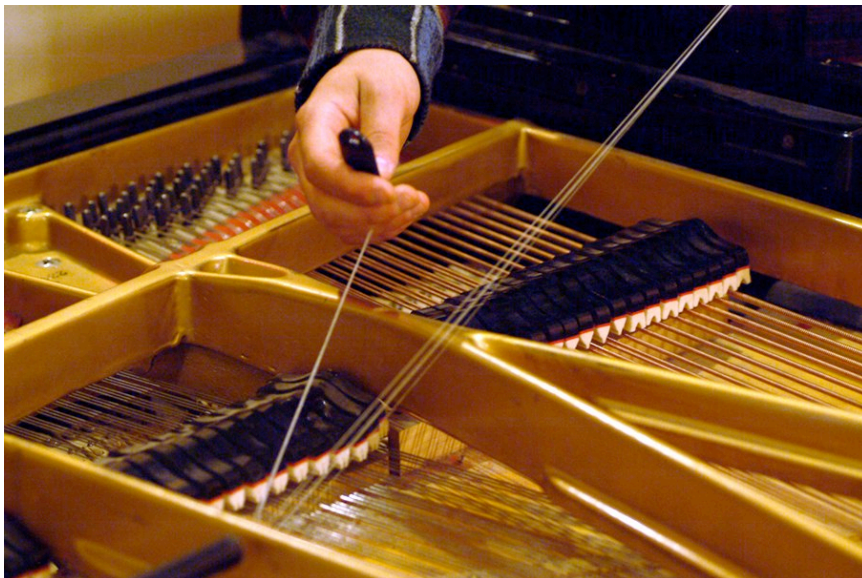
- Bowed Piano - in which the strings are bowed rather than struck
- Mute Piano - in which a harmonic is created by touching the string
- Plucked Piano - in which the strings are plucked with a guitar pick
- Mallet Piano - in which the strings are struck with foreign mallets
- Strums and Scrapes - a collection of special effects inside the piano

More details about these five techniques are found on the following pages.

THE XTENDED PIANO TECHNIQUES

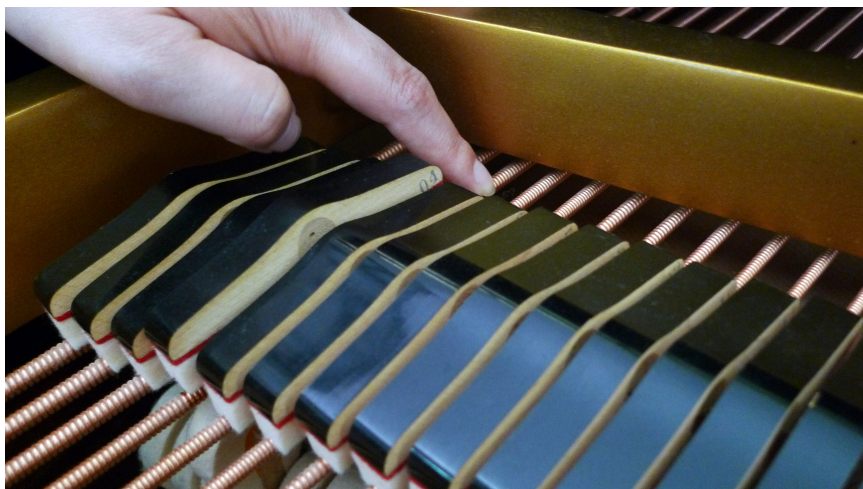
BOWED PIANO

Our bowed piano includes three articulations, two made with very long bows which are sustained (and the samples are looped). We do a sustained bow at both a soft and very loud articulation. We also include a short bow made from a tongue depressor and horsehair, which produces a short staccato sound.



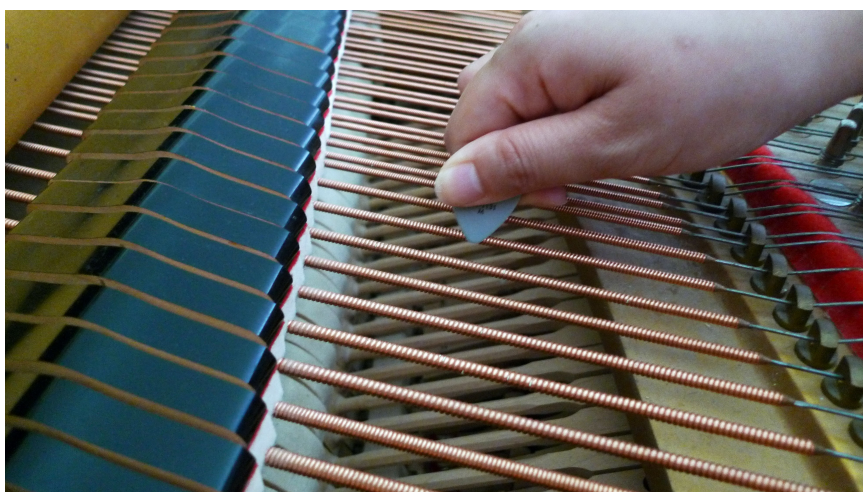
MUTE PIANO

Mute piano is a technique in which you lightly touch the finger at a nodal point on the piano string and play the key to produce a harmonic. In our library, this harmonic is the 3rd harmonic, so it sounds a 12th above the



fundamental (an octave plus a fifth). This is the harmonic most used by George Crumb, who often included Mute piano in his pieces. It is also one of the few easily produced harmonics which the performer can actually reach while still being able to play the keys.

PLUCKED PIANO



This is a technique in which the piano notes are plucked, either with the fingers or a plectrum of some sort. We used a guitar pick and recorded

plucked notes with both the piano dampers down and up. Soniccouture prefer *Jim Dunlop™ USA Nylon 0.73mm* guitar picks for picking piano.

MALLET PIANO

A piano of course has mallets itself (made of hard felt), but you can also hit the strings with foreign mallets to produce a different timbre. For this collection we recorded hitting the strings with a wooden mallet, and with a marimba mallet. The wooden mallet has a timbre reminiscent of honky-tonk or "thumb tack" pianos, like those used in ragtime during the 20's (or Nancarrow's player piano). In those days, people would put sometimes thumb tacks into the felt to make the attack of the piano much louder and brighter. We might have done a thumb tack piano ourselves, but not to a very expensive 9' grand, since it destroys the felt.

STRUMS AND SCRAPES

We also recorded a large collection of strums and scrapes, but these are not always pitched, or else include large clusters that are difficult to map as a traditional instrument. For this reason, we've named this collection of sound "SFX", and there are 127 different strums and scrapes included, one for every MIDI note.

All of the above were recorded on the same Baldwin SD-10, 9' Grand Piano.

For each of these techniques, we programmed Kontakt slightly differently, so please have a look at the Kontakt Instruments section to see how best to control each of the above.

SAMPLING XTENDED PIANO



Both the original *Bowed Piano* recording and the new *Xtended Piano* sample sets were recorded in the same room, using the same piano. This ensures there is complete sonic compatibility between the sample sets.

Stereo pairs of microphones were placed above the soundboard of the piano (omnis), and above the keyboard area (cardioid). These recordings were then mixed down to a single stereo signal in post production to give the best balance of ambience and impact.

Xtended Piano was recorded at 24Bit 44.1khz, in Stereo.

Library Size : 2,829 samples

3.1 GB using Kontakt's Lossless Sample Compression

6 GB uncompressed

THE KONTAKT INSTRUMENTS

OVERVIEW

There are 5 *Xtended Piano* Instruments, which feature broadly similar controls ; however, each one is a little different, offering a few specialised controls for that particular instrument.

First we will look at the standard controls which are the same for each instrument, page by page :

1. THE INSTRUMENT TAB

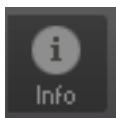


This contains a simple (**Natural**) and a more detailed (**Synth**) edit page for each instrument. You can click on the Natural or the Synth tabs at the top right of this page.

NATURAL EDIT PAGE : This has 4 control knobs, **ATTACK**, **RELEASE**, **BRIGHT** and **REVERB**. Here you can very quickly tailor the natural sound of the piano to fit into your production.

ARTICULATION LED SWITCHES : If an instrument has alternative articulations, such as Long and Short bow on Bowed Piano, you can switch between them and see which is selected using these LEDS.

(Note that for all most knobs on the instruments, a numeric value appears at the top right of the screen (above the tabs) while you're adjusting the knob. This can be useful for precise settings (see picture)



Every control also has a mouse-hover help attached to it. If you turn on the 'Show Info' pane in Kontakt, then you will see a reminder of each control's function at the bottom of the screen when the mouse is hovered over a control.)

Finally, as in many of our instruments, Command-click (or Control-click) will reset a knob to its default value.)

SYNTH EDIT PAGE : This page is for much more detailed programming and sound design. You do not ever need to use these controls if you don't want to ; if however you like to experiment, then this is the place to do it.



This page gives you access to the Filter, LFO and two envelope generators.

FILTER



- **CUTOFF** : this adjusts the main cutoff frequency of the 12 db Low Pass Filter. Different filter types may be assigned within different presets, however.
- **RES**: control of the Resonance of the main filter.
- **ENV** : controls the Filter Envelope Depth to that filter. (Note that ENV is bipolar, 0 is at the top.)
- **VEL** : provides control of the velocity to cutoff depth. Again, this control is bipolar.
- **TRACK**: controls the slope of the filter cutoff keyboard tracking.
- **HPF** : is a 6 db High Pass Filter. The HPF is not dynamic and is not affected by the filter envelope, the tracking, or the velocity.

You can bypass the FILTER section entirely with the blue LED at the top of that section.

ENVELOPE



The **ENVELOPE** section controls the **ATTACK**, **DECAY**, **SUSTAIN**, **RELEASE**, and **Velocity** sensitivity of the envelopes.

Using the drop down menu above the knobs you can access the same controls for the **Amplitude Envelope** or the **Filter Envelope**.

- When adjusting the **Filter Envelope**, the Velocity Sensitivity is bipolar.
- Also note that velocity to FEG depth is not the same as velocity to cutoff. They have a *similar* result, but velocity to Cutoff changes the base frequency of the filter, velocity to FEG depth changes the **DEPTH** of the filter from the same base frequency.

LFO



Because of the long release tails present on most of the instruments, an LFO is provided to modulate the filter and amplitude for a variety of interesting effects.

- **SPEED** controls the rate of the LFO
- **FILTER** and **AMP** control the amount of modulation for those parameters.

LAYERS



This is an unusual set of controls which gives you precise control over the layers of samples used in the instrument. Most *Xtended Piano* instruments have alternate 'round robin' samples which are used so that the same sample is not triggered twice in a row, giving a more natural sound. In this section you can also use them for interesting detuning/ensemble effects :

- **Round Robin/Stacked Layer Drop down** : sets the behaviour of the layers, either alternating them, or playing two at once.
- **Spread** : pans the layers across the stereo field if Detune is greater than 0.
- **Phase** : controls phase alignment ; align the samples exactly or offset them for a doubled, thicker sound. This again is only active if Detune is greater than 0.
- **Detune** : This detunes one layer against the other when set to anything other than 0. If the menu is in Round Robin mode it uses two different versions of the note, so that the effect is more like that of two instruments playing at once (ie. it detunes one of the possible robins against a different robin). In Stacked Layer mode, the same sample is detuned, resulting in a more traditional, and slightly more synthetic effect.

THE PERFORMANCE TAB



This page has various different variations according to which instrument you are using. Below is a guide to using the various different KSP performance modules:

STRUMMER (PLUCKED PIANO)



The Strummer is a KSP script that allows you to use a MIDI controller (CC) to virtually strum the instrument. By default this controller is set to be the Mod Wheel (CC1), but you can change this to any controller you like.

Rather than strumming every note of the instrument, the Strummer algorithm chooses only the pitches you hold down on the keyboard at that time.

For example, if you hold down a C major chord (C, E, and G), and move the strum controller you will generate a strum that includes all the Cs, Es, and Gs that the instrument contains, across the entire range. It doesn't matter what octave you hold down on your keyboard, the strummer will include all octaves of any pitch being held.

The Strummer is switched on and off with the

little blue LED at the top of the STRUMMER section. The remaining controls are as follows:

- The **STRUM** wheel is both a display of the current state of your Strum Controller, and will generate a strum if you use the mouse to turn it.
- **RANDOM** will introduce random velocity variation into your strum. The last note you play provides a default velocity for the strummer effect. But this can sound a bit artificial if your strum has a constant velocity. Introducing a bit of randomness to the strummer the result is more natural and organic sounding. RANDOM controls the range of randomness to be introduced. RANDOM only subtracts from the velocity it last receives, it will never add to it. This means you can be confident that the velocity you played your chord at is the loudest the strum will generate, and any variation will be lower than that. The range of the RANDOM velocity knob is 0 to 100.
- **MIDI CC** is the the controller that you define for the STRUMMER effect. This defaults to 1, but you can change it to any other MIDI controller if you prefer, and save the instrument with your own preference.
- **INVERT** inverts the direction of the strum. By default, the STRUMMER will map the CC from low to high. If you choose INVERT, then the STRUMMER will map the CC from high to low.
- **MUTE INPUT** allows you to mute the incoming MIDI so that *only* the STRUMMER is heard. In other words, it mutes the notes you play, but not the output of the STRUMMER.

DAMPING KEY OFF (MUTE PIANO)



This Module allows you to set the level of the key-off sound on the Mute Piano instrument.

This is the sound that occurs when you release the key and the damper is released to stop the string. This can greatly enhance the realism if used with subtlety. You can also turn it off completely with the Blue LED in the top right corner.

As with all the knobs on our instruments, you can control this with a MIDI CC if you like.

PITCH MODE :

This Menu gives you two options, “Piano Key” and “Sounding Pitch”.

When you play a “Mute” you are actually playing a harmonic of the piano key you strike. (In our instrument, it’s the 3rd harmonic, which sounds a 12th above the fundamental pitch of the piano key you play.)

Using the Pitch Mode drop down menu, you can choose to have Kontakt play at the Sounding Pitch of that harmonic (so the note you play is the same note you hear, but in fact your MIDI input is actually transposed 19 semitones to achieve this). Or you can choose the Piano Key mode, which is as if you were doing the “mutes” yourself, so the sounding pitch is the result you would get from playing that Piano Key.

JAMMER (MUTE PIANO, MALLET PIANO)



Jammer is a performance tool for generating random-ish notes. It’s similar to an arpeggiator in that notes you hold down will be played automatically, but the note triggered is randomly selected from those you hold down, and there are controls for extra randomizers too.

The **Blue LED** switch enables or disables the Jammer effect. When the Jammer is ON, all throughput of MIDI is disabled, you only hear the output of the Jammer.

RATE allows you to choose the repeat speed.

This is set in note values, and will always sync to the tempo of Kontakt or your host sequencer.

MW VEL is a depth setting that allows you to add or subtract velocity using the Modulation Wheel. This will affect notes already held down so you can make swells or fades while the Jammer is already rolling.

VEL will add or subtract a random amount of velocity for each note, up to a maximum that you set. This is always in relation to the last played velocity you triggered with your keyboard or sequencer.

NOTE will add or subtract a random value for the MIDI note.

OCTAVE will randomly add an octave or more (maximum 3) to the generated notes. Note that Octave only introduces added octaves, not subtractions.

TIMING is best used very subtly if you want to introduce a bit of “human error” into the timing. At higher settings it gets a bit avant-garde.

KEY DROP DOWN MENU : here you can restrict jammer to play a particular scale. You can choose which scale to limit the output of the Jammer to using this menu. If you play a note that is not in the scale chosen, the script will choose the *nearest* note that is within the scale and play that one instead.

If you want to record the output of the Jammer into a MIDI track, you need to turn on “Send MIDI to outside world” in Kontakt’s Options page, under the Audio Engine tab. In the “choose options” drop down, you can turn on “script generated notes”, and Kontakt will then send Jammer’s notes out. You then need to assign a MIDI track to record these notes as you play the Jammer. Be careful you don’t route the generated MIDI thru your sequencer back into Kontakt again.

ARTICULATIONS - DAMPING (PLUCKED PIANO)



This module allows you to define keyswitches to change between damped and undamped articulations for the Plucked Piano instrument.

You can also adjust the relative levels for each articulation using the knobs.

ARTICULATIONS - MALLET TYPE (MALLET PIANO)



As above, this allows you define keyswitches and adjust relative levels of the different mallets

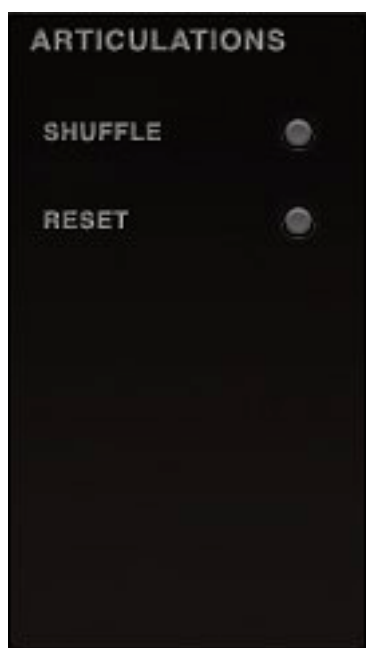
ARTICULATIONS - BOW TYPE & BOW STRENGTH (BOWED PIANO)



This module allows you to crossfade between soft and hard bowing, using the knob or the Mod Wheel of your MIDI controller.

You can also define the keyswitches for the sustained and short bow articulations.

ARTICULATIONS - SHUFFLE (SFX PIANO)



This very simple module randomly shuffles the 127 keys in the SFX Piano instrument. Click the **SHUFFLE** LED to do this, and you use the **RESET** LED to, well, reset it to our default.

This is useful because 127 MIDI notes is a lot to check through one by one, and if you simply hit Shuffle, you might quickly discover some samples you didn't expect.

This could also be automated via MIDI to facilitate random compositions.

GLISSANDO (BOWED PIANO)



This module is used to create horror-movie type Glissando effects.

AMOUNT : The pitch will keep sliding if Amount is anything but zero... however the speed at which the pitch moves depends both on the “Amount” and the “Time”. A shorter time moves the pitch quicker.

TIME : because here is no maximum or minimum pitch or destination pitch, the Amount refers to a pitch change (in half-cents) that is moved every so many milliseconds (TIME). You can go below the threshold of sound and way up

into aliasing, if you want. Kontakt doesn't complain for a long long way beyond normal pitch ranges. In this respect, Glissando GIVES a very different result than using a “glide” patch.

You can assign a MIDI controller to control either parameter, and this is really when it gets interesting since you don't have to re-start a note to change its direction or glide speed.

The LED switch in the top corner switches the effect on or off, and can also be assigned to a MIDI Controller.

THE EFFECTS TAB



Each of the *Xtended Piano* instruments has the same Effects page : select the Kontakt tab below the main panel, and the view will change to the effects panel. All of these effects can be turned on and off with the blue LED at the top right of their section. **N.B. This will save CPU if you turn them off, especially in the case of the REVERB since this is a Convolution effect.**

Watch the top right of the panel for a display of numeric values of settings you make with knobs in this section.

On the next page we'll run through the functionality of each effect processor.

TAPE



TAPE is a combination of effects.

DRIVE provides a tape saturation effect.

COMP sets the threshold for the compressor.

RATIO sets the compression ratio.

HIGH EQ and **LOW EQ** provide a bell filter boost at around 10khz and 150hz respectively.

PHASER



MIX sets the amount of dry/wet signal.

You have four smaller knobs to control the **SPEED**, **DEPTH**, **FEEDBACK**, and **PHASE** of the PHASER effect.

If you experience clipped or 'hot' levels from the Xtended Piano instruments, trim down any effects MIX knobs that may be active. When all four effects are running, it can increase the overall gain quite a lot.

The effect can be bypassed using the blue LED switch.

DELAY



MIX sets the amount of dry/wet signal.

You have four smaller knobs to control the **TIME**, **DAMPING**, **FEEDBACK**, and **PAN** of the **DELAY** effect.

There is also a switch to change between **SYNC** delay and free delay.

If you are in SYNC mode, the TIME knob displays sixteenth note values.

The effect can be bypassed using the blue LED switch.

REVERB



MIX sets the amount of dry/wet signal.

You have two smaller knobs to control the **SIZE** and **HPF** (High Pass Filter) of the REVERB.

The **REVERB TYPE** drop down menu gives you a selection of some of our favourite impulse responses. These are divided into 'Rooms' and 'SFX' - the later for more creative, sound design effects. Two 'Piano Cabinet' impulses taken from the Baldwin piano during recording are included, and loaded up by default. These give a natural resonance to the sound.

If your CPU seems strained when using the instruments, please turn off REVERB first. The Convolution effect is the most CPU intensive aspect of the instruments. The longer the REVERB impulse response time, the more CPU will be used to process it.

The effect can be bypassed using the blue LED switch.

SUPPORT

If you have any problems or questions relating to the use of this product, please feel free to contact us. You can either email us at :

customerservices@soniccouture.com

or we have a support forum within the KVR Audio community, which can be found here :

[Soniccouture Support Forum](#)

We will always endeavour to reply to any enquiry within 12 hours, but do bear in mind the differences in time zones, so please be patient!

E.U.L.A.

END USER LICENSE AGREEMENT

PREFACE: This End-User License Agreement ("EULA") is a legal agreement between you and Soniccouture LTD for the Soniccouture product accompanying this EULA, which includes computer software and may include associated media, printed materials, and online or electronic documentation ("Software"). By installing, copying, or using the software, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, you may not use the software.

The software is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The software is licensed, not sold.

Soniccouture Ltd grants the Owner of a Soniccouture product the right to create finished musical works and performances using the sounds and software that comprise the Soniccouture product.

The making of sample libraries in any form, commercial or otherwise, using Soniccouture audio or software (be they single hits, loops, fully mixed audio clips, or scripts) is STRICTLY FORBIDDEN without express written agreement of Soniccouture Ltd, and violations will be prosecuted to the full extent of international and local copyright law.

The ownership of all title and copyrights in and to the Software (including but not limited to any images, photographs, animations, video, audio, music, text, and "applets" incorporated into the Software) is fully asserted by Soniccouture Ltd.

The Owner may only install and use Soniccouture libraries and software on multiple computers strictly under the following conditions: where multiple computers comprise part of a single composition workstation for a composer; or where the Owner has two non-concurrent sites of work, for example a studio desktop and a laptop for live performance.



The Owner may not transfer, modify, rent, lease, loan, resell, distribute, network, electronically transmit or merge the Software.

DISCLAIMER OF WARRANTY: The software is provided "as is" and without warranty of any kind. The entire risk arising out of the use or performance of the software and documentation remains with user. To the maximum extent permitted by applicable law, Soniccouture further disclaims all warranties, either express or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the software, and any accompanying hardware. To the maximum extent permitted by applicable law, in no event shall Soniccouture be liable for any consequential, incidental, direct, indirect, special, punitive, or other damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of this EULA or the use of or inability to use the software, even if Soniccouture has been advised of the possibility of such damages.