

USER MANUAL

# HAMMERS

## BY CHARLIE CLOUSER

SPITFIRE AUDIO

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# INTRODUCTION

*Make an impact with this comprehensive collection of drums and percussion instruments. Created in collaboration with composer Charlie Clouser (Saw, Wayward Pines, Nine Inch Nails), Hammers features more than 1,000 sounds across 58 drums, including detailed hits, ensembles, performance loops, and genre-bending warps. With this selection of explosive drums, inspired by Charlie's extensive experience in film scoring, rock, and industrial production, composers will have a uniquely powerful tool for creating hard-hitting rhythms.*

*Supercharge your compositions with this crucial assemblage of instruments, recorded in a Brutalist space composed of concrete, glass, and steel, allowing for a uniquely sharp attack and controlled reverb. This is a must-have for composers and producers of all levels. Create intricate patterns, or use the awesome performance loops for instant inspiration, elevating your craft for 2021 and beyond.*

## QUICK SPECS

### MAC SYSTEM REQUIREMENTS

Mac OSX 10.10 - Mac OS 11

Minimum: 2.8GHz i5 minimum (quad-core), 8GB RAM.

Recommended: 2.8GHz i7 (six-core), 16GB RAM.

Intel and M1 Macs supported 64 bit DAW required (32 bit DAWs not supported)

Machine must be connected to the internet during install

### PC SYSTEM REQUIREMENTS

Windows 7, Windows 8, or Windows 10 (latest Service Pack, 64-bit)

Minimum: Intel 2.8 GHz i5 (quad-core) or AMD Ryzen 5.

Recommended: Intel 2.8 GHz i7 (six-core) or AMD R7 2700.

Machine must be connected to the internet during install.

- 1060 Sounds
- 132 Techniques
- Disk space required: 100 GB
- Disk space required during install: 100 GB
  
- Dedicated plugin (AU, VST2, VST3, AAX)

# WELCOME

## THE ARCHITECT'S BRUTALIST DREAMS

Informed by Charlie Clouser's years of experience producing bands like White Zombie and playing keyboards in Nine Inch Nails, as well as composing music for all nine of the SAW films, Resident Evil: Extinction, Wayward Pines, and others, this library offers music makers a wide selection of widescreen drum sounds to fit any production.

Two and a half years in the making, from ideation to execution and completion, with Charlie personally obsessing over every element, from development to recording and processing. Hammers is the ultimate result of a perfect marriage of Charlie's Brutalist, industrial vision and experience in producing and composing, combined with Spitfire Audio's comprehensive approach to sampling. The hits and performances captured for this release are instruments and techniques that Charlie has developed and used in his own productions for years, recorded in exhaustive detail, immediately accessible for broadcast-ready sounds.

To achieve this vision, all of the performances were captured in Charlie's own recording space—a Brutalist environment consisting of 23-foot ceilings, concrete, glass, and steel. This is the very space in which Charlie has recorded all of his scores and productions over the last 15 years. In order to obtain performances that have a sharp attack but also detailed low end, this was the environment that was needed. For further control over your production, you have the choice of up to 12 signals to customise and warp your sound, including 3 personal mixes by Charlie Clouser. The resulting sounds are informed by industrial and rock production techniques, but all have been recorded, developed, and presented in a cinematic style that is perfectly tailored for all sorts of action, drama, horror, TV

procedurals, and game music.

## DEVILISH DETAILS

Hammers was specially designed so that you can dive deep into the details to create complex, dynamic performances, but it remains very quick and intuitive. Further than the incredible number of mics, mixes, signals, and reverb options, Charlie Clouser and the Spitfire Audio engineering team have worked to develop customisations in the mapping of the performances inside the GUI that are unique to this library, and are based on the experience Charlie has from his years programming and composing with drums.

A custom “key brick” layout was developed by Charlie to allow for a wide range of MIDI performance styles, with total consistency across all of the drum types in Hammers. Laying out each drum across six adjacent keys following the same order (Hit, Ruff, Hit, Flam, Hit, Roll) allows you to play the hits and ornaments in between them for quick improvisation. This then repeats up the keyboard giving you the option to move MIDI performances between drums by simply dragging the MIDI information up or down the keyboard or to other instances of Hammers. Except for a few of the miscellaneous Scrap Metal sounds, this mapping scheme is completely consistent across every drum type, so it's a matter of seconds to take a finished performance from the Darbukas and hear it playing back perfectly on the Frame Drums, Surdos, Roto-Toms, or any instrument in the library.

Other unique features available in Hammers include Reverse, Normalize, and Retro Pitch mode. The Reverse feature is very useful for modern hybrid composers across sounds in Loops, Warps, and Hits sections, with the ability to play in sync with the host tempo.

Normalize appears as a single knob in the FX page, and has the effect of raising the level of the quieter samples until the quietest samples are effectively at the same loudness as the loudest samples. And Retro Pitch mode is provided as an alternative to the various time-stretching modes for host sync. With Retro Pitch mode enabled, the samples are not time-stretched to match the playback tempo of your project; instead, they are simply shifted up or down in pitch. While the pitch will be different from the original recording, the transients are immune from any effects of time-stretching and remain crisp and clear. Retro Pitch is a great option to explore for creative sound design and extends the range of possibilities you can discover within Hammers.

Due to the scale of Hammers we recommend watching the walkthrough to get the best overview of this drum library. And for a list of patches see [Appendix A on page 33](#) of this manual or check out the “What’s Included” section found at the bottom of the product page.

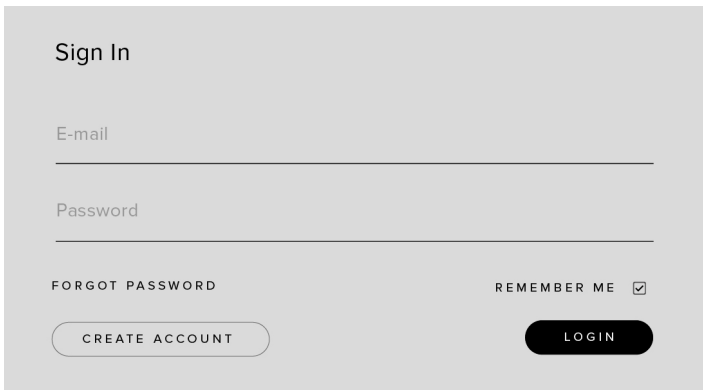
# DOWNLOADING & INSTALLING

Thank you for buying Hammers by Charlie Clouser. If you are a total newbie to this kind of thing you can get up to speed here: <https://www.spitfireaudio.com/about/>

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

## THE SPITFIRE AUDIO APP

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

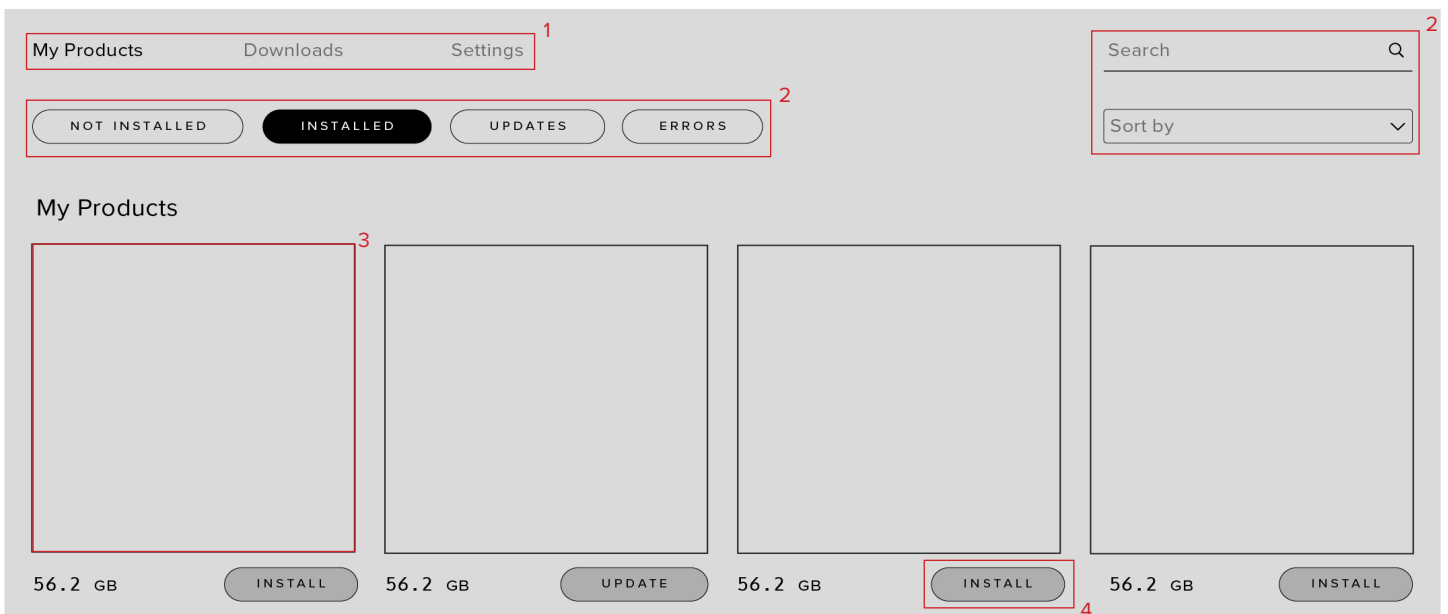


**1. TABS** the default tab is My Products, which shows all of the libraries on your Spitfire Account. Downloads will show currently downloading products.

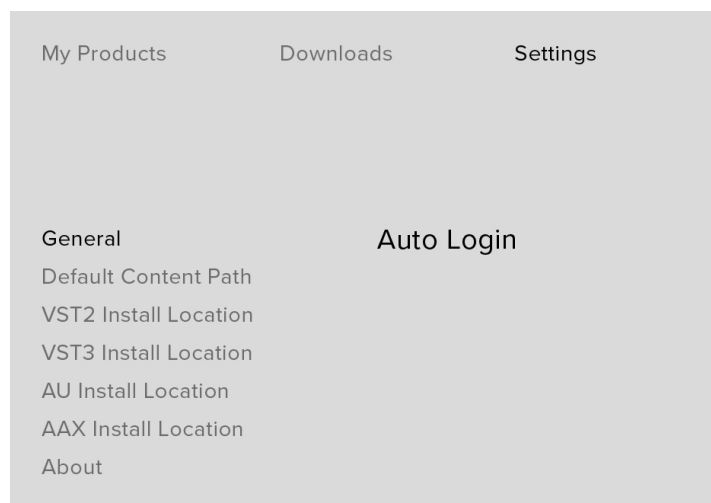
**2. FILTERS** Clicking these filters will quickly display products you’ve yet to install, those already installed, and any available updates. Clicking again will remove the filter.

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

**4. INSTALL/UPDATE** buttons allow you to quickly start a download directly from the My Products tab, instead of clicking through to the Library. Next to the button the size of the download is shown.

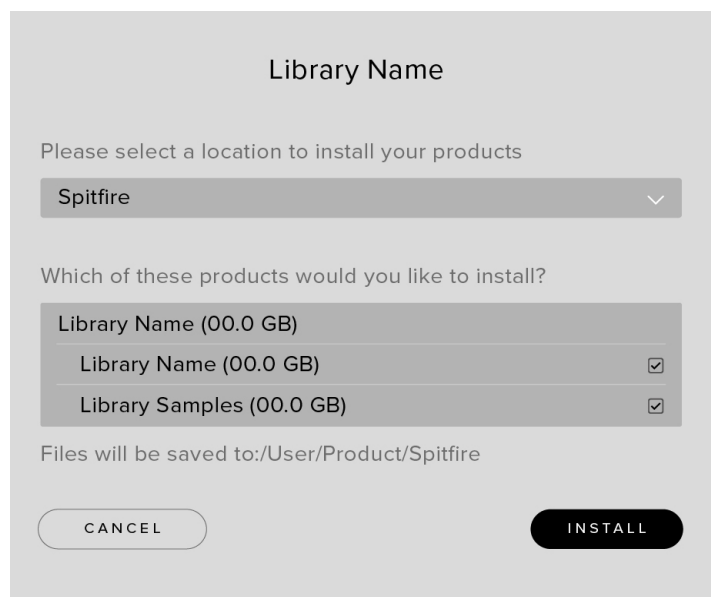


# THE SPITFIRE APP PREFERENCES



If this is your first time using the Spitfire Audio App for a download you may wish to first navigate to the Settings tab. Here you can set the Default Content location for where you wish to download your libraries. You can also you can set the default VST2 install location to the folder where your DAW expects to find VST files.

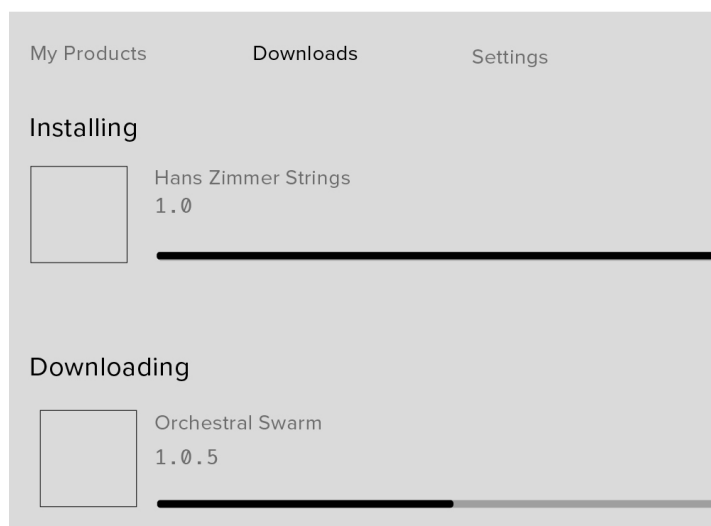
Here you can also enable Auto Login to save time in future.



Once you are happy with your preferences, simply click the Install button for the library. This is either directly on My Products tab under the library artwork, or it can be found by clicking on the library image and clicking the install button on the page that appears.

Clicking either of these will prompt you for a location, the default content location in your preferences will be suggested but you can select any suitable location. If installing from a hard drive, ensure that you choose the drive as the location.

Once you are happy with the location click Download.



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

# THE DEDICATED PLUGIN

Unlike many Spitfire libraries, you don't need Kontakt Player or the full Kontakt to run this library. Hammers is its own, all new, self contained plugin built for VST, AU and AAX, so once you've downloaded and installed you're ready to go.

## LOGIC PRO X

- On a fresh project, a track dialogue box will automatically pop up
- Choose 'Software Instrument', and then look beneath the 'Instrument' dropdown
- Select AU Instruments > Spitfire Audio > Hammers.

## CUBASE

- Right-click the track window and choose 'Add Instrument Track'
- Underneath the 'Instrument' dropdown, choose Hammers.
- Select 'Add Track'

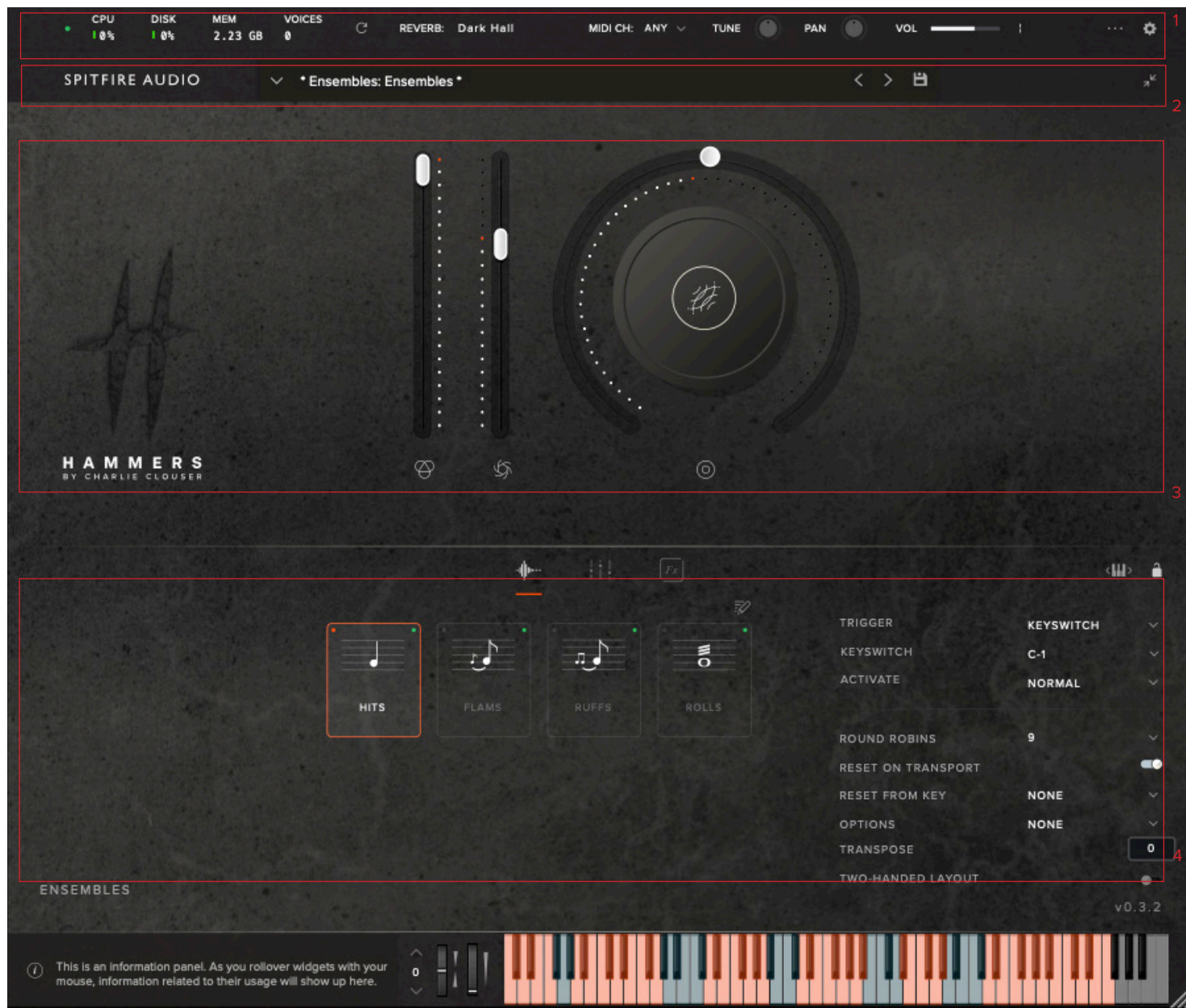
## PRO TOOLS

- Go to the 'Track' menu at the top of the screen, and select 'New'
- In the pop-up, select Stereo and Instrument Track, and press 'Create'
- In the first Insert slot, select multichannel plug-in and 'Instrument'
- You should see the Hammers plugin available as an option



# HAVE A LOOK AROUND

## THE HAMMERS INTERFACE



### OPENING YOUR FIRST PRESETS

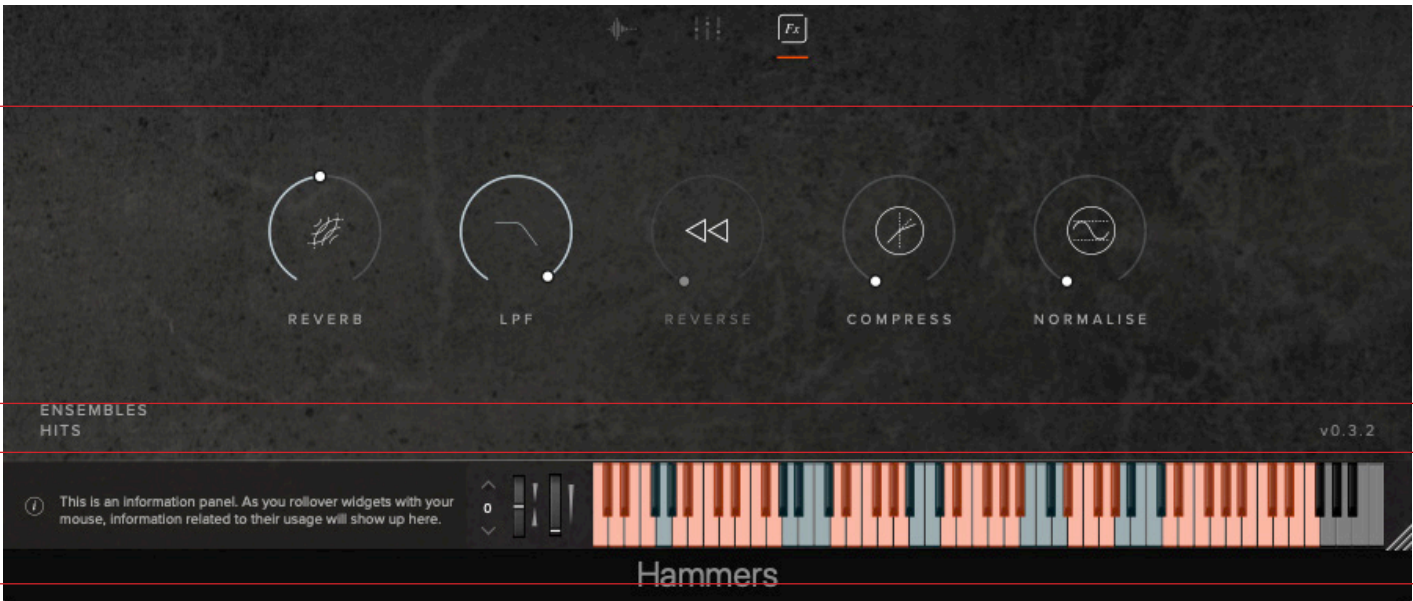
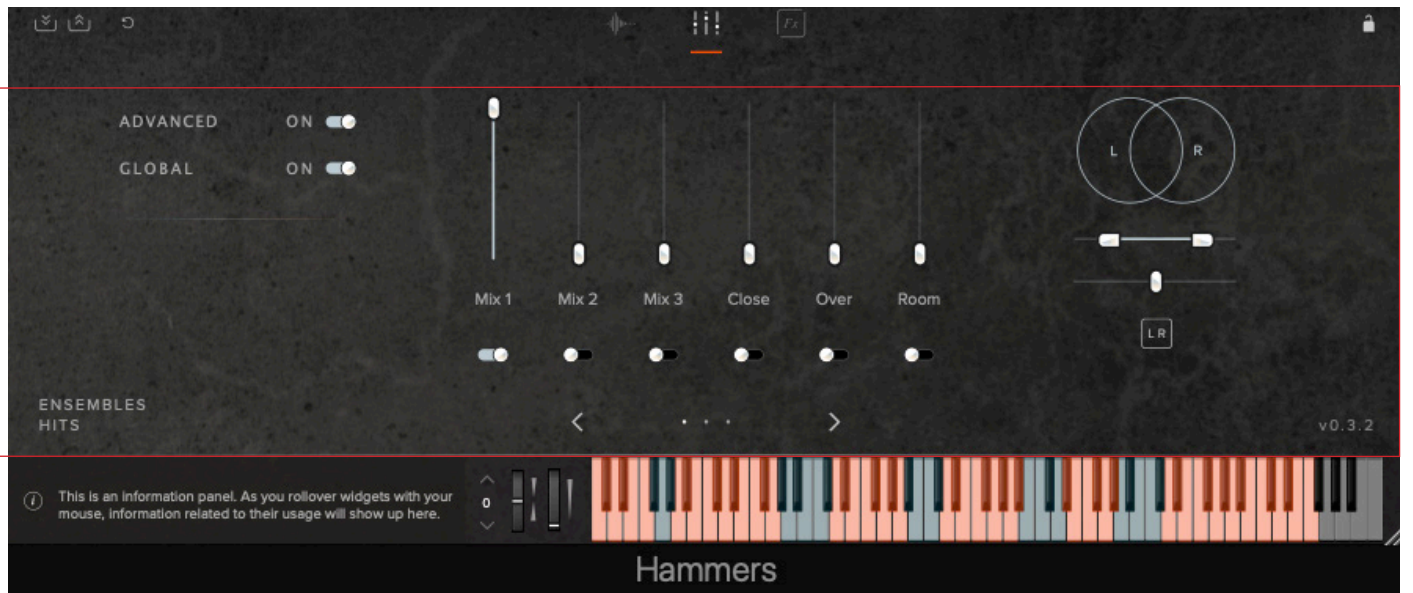
When you first open Hammers, this is what you will see. It opens with the Ensembles: Ensembles patch.

#### 1. TOP MENU

#### 2. PRESET SELECTOR

#### 3. MAIN CONTROLS

#### 4. TECHNIQUE SELECTOR

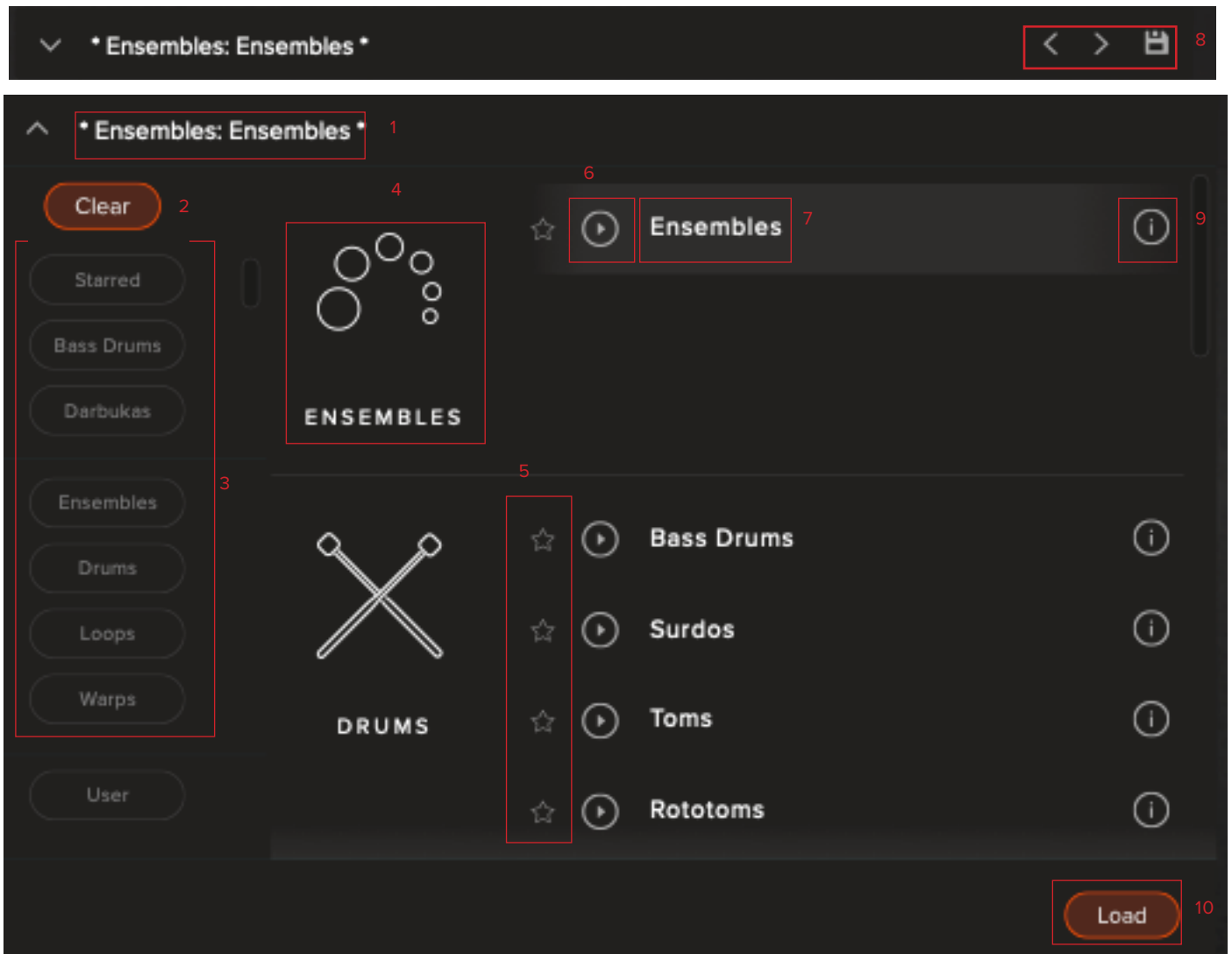


**5. SIGNAL MIXER**

**6. CONTROLLERS**

**7. KEYBOARD & INFO**

# PRESET SELECTOR



## 1. PRESET NAME

Here you can see the currently selected preset.

## 2. CLEAR FILTERS

This button becomes available once filters are in use. Click here to show all instruments at once.

## 3. FILTERS

Click on a filter to only show those preset grouped by the filter.

## 4. INSTRUMENT GROUP

As you scroll through the available presets, the instrument group is displayed here.

## 5. STAR

Favourite to add to the “starred” filter.

## 6. PREVIEW

Play back a short example of the preset without having to load it! Enormously helpful when choosing a sound.

## 7. PRESET LIST

Scroll through the list of presets here. Double-click to load a preset or click the 'Load' button.

## 8. NEXT, PREVIOUS AND SAVE

With the presets view collapsed, you will be able to see the Next, Previous and Save icons.

Next and Previous will simply send you to the next available preset - if you have a filter enabled, you will scroll through the filtered set of presets.

Save allows you to save your own preset, click save, name the preset and it will appear under the "user" filter.

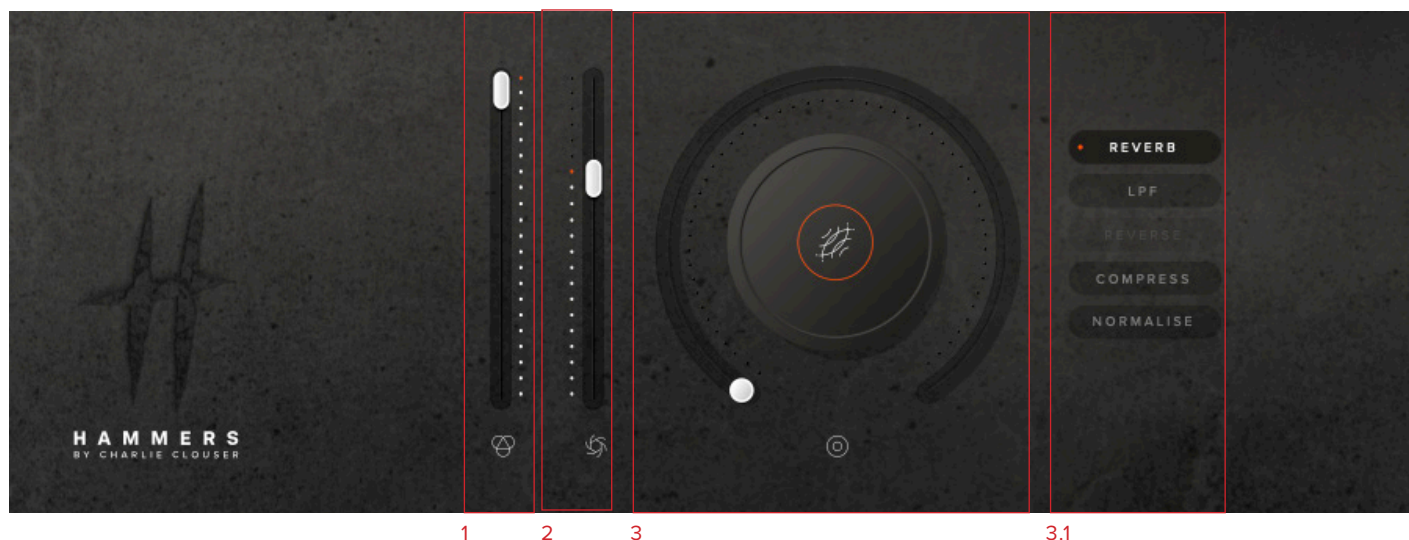
## 9. INFORMATION

Hover over on the "i" icon to see some information about the preset.

## 10. LOAD

Select a preset and then press "load" (or double-click the preset).

# MAIN CONTROLS



## 1. VOLUME

Often referred to as “Expression” in our Kontakt Libraries, this is a simple level control for you to adjust along with...

## 2. DYNAMICS

Adjust the dynamic layer that you are playing here, use in conjunction with the volume to make your performances sound so much more musical than before!

## 3. KNOB

The configurable knob allows you to control any of the other available parameters for the particular technique.

Hover over the knob and it will turn black.

**3.1 CLICK:** Click and you will be able to assign any of the remaining available controls to the knob.

Right click on any of these controls to assign them to a MIDI controller. Remember that if you assign a MIDI controller to a parameter via the knob, the MIDI controller will follow the parameter rather than being permanently assigned to the knob.

Reverb: Control over the amount of send to the convolution reverb. The reverb type is switchable in the Top Menu REVERB drop down.

LPF: Controls the cutoff frequency of a Low Pass Filter

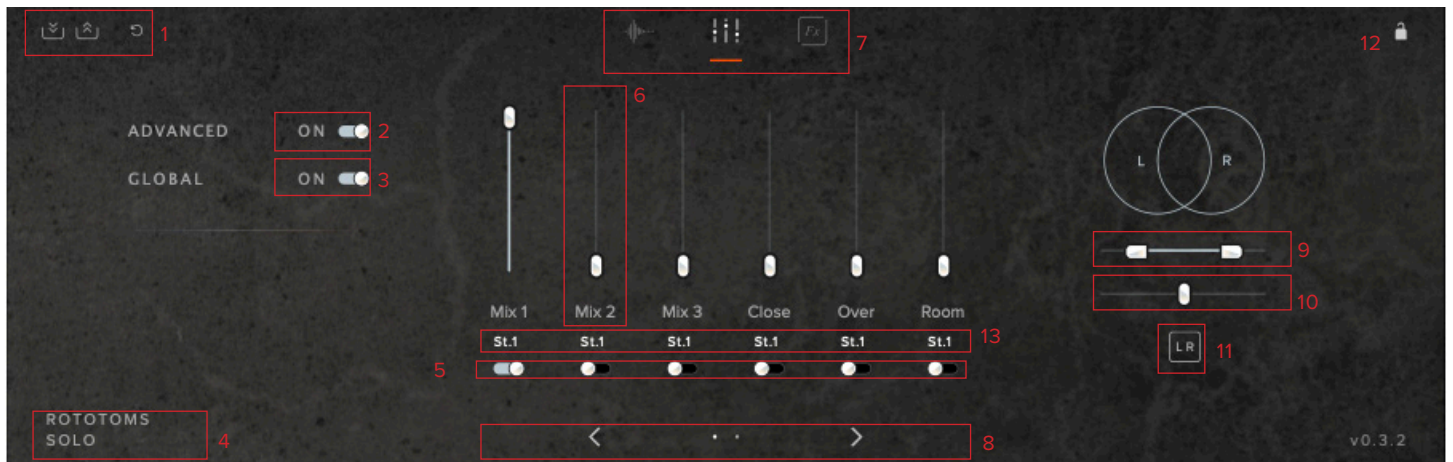
Reverse: When this is enabled, the single hits are played in reverse with adjustable lead-in time. When Sync To Tempo is On, the start points are stepped at intervals related to the host tempo. When Sync To Tempo is Off, the start point is continuous with a maximum of 2s.

Compress: Controls the amount of master bus compression.

Normalise: Increases the volume level of quieter samples by a constant amount to help even out the overall volume.



# SIGNAL MIXER



## 1. MIXER PRESETS

Load and save your own mixer presets here, this is a good way for you to share your mixes across different instruments and presets. Click on the down arrows to save and the up arrows to load.

To rename a preset after saving or delete a preset, browse to Hammers > Presets > Mix in the finder and edit the .mpreset files.

## 2. ADVANCED

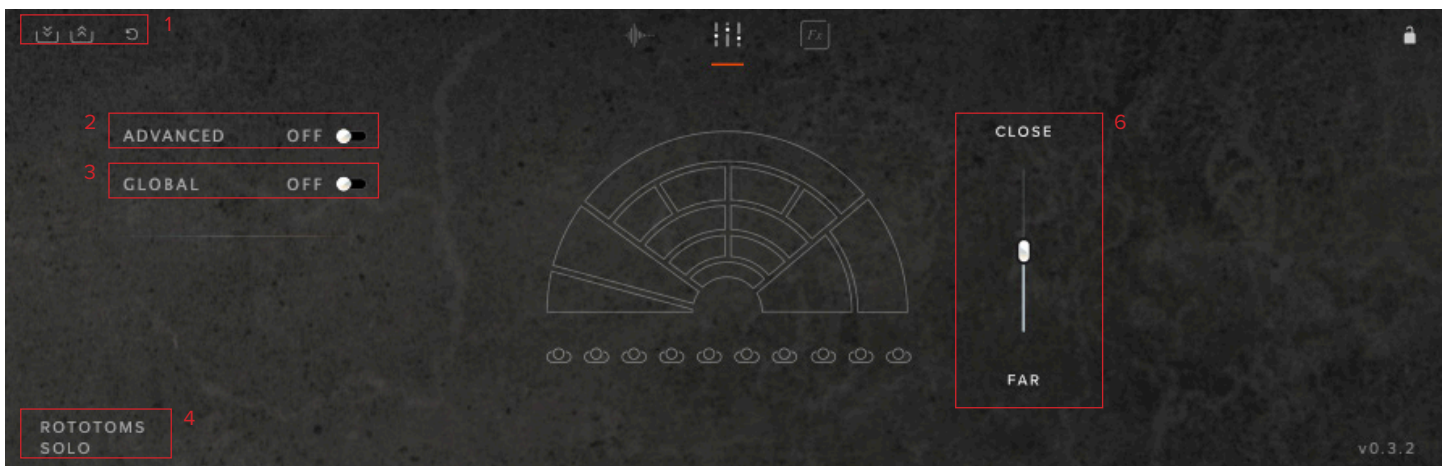
By default, the mixer will load up in the advanced view, toggle off for the simple view.

In this view, you can simply adjust how close the instruments sound with a single fader. Under the hood, this will adjust the Close, Tree and Ambient signals.

## 3. GLOBAL

By default, this is “on” and means that any changes you make to the mixer are replicated across any technique in that particular preset.

## 4. TECHNIQUE NAME



## 5. SIGNAL ON/OFF

Here you can turn signals on or off (you can also turn them on by fading them up). If you turn a signal on, pay attention to the LED in the top left of Hammers, if it is flashing red, it means that the samples are still loading into RAM and you should wait before playing again to avoid glitches.

## 6. SIGNAL FADER

Adjust the level of each signal here, right-click to learn MIDI cc# automation.

## 7. VIEW SELECT

Choose between the Technique Switcher, Mixer and Effects, the Technique Selector and Effects are covered in the following chapters of this manual.

## 8. SIGNAL NAVIGATION

Click the right arrow to access additional signals. Unused signals are greyed out.

## 9. STEREO WIDTH

Adjust the stereo width of the close and spot signals here. Right-click to assign to a MIDI cc#.

## 10. PAN

Adjust the position of the close and spot signals within the stereo field.

## 11. INVERT

Click to swap the left and right channels.

## 12. LOCK

Click to lock the Mixer. This will prevent further changes to the mixer, useful if you're happy with what you've done and don't want to accidentally change it. This will even prevent changes made by MIDI controllers, but beware, as soon as you unlock the mixer, the control will be active.

## 13. MULTIPLE OUTPUTS

If enabled in your DAW, here is where you can assign each signal to a different stereo output.

# TECHNIQUE SELECTOR



## 1. TECHNIQUE SWITCHER

Click to select a technique. Shift-Click to select multiple techniques. The black dot in the top left shows which technique(s) will play, the black outline shows which technique will be affected by any changes you make to the other options in this page.

## 2. VIEW SELECT

Choose between the Technique Selector, Mixer and Effects. The Mixer and Effects are covered in different chapters of this manual.

## 3. TECHNIQUE NAVIGATION

Click the right arrow to access additional techniques.

## 4. KEYSWITCH ADJUST

Click and drag to move the keyswitches to the left or right on your keyboard.

## 5. LOCK

Click here to lock off the technique section and prevent any unwanted changes.

## 6. TECHNIQUE TRIGGER

With the technique trigger section you can choose to trigger techniques using various parameters:

**KEYSWITCH:** Pick a key on the keyboard that will select this technique. The selected keys will show up in green for unselected techniques and in orange for selected techniques.

**CC RANGE:** Choose a CC# and a range of values (or a single value) for the control that you want to trigger this technique.

**VEL. RANGE:** Switch technique based on how hard you are playing! You might want to trigger longs when playing softly and pizzicato when playing hard.

**MIDI CHANNEL:** Switch techniques based on the incoming MIDI channel.

**SPEED:** Switch technique based on the speed of playing. Specify the time interval between notes to switch to a particular technique.



**PROGRAM CHANGE:** Switch technique based on program change messages sent.

**HOST TEMPO:** Switch techniques based on the tempo of your DAW (as set by the two range limits beneath).

## 7. ACTIVATE

Choose between “NORMAL” and “LATCH” for your technique switching.

## 8. ROUND ROBINS

Round robins are a way to ensure that repeated notes don't sound robotic and unnatural. We record the same note multiple times and then cycle through them. Here you can choose to reduce the number of round robins that are being used.

## 9. RESET ON TRANSPORT

If you're worried about the effect of the round robins making each run through of your session sound different, you can choose to reset the round robins using the DAW transport.

## 10. RESET FROM KEY

You can also reset the round robins using a keyswitch. Choose that keyswitch here.

## 11. OPTIONS

**NEIGHBOUR ZONE RR:** Double the number of round robins by “stealing” notes from neighbouring notes and transposing them to match the pitch.

**LAYER X2:** Thicken the sound by layering round robins on top of one another. This option will play round robins 1/2 followed by 3/4, effectively halving the number of round robins.

**LAYER X2 (NO SKIP):** Same as above but this time you will be playing 1/2 followed by 2/3 and so on, meaning that you will not halve the number of round robins available.

**LAYER +2:** This option will play the round robins from the tone above the key played but transposed down so that it plays at the right pitch.

**LAYER -2:** This option will play the round robins from the tone BELOW the key played but transposed UP so that it plays at the right pitch.

## 12. TRANSPOSE

Transpose the instrument up or down in 1 semitone increments.

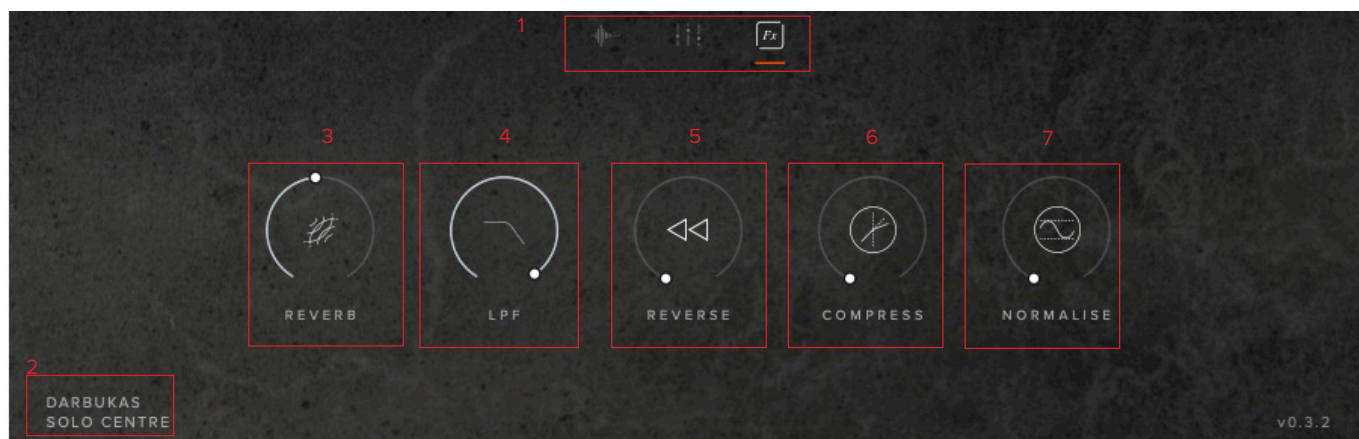
## 13. TWO-HANDED LAYOUT

Toggle this on or off to enable or disable the two-handed layout on the keyboard.

## 14. TECHNIQUE EDITOR

Opens the Techniques Editor, allowing you to customise and edit your preset (see pg. 20).

# EFFECTS



## 1. VIEW SELECT

Choose between the Technique Selector, Mixer and Effects, the Technique Selector and Mixer are covered in different chapters of this manual.

## 2. TECHNIQUE NAME

## 3. REVERB

Control over the amount of send to the convolution reverb. The reverb type is switchable in the Top Menu REVERB drop down.

## 4. LPF

Controls the cutoff frequency of a Low Pass Filter

## 5. REVERSE

When this is enabled, the single hits are played in reverse with adjustable lead-in time. When Sync To Tempo is On, the start points are stepped at intervals related to the host tempo. When Sync To Tempo is Off, the start point is continuous with a maximum of 2s.


## 6. COMPRESS

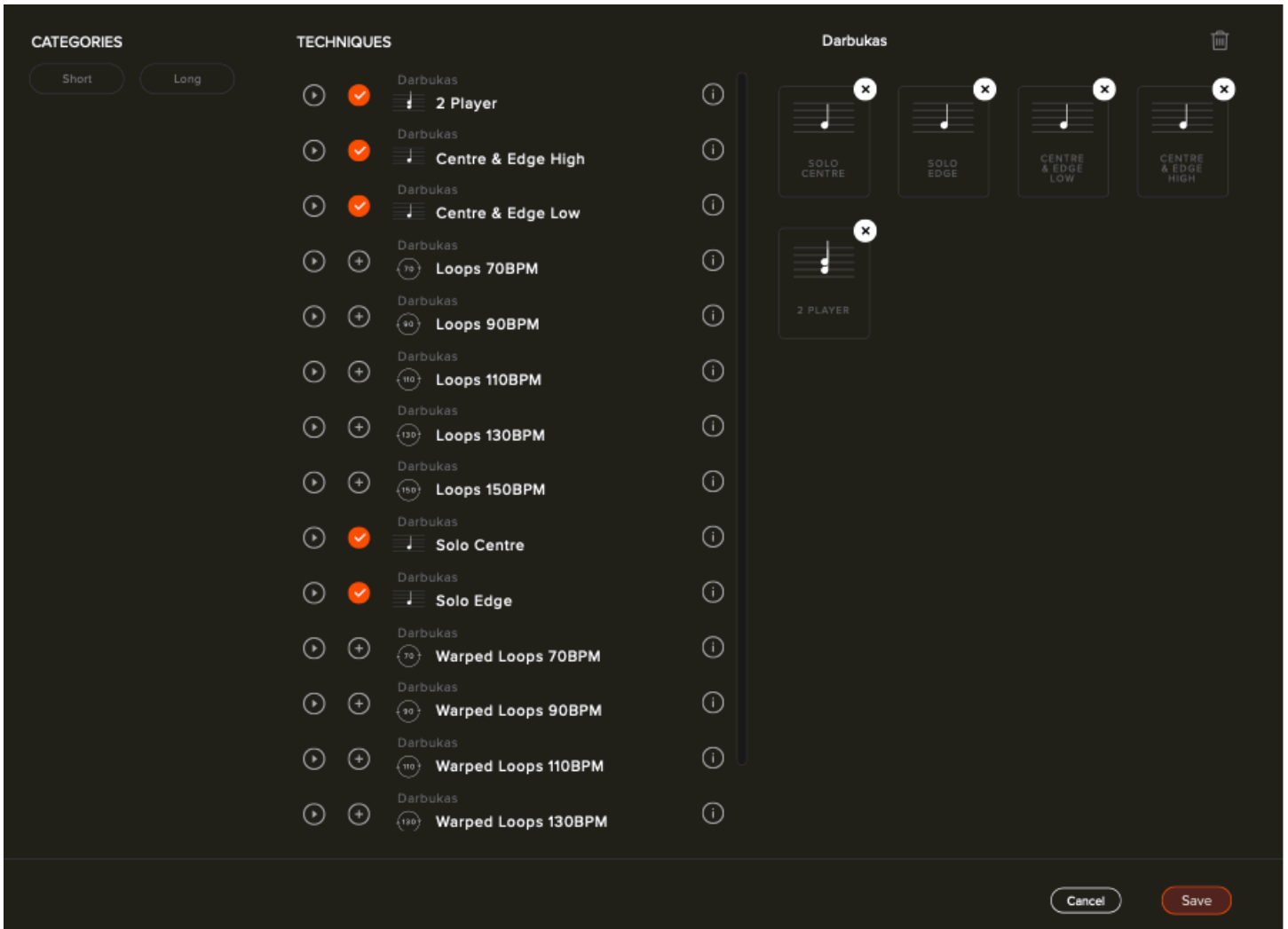
Controls the amount of master bus compression.

## 7. NORMALISE

Increases the volume level of quieter samples by a constant amount to help even out the overall volume.

# TECHNIQUE EDITOR

The Technique Editor will allow you to both add and remove techniques from your current preset, as well as re-arranging the order of the techniques to your own personal preference. This is opened by selecting the pencil icon  (see pg. 13).



- The left 'Instruments' panel allows you to filter between all available techniques for this specific preset.

- The central 'Techniques' panel shows all available techniques for each preset. Click the '+' to add techniques back into your current preset.

- The panel on the right is where your current articulations are displayed. Click and drag these to re-arrange the order. By selecting the 'x' in the top-right corners, you can remove a technique from your preset. Click the 'trash-can' in the upper corner to remove all techniques completely in a single click.

- Once you're done, click 'Save'. If you have made a mistake and don't want to save, choose 'Cancel' instead to go back to your previous setting.

# TOP MENU



## 1. LED

Shows when an instrument is loaded by lighting solid green. If this is flashing, your instrument is not fully loaded yet.

## 2. CPU METER

An indication of how much your CPU is being taxed, the green flash next to the CPU meter will turn red when you are overloading it.

## 3. DISK METER

How hard are you taxing your hard drive? If this is close to, or going over 100% it's time to consider a faster drive. See next page for settings that can help get the most out of a slower drive.

## 4. MEMORY

This shows how much RAM you are currently using in this instance of Hammers. While the preset is loading, this will show the instrument loading into memory.

## 5. VOICES

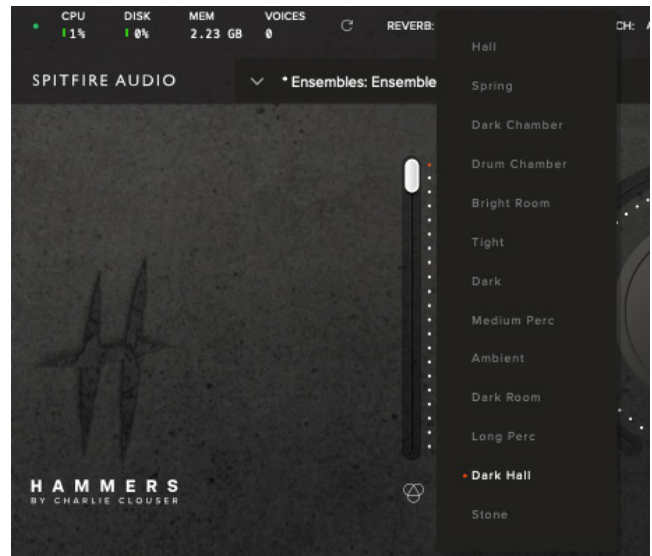
Shows how many voices are being used at any one time.

## 6. REFRESH

Refresh the instrument, alt-click to refresh the whole plug-in. This can be useful if you have hanging MIDI notes or have moved samples in your file system.

## 7. REVERB

Here you can change the reverb type.



## 8. MIDI CH

Set the MIDI channel that will control the instrument here. If in doubt select "all" so that the instrument will react to any incoming MIDI messages.

## 9. TUNE

Move this knob to tune in semitone increments, shift-click to move in increments of 0.01 of a semitone. Alt-click to reset to default.

## 10. PAN

Pan the whole plug-in left and right in the stereo field. Alt-click to reset to centre.

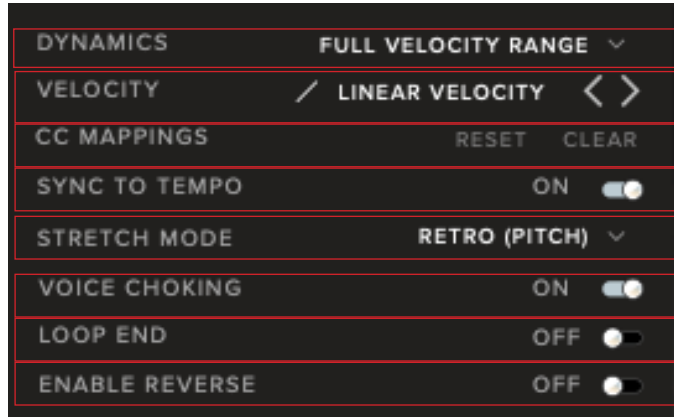
## 11. VOLUME

Control the overall volume of the instrument.

## 12. LEVEL

A visual indication of the level of the instrument.

## 13. PRESET SETTINGS



### A. VELOCITY MAPPED TO DYNAMICS

Different behaviours for the Dynamics fader.

- 1) Full Velocity Range.
- 2) Velocity Mapped to Dynamics.
- 3) Compressed Velocity High.
- 4) Compressed Velocity Low.

These settings will change how hard you need to hit the keyboard to trigger different layers. Velocity mapped to dynamics will allow you to control short note velocity with the mod wheel.

### B. VELOCITY

Pick from 4 different velocity curves to suit your controller.

### C. RESET CC MAPPINGS

Clicking on this will reset all of the CC mappings for this instrument to the defaults - useful if you've got yourself in a mess!

### D. SYNC TO TEMPO

Sync to your host BPM

### E. STRETCH MODE

Change the algorithm used to stretch audio to remain in sync with your BPM. Some algorithms use more CPU than others.

### F. VOICE CHOKING

Allows single hits to interrupt Ruffs and Rolls for more precise placement of end hits

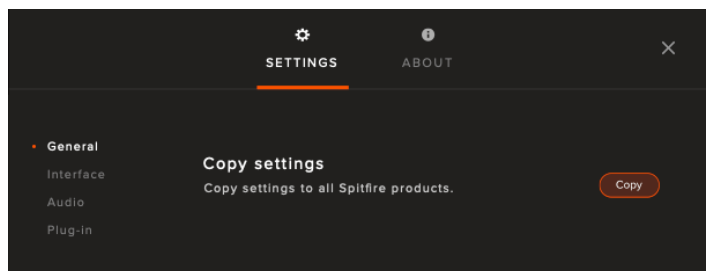
### G. LOOP END

Natural end hits have been recorded and will trigger on note-off if enabled here

### H. ENABLE REVERSE

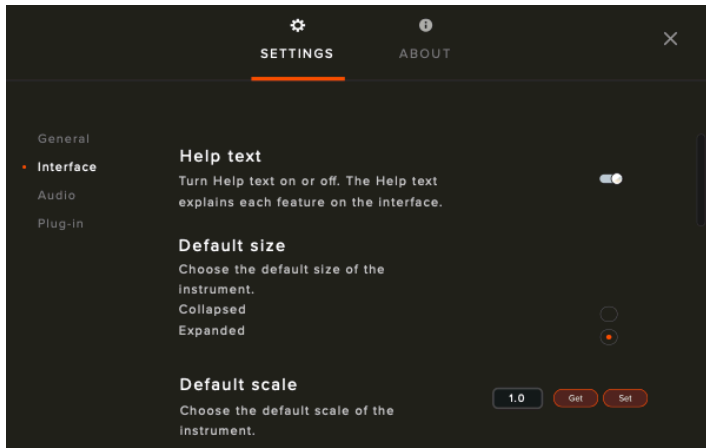
Availability of reverse samples to play can be enabled or disabled on a per-patch basis here.

## 13. PLUGIN SETTINGS



### COPY SETTINGS

Common controller values will copy to other Spitfire plugins.



## HELP TEXT

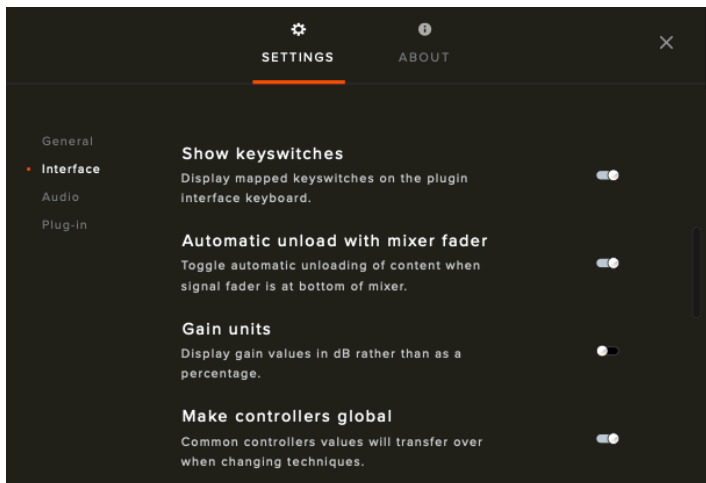
Turn this on to display parameter information in the bottom left corner of the plug in.

## DEFAULT SIZE

Set whether the instrument opens up collapsed or expanded by default.

## DEFAULT SCALE

How big the plugin UI is when opened. Press “get” to set the current scale or type a value before pressing “Set” and “Save”



## SHOW KEYSWITCHES

When this option is on, presets that have multiple techniques will show available keyswitches in red and the currently selected technique(s) in yellow.

## UNLOAD WITH MIXER FADER

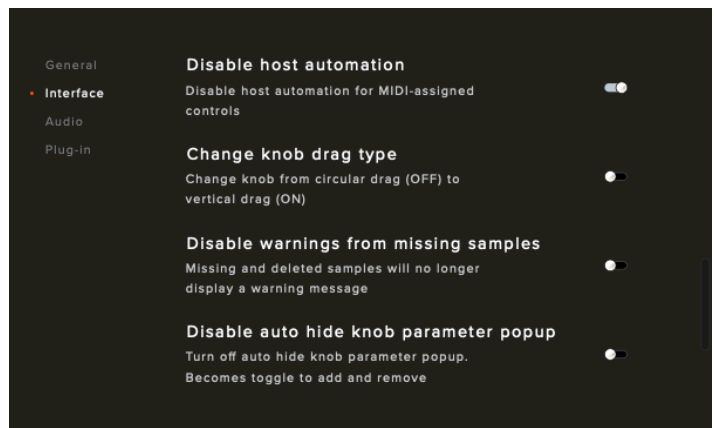
Toggle this to unload data from RAM when fader is pulled down to the bottom.

## GAIN UNITS

Toggle this if you want your gain to be displayed in dB instead of as a percentage.

## MAKE CONTROLS GLOBAL

Common Controller values will remain when switching techniques.



## DISABLE HOST AUTOMATION

Turn this on to enable the Host Automation from the DAW.

## CHANGE KNOB DRAG TYPE

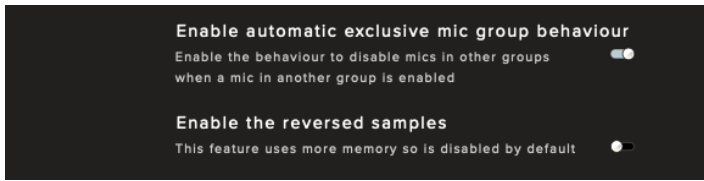
Change the mouse behaviour when dragging the Knob control.

## DISABLE WARNINGS FROM MISSING SAMPLES

Hide an error in the plugin top left corner which is visible when the library is missing its content.

## DISABLE AUTO HIDE KNOB PARAMETER POPUP

When enabled, clicking the knob will always shows the fx controls menu.

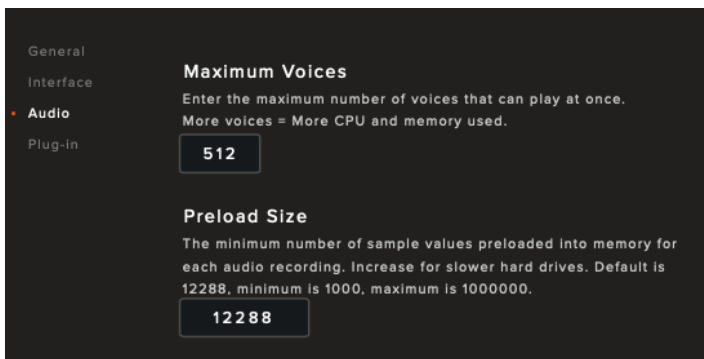


## ENABLE AUTOMATIC EXCLUSIVE MIC GROUP BEHAVIOUR

Disable if you want mics to be ungrouped together.

## ENABLE THE REVERSED SAMPLES

With this option on, this will load both the forward and reverse samples for all patches. As this feature is very memory intensive, this is disabled by default, and the reverse samples can then be enabled on a per patch basis under the Preset Settings ellipsis as previously explained.

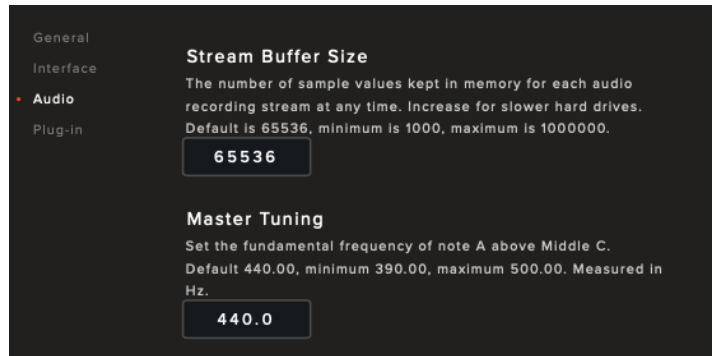


## MAXIMUM VOICES

Enter the maximum number of voices that can play at once. More voices = More CPU and memory used.

## PRELOAD SIZE

The minimum number of sample values preloaded into memory for each audio recording. Increase for slower hard drives. Default is 1288.

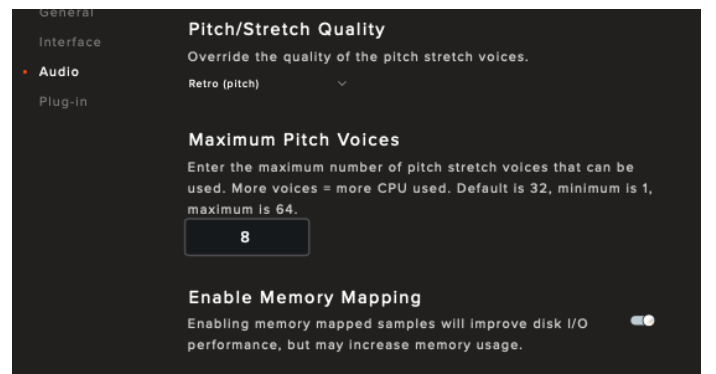


## STREAM BUFFER SIZE

The number of sample values kept in memory for each audio recording stream. Increase for slower hard drives.

## MASTER TUNING

Change the default tuning of the plugin. For example A = 440hz or A = 432 HZ.



## PITCH/STRETCH QUALITY

This option allows you to override the default pitch/time quality to improve performance or improve audio quality.

## MAXIMUM PITCH VOICES

Limit the number of voices triggered at any one time. Lower values can aid CPU.

## ENABLE MEMORY MAPPING

Turn off for windows machines for better performance.

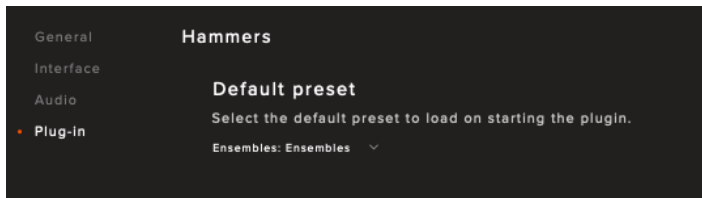
### Default Stereo Outputs

Set the default number of stereo outputs created, required by some hosts to control the number of outputs available. Default is 16, minimum is 1, maximum is 64.

1

## DEFAULT STEREO OUTPUTS

The default number of outputs for the Microphone routings.

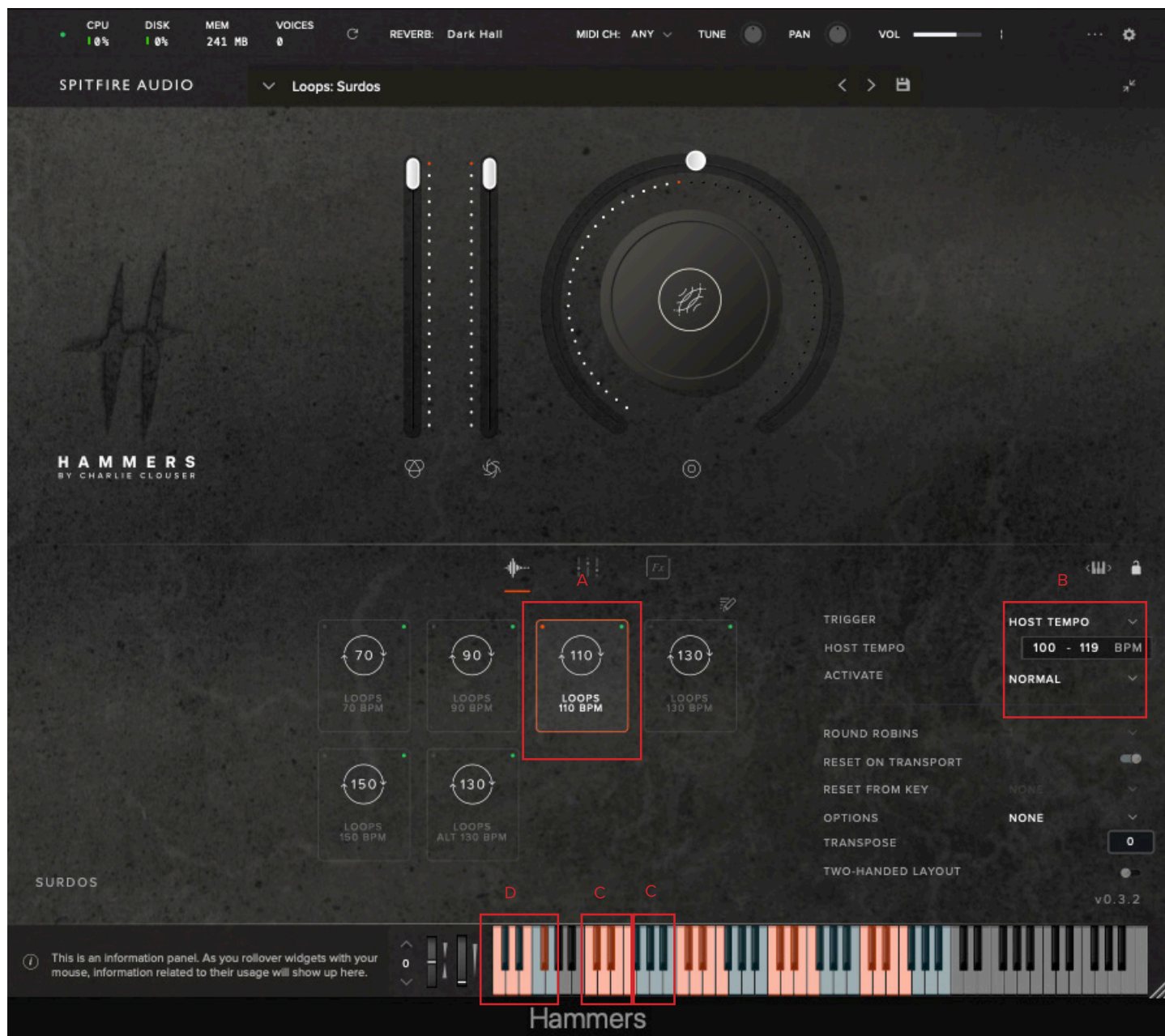


## PLUGIN

Under this heading you can choose a default preset to load, simply click on the preset name and choose your preferred preset from the list.



# LOOPS



## A. LOOPS BPM

Loop performances were recorded as eight 8-bar loops at each of five tempos: 70, 80, 110, 130 and 150bpm. There is different content available in each 8-bar loop for each tempo group.

## B. SYNC TO HOST TEMPO

Enabled in [Preset Settings](#), automatic Sync To Tempo is available in your DAW, with

various time stretch modes, including Retro Pitch. You can use the 150bpm loops in a 70bpm session, and try different time stretch modes to achieve the sound you prefer.

## C. LOOP 'BRICKS'

In each of the 8 different loop 'bricks', the first note will play the whole loop, the second note the first two bars, third key the second 2 bars and so on. End hits for each loop are available on the sixth key.

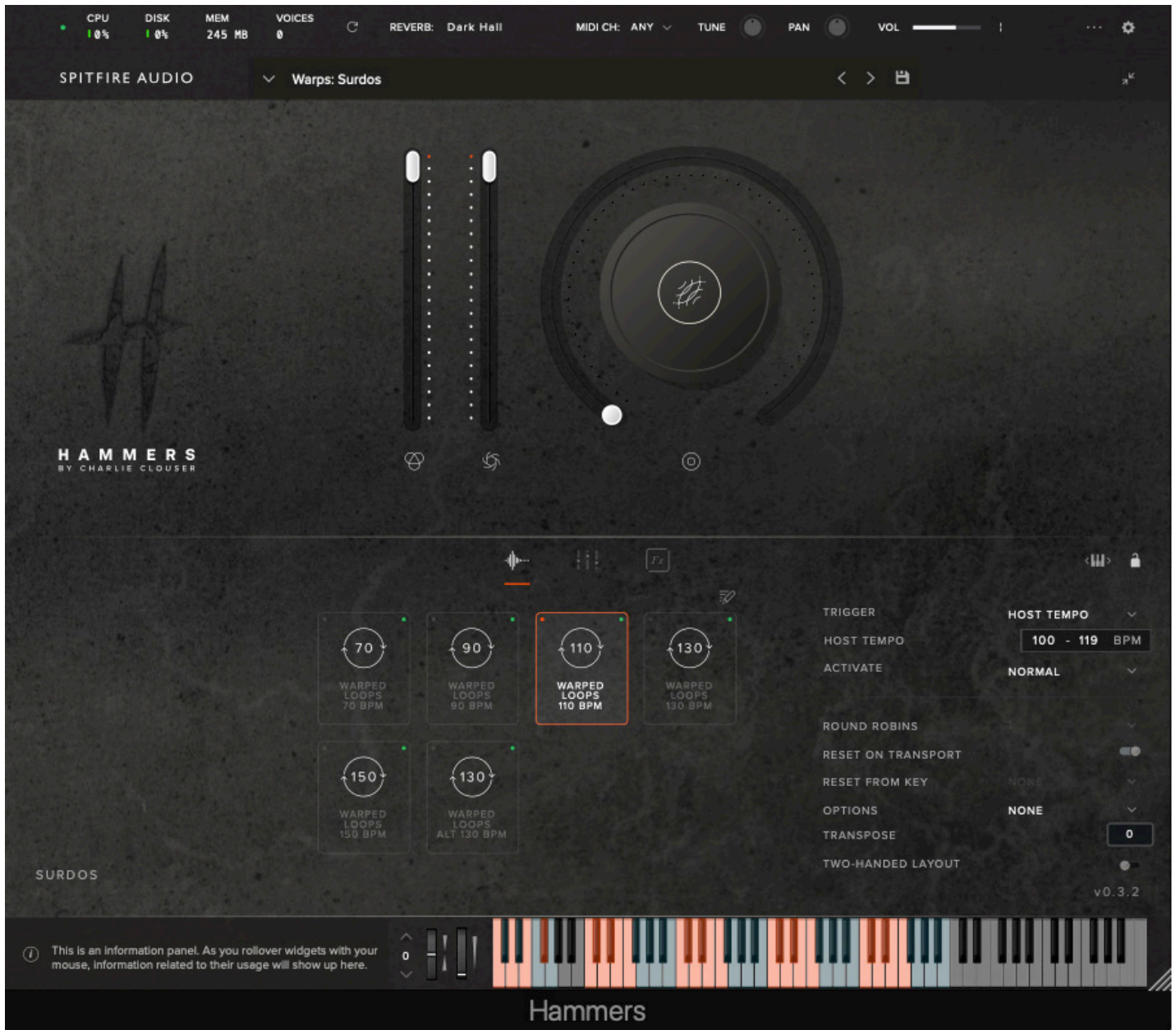
You can also toggle the end notes to sound on note-off via the [Preset Settings](#).

#### **D. REVERSED LOOP**

On the bottom of the keyboard there are available reversed end hits for trailer-style epic swoops and sucks.

Reverse functionality is also available in all Loops presets, this will play any of the loops backwards.

# WARPS



## WARPED LOOPS

Guitar pedals, analog synths, outboard hardware and a huge modular synth rig were used to create 12 heavily processed variations of the loops.

## PROCESSING

The processing for each drum type was tailored to the source material, spanning the spectrum from lows to highs. Here you might find that Surdo Warps sound like maracas or hi-hats, or Scrap Warps that sound like low

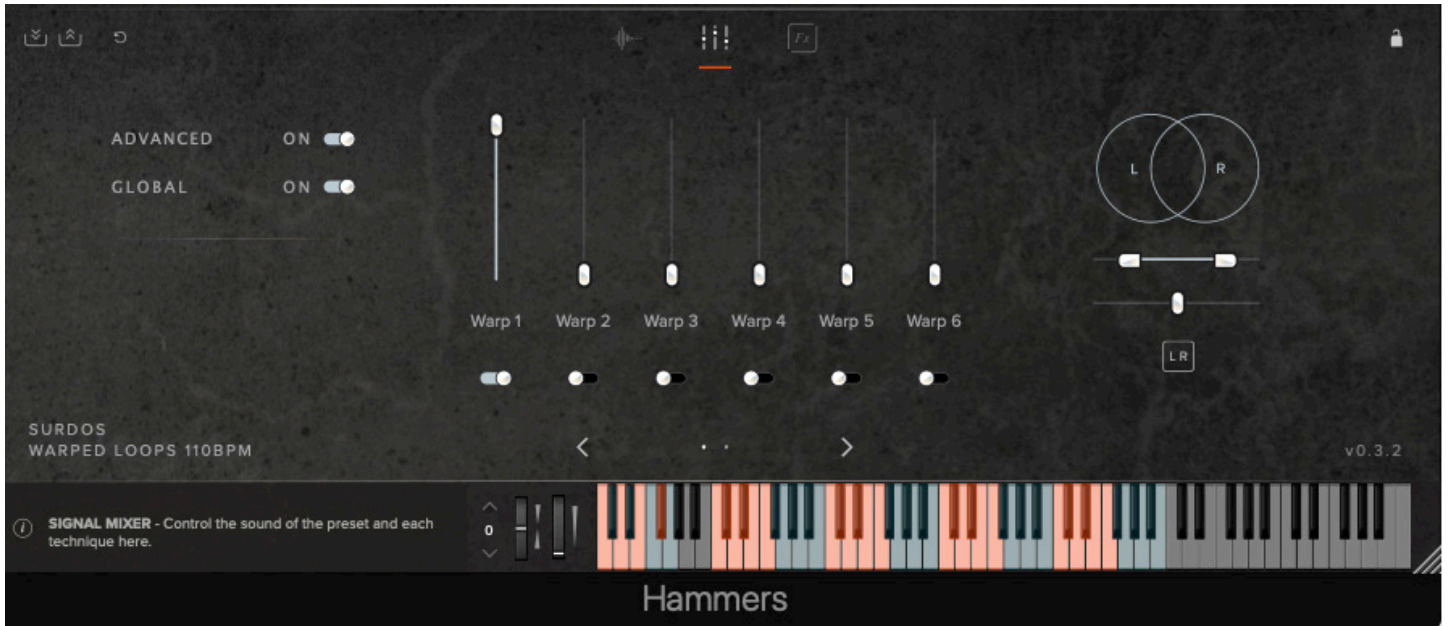
synth pulses.

## LAYOUT

The layout of the Warps on the keyboard is the same as the Loops, so it will be easy for you to find a processed version of a loop that you like.

## REVERSE

As with the Loops, reverse playback is available with the same functionality, as well as reversed end hits on the bottom of the keyboard.



## WARP SIGNALS

The 12 signals in the Warps presets can be layered in any combination, all the way up to having all 12 playing at once.

# MICROPHONE SIGNALS

## MIX 1

A mix of Close and Overheads with curated processing to make it hit harder.

## MIX 2

A mix of Close, Overheads and Room with more intense processing for a larger yet darker sound.

## MIX 3

**TURBO MODE ENGAGED!.** A Mix of Close, Overheads and Room with controls set to 11.

## CLOSE

The close mic, panned in place to match the overheads. When playing as a group all close mics are summed.

## OVERHEADS

A stereo pair of overheads, placed in the natural position for each drum or group.

## ROOM

A stereo pair of omni room mics, placed in the diffuse field for that classic brash drum room sound.

## CLOSE PITCHED

A curated version of the close signal, pitched down with extra processing for a signature sound.

## OVERHEADS PITCHED

A curated version of the overheads signal, pitched down with extra processing for a signature sound.

## ROOM PITCHED

A curated version of the room signal, pitched down with extra processing for a signature sound.

## CRUSH\*

An overhead placed high above the drums, crushed through brutal processing for a distinctive sound.

## CRUSH PITCHED\*

A curated version of the crush signal, pitched down with extra processing for a signature sound.

## SUB\*

A deep sub boom, perfect for the LFE channel, formed from a processed mic placed in a resonant chimney.

## CLOSE REAR\*

Only available on Bass Drums - a close mic placed on the rear skin of the drum for its resonant quality.

\* NOT AVAILABLE ACROSS ALL DRUMS - MIC SLIDER EMPTY WHEN NOT PRESENT



# MICROPHONE GROUPING

The Microphone Groups are as follows:

SIGNAL NAME	UI SHORT NAME	MICROPHONE GROUP
MIX 1	MIX 1	A
MIX 2	MIX 2	B
MIX 3	MIX 3	C
CLOSE	CLOSE	D
OVERHEADS	OVER	D
ROOM	ROOM	D
CLOSE PITCHED	CL PTCH	D
OVERHEADS PITCHED	OH PTCH	D
ROOM PITCHED	RM PTCH	D
CRUSH	CRUSH	D
CRUSH PITCHED	CR PTCH	D
SUB	SUB	D
CLOSE REAR	CL REAR	D

A group will become active when it has all its signals enabled. This is shown below for Group D.



You can tell which are enabled by looking at the active ROM toggles below each signal.

If you then turn up any signal from a different Mic Group, for instance Mix 2 from Group B, it will automatically disable all signals from Group D.

# DRUM TECHNIQUE GLOSSARY

## **SINGLE HIT**

Recording of a single hit.

## **FLAM**

One soft ghosted/grace note is played just before the main note, creating a “flam” effect.

## **RUFF**

A single stroke with one hand preceded by two lighter strokes in the opposite hand.

## **ROLL**

Series of hits that follow each other so quickly that they make a continuous sound.

# APPENDIX A - TECHNIQUES/MICS/MIXES

## PRESETS:

## ENSEMBLES:

### HITS/FLAMS/RUFFS/ROLLS:

#### • Bass Drums

Solo Damped 36", 32"

Solo Open 36", 32", 26"

4 Player

#### • Surdos

Solo 22", 20"

4 Player

#### • Toms

Solo 18", 16", 14"

2 Player 18", 16", 14"

4 Player

Rollers 18", 14"

Brushes 18", 14"

#### • Rototoms

Solo 16", 14", 12"

2 Player - Low, High

4 Player

#### • Frame Drums

Solo 16" Centre, 16" Edge, 14" Centre, 14" Edge

Brushes 16" Centre, 16" Edge, 14" Centre, 14" Edge

#### • Snare - On

Centre

Edge

Rim

#### • Snare - Off

Centre

Edge

Rim

#### • Darbukas

Solo Centre 8", 7", 6", 5"

Solo Edge 8", 7", 6", 5"

Centre & Edge Low 8" Centre, 8" Edge, 7" Centre, 7" Edge

Centre & Edge High 6" Centre, 6" Edge, 5" Centre, 5" Edge

2 Player

#### • Scrap

Pipe Low

Pipe High

Iron

Misc

## DRUMS:

### BASS DRUMS:

#### • Solo Damped 36", 32"

Single Hit

Ruff

Roll

Flam

#### • Solo Open 36", 32", 26"

Single Hit

Ruff

Roll

Flam

#### • 4 Player

Single Hit

Ruff

Roll

Flam

### SURDOS:

#### • Solo 22", 20"

Single Hit

Ruff

Roll

Flam

#### • 4 Player

Single Hit

Ruff

Roll

Flam

### Toms:

Solo 18", 16", 14"

2 Player 18", 16", 14"



# APPENDIX A - TECHNIQUES/MICS/MIXES

## DRUMS contd.:

### TOMS:

- Solo 18", 16" 14"  
Single Hit  
Ruff  
Roll  
Flam
- 2 Player 18", 16", 14"  
Single Hit  
Ruff  
Roll  
Flam
- 4 Player  
Single Hit  
Ruff  
Roll  
Flam
- Rollers 18", 14"  
Single Hit  
Ruff  
Roll  
Flam
- Brushes 18", 14"  
Single Hit  
Ruff  
Roll  
Flam

### ROTOTOMS:

- Solo 16", 14", 12"  
Single Hit  
Ruff  
Roll  
Flam
- Two Player Low  
Single Hit  
Ruff  
Roll  
Flam
- Two Player High  
Single Hit  
Ruff  
Roll  
Flam
- 4 Player  
Single Hit  
Ruff

- Roll  
Flam

### FRAME DRUMS:

- Solo  
16" Centre (Single Hit, Ruff, Roll, Flam)  
16" Edge (Single Hit, Ruff, Roll, Flam)  
14" Centre (Single Hit, Ruff, Roll, Flam)  
14" Edge (Single Hit, Ruff, Roll, Flam)
- Brushes  
16" Centre (Single Hit, Ruff, Roll, Flam)  
16" Edge (Single Hit, Ruff, Roll, Flam)  
14" Centre (Single Hit, Ruff, Roll, Flam)  
14" Edge (Single Hit, Ruff, Roll, Flam)

### SNARES:

- Snares On  
Centre (Single Hit, Ruff, Roll, Flam)  
Edge (Single Hit, Ruff, Roll, Flam)  
Rim (Single Hit)
- Snares Off  
Centre (Single Hit, Ruff, Roll, Flam)  
Edge (Single Hit, Ruff, Roll, Flam)  
Rim (Single Hit)

### DARBUKAS:

- Solo Centre 8", 7", 6", 5"  
Single Hit  
Ruff  
Roll  
Flam
- Solo Edge 8", 7", 6", 5"  
Single Hit  
Ruff  
Roll  
Flam
- Centre & Edge Low 8", 7"  
Single Hit  
Ruff  
Roll  
Flam

# APPENDIX A - TECHNIQUES/MICS/MIXES

## DRUMS contd.:

- Centre & Edge High 6", 5"

Single Hit

Ruff

Roll

Flam

- 2 Player

Single Hit

Ruff

Roll

Flam

## SCRAP:

- Pipe Low

Pipe 1 (Single Hit, Ruff, Flam)

Pipe 2 (Single Hit, Ruff, Flam)

Pipe 5 (Single Hit, Ruff, Flam)

- Pipe High

Pipe 4 (Single Hit, Ruff, Flam)

Pipe 3 (Single Hit, Ruff, Flam)

Pipe 6 (Single Hit, Ruff, Flam)

- Iron

Iron Front 1 (Single Hit, Ruff, Flam)

Iron Back 1 (Single Hit, Ruff, Flam)

Iron Front 2 (Single Hit, Ruff, Flam)

Iron Back 2 (Single Hit, Ruff, Flam)

- Misc (Single Hits)

Misc 1

Misc 2

Misc 3

Misc 4

Misc 5

Misc 6

## MIXES:

Mix 1

Mix 2

Mix 3

## MICROPHONES:

Close

Overheads

Room

Close Pitched

Overhead Pitched

Room Pitched

Crush\*

Crush Pitched\*

Subs\*

Close Rear\*

\*Not available across all drums - mic slider empty when not present.

# APPENDIX B — FAQS AND TROUBLESHOOTING

## Q: WHAT ARE THE SYSTEM REQUIREMENTS?

### MAC SYSTEM REQUIREMENTS

Mac OSX 10.10 - Mac OS 11

Minimum: 2.8GHz i5 minimum (quad-core), 8GB RAM.

Recommended: 2.8GHz i7 (six-core), 16GB RAM.

Intel and M1 Macs supported 64 bit DAW required (32 bit DAWs not supported)

Machine must be connected to the internet during install

### PC SYSTEM REQUIREMENTS

Windows 7, Windows 8, or Windows 10 (latest Service Pack, 64-bit)

Minimum: Intel 2.8 GHz i5 (quad-core) or AMD Ryzen 5.

Recommended: Intel 2.8 GHz i7 (six-core) or AMD R7 2700.

Machine must be connected to the internet during install.

## Q: I WANT TO RESET MY HAMMERS SETTINGS TO THE DEFAULT

You can delete the Hammers.settings file to reset the settings to default. This is located at Users/username/Music/Spitfire Audio/Settings on a Mac and C:\Users\username\AppData\Roaming\Spitfire Audio\Settings on a PC.

## Q: MY LIST OF PRESETS IS EMPTY, HOW DO I SOLVE THIS?

If you have moved your Hammers folder, you can solve this problem by using the “Locate Library” feature in the Spitfire Audio App.

If this does not solve the problem, the library likely needs reauthorising, to do this, use the “repair” feature in the Spitfire Audio App.

## Q: I SEE A RED EXCLAMATION MARK IN THE TOP LEFT OF HAMMERS, WHAT DOES THIS MEAN?

This means that there is an error, you can click the exclamation mark to open a log with further details. It is likely that using the “Repair” and “Locate Library” features in the Spitfire Audio App will solve the problem but if not, contact our support team at [spitfireaudio.com/support](https://spitfireaudio.com/support) and attach the log.

## 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. If you have purchased the library on a hard drive, you should copy the contents of the drive on to the destination machine before completing the download with the Spitfire App. If you downloaded Hammers, you can copy the library folder over to the second machine and then use the “Repair” and “Locate Library” features in the Spitfire Audio App.

## Q: I CAN'T SEE THIS IN THE KONTAKT LIBRARIES PANE AND WHEN I TRY AND LOAD IT INTO KONTAKT IT SAYS NO LIBRARY FOUND

This library does not run in Kontakt, it is a standalone plug-in that you can run in your chosen DAW.

## Q: HOW DO I AUTHORIZE HAMMERS ON A MACHINE NOT CONNECTED TO THE INTERNET?

It is currently not possible to authorise Hammers on a machine not connected to the internet. Authorisation is done with the Spitfire Audio App and an internet connection is required.

## **Q: HOW CAN I REDOWNLOAD A PRODUCT?**

This can easily be done via your Spitfire Audio App. To reset both your entire library download or the latest update;

- Open up the Spitfire Audio App and log in with your account email and password.
- Select the product artwork you wish to re-download
- On this page is a “cog wheel”. Select this, choose “reset” from the menu. Then “Reset Entire Download” (for a full download) or (Latest Update) for the latest update.

This will reset your latest update ready for install again. 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 or use a different drive. We recommend NTFS on PC and Mac OS Extended on Mac. Other possible issues:
- Spitfire App freezes in the “Extracting” stage for hours. This may be because our

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

- If 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 HAVE FAST INTERNET, WHY IS MY DOWNLOAD SLOW?**

We have no direct influence on your actual download speeds, our libraries are hosted on Amazon S3 servers which are normally very quick but it may well be that at certain times of the day when traffic is particularly busy, your ISP may throttle your connection speeds.

We would advise you to leave your download running overnight as speeds should ramp up at less busy times. Our Spitfire App downloader aims to use as much of the available bandwidth as possible to give you the quickest possible speeds, and may take several minutes to reach its peak.

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

No - it is not currently possible to demo our products.

If you go to our Youtube channel you’ll see many many walkthroughs containing detailed info about all our products -- you can hear them being played in real time with no smoke and mirrors!

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

A handful of customers may find that when they log into their Spitfire App, some of their previously 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 we have, the quicker we can get you back up and running!

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

The main premise of downloading our products is that our Spitfire App downloads into the folder you choose, so it is important to choose the folder above where you want the download to go. The best file path for our products is something very simple, a long file path will cause errors as there is a character limit on how far the Spitfire App can read. We advise a file path of something along the lines of: Samples Drive > Spitfire Audio

When it comes to downloading / updating - if you have a folder called 'Spitfire Audio' always point the Spitfire App to the folder Spitfire Audio - never go into this folder and choose the actual library in question.

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

With the continuous improvements to our Spitfire Audio App, we have incorporated the ability to reset your own downloads.

This can easily be done via your Spitfire Audio App.

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

- Select the product artwork you wish to re-download
- On this page is a "cog wheel". Select this, choose "reset" from the menu. Then "Reset Entire Download" (for a full download) or (Latest Update) for the latest update.
- This will reset your latest update ready for install again.

You can repeat this process for any other updates you wish.

If you do not see the option to reset your download in your Spitfire Audio App, we would advise to download the latest version of the Spitfire App from [spitfireaudio.com/info/library-manager/](http://spitfireaudio.com/info/library-manager/).

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

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

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

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

Yes, you can copy the library folder and plugin files over to the second machine and then use the “Repair” and “Locate Library” features in the Spitfire Audio App. Please note that although the majority of the download can be done on a separate machine, you will always need an internet connection to finish the authorisation process.

### **Q: HOW DO I DOWNLOAD PRODUCTS ON MAC OSX 10.9?**

The version of the Spitfire App needed to install Hammers only supports Mac OSX 10.10 and upwards.

### **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 preset name (or presets) 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 YOUR REFUNDS / RETURNS POLICY?**

If you have NOT completed the download / installation process, and bought within 14 days 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 1-2 days after you order.

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

If you have forgotten your password, please see this link [spitfireaudio.com/my-account/login/](http://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.

## APPENDIX C — DEFAULT CC MAPPINGS

Dynamics	1
Global Gain	7
Global Pan	10
Expression	11
Reverb	19
Mix 1	22
Mix 2	23
Mix 3	24
Close	25
Overheads	26
Room	27
Close Pitched	28
Overheads Pitched	29
Room Pitched	30
Crush*	31
Crush Pitched*	33
Sub*	34
Close Rear*	35
Warp 1	36
Warp 2	37
Warp 3	38
Warp 4	39
Warp 5	40
Warp 6	41
Warp 7	42
Warp 8	43
Warp 9	44
Warp 10	45
Warp 11	46
Warp 12	47

\*Not available across all drums - mic slider empty when not present.

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