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1. Welcome to S.I.D.!

SCARBEE is proud to present **Scarbee Imperial Drums** (S.I.D.), conceived and produced by Simone Coen, featuring Elio Rivagli on drums, now shipping in native Halion 3 format.

In the tradition of other SCARBEE products such as J-Slap n' Fingered, R.S.P '73 and W.E.P., *Scarbee Imperial Drums* sets several new benchmarks in the arena of drum sampling. Recorded in 24bit/88khz high definition resolution (down-sampled to 44.1 for release), S.I.D. captures the true full dynamic range of every drum, providing nearly 30,000 individual drum samples on 3 DVDs. These DVDs represent the distillation of over 1 terabyte of recordings.

As with all other SCARBEE offerings to date, rather than offering a 'grab bag' of many instruments which have been sampled to an 'acceptable' level, S.I.D. focuses the combined energies of the entire production team on a single DW® drum set and Paiste® cymbals, with additional snares and an alternate DW® bass drum. The result is a sampled drum kit which is rendered to a level of detail previously unavailable to sample users.

S.I.D. also utilises the latest advances in sample playback technology to provide performance and mixing features never before offered on any sampled drum library.

The aim of the S.I.D. project was to truly put sample users in the 'engineer's seat'. To do this, we had to provide them with a way of miking up and mixing a kit which *had already been recorded!* The S.I.D. solution was to record each drum from multiple microphone positions, including close, overhead and ambient perspectives, with some drums recorded from multiple close perspectives. S.I.D even provides 'bleed' samples which capture the resonance of the rest of the kit as a drum is hit. These different mic perspectives are presented in a 'virtual multitrack' format within the sampler, allowing the user to pick and choose which mics he wants to use on a particular drum, how much ambience he needs, how much bleed will be useful etc. Then...it's mix time!

As with all SCARBEE products, each sound in S.I.D. has been sampled and mapped to an exceptionally high standard. A single key might feature over 420 bass drum samples in 75 velocity layers; one of the snare drums gives the user access to over 2200 snare hits in over 130 velocity layers through an intuitive combination of one key and the modulation wheel; and there are over 3,000 samples - totalling almost 2 gigabytes of data - dedicated to the 14″ Hi Hat alone! This means more articulations to choose from and virtually seamless transitions through all degrees of playing force from the lightest to the most aggressive pounding. This abundance of velocity layers also means that

sample users can finally say 'good riddance' to that bane of all drum programing – 'the machine gun effect' – the artefact which makes repeated hits of the same drum sound like a sampler rather than a live drummer playing. Ultimately, these features lead to one important breakthrough: S.I.D. has *feel.* These drums respond like a real, wildly dynamic acoustic drum kit. Add this real feel to the fact that you have wide ranging control over your drum mix, and you arrive at the ultimate sampled drumming experience: S.I.D.

S.I.D. caters for a wide range of playing styles, offering hits using standard wooden drum sticks, reversed sticks, several types of brush sticks, mallet drum sticks and even hands and fingers.

There are a total of 59 'Emperor' Kit banks, 85 Emperor Single Drum programs, 1 GM mapped kit and 174 additional banks and programs. The Emperor kit is the 'grand daddy' of all S.I.D. kits, packing thousands of samples and bristling with detail.

Of course, SCARBEE hasn't forgotten those with modest computer resources: S.I.D. also includes streamlined versions of the Emperor Kits which, while retaining much of the character and detail of the Emperor, place less demand on memory and cpu.

1.1 It all started out with friendship

If just one word had to be found to describe the strength behind S.I.D. it would be Friendship. The development of this library has been a tremendous and challenging task for everyone involved, no matter how much he or she actually did for the product. Friendship is the catalyst which has enriched the S.I.D. project with 'power and beauty' from the beginning of our journey. Simone Coen struck up a friendship with Maurizio Macchioni a long time ago. Elio Rivagli is a new-old friend. Thomas Hansen Skarbye is a virtual blood-brother and the other members of this project are firm friends.

We sincerely hope that this good vibe will be in some way transferred to you and your creations when using S.I.D.

The S.I.D. Development Team

1.2 Read me for Scarbee Imperial Drums HALion 3 free sample content

This Manual refers to the full Scarbee Imperial Drums Halion version available now! We decided to include it with the bonus kit Steinberg gave us the honour to put on the release discs of the wonderful HALion 3 sampler.

Please be aware that no support is granted for this release!

At our site www.scarbee.com you will be able to listen to and download some amazing demo songs, check out the other libraries from us and access the SCARBEE Web Shop to immediately acquire them from anywhere on Earth.

2. SID User Licence Agreement

License Agreement

Copyright © 2003 SCARBEE.

All rights reserved. All sounds created by and property of SCARBEE.

The enclosed digitally recorded sounds are licensed, not sold to users by SCARBEE.

All samples are the property of SCARBEE, and are licensed to you only for use as part of a musical performance, live or recorded, or for use in audio postproduction.

This license expressly forbids resale or other distribution of these sounds, either as they exist on this disc, reformatted, or mixed, filtered, resynthesized or otherwise edited, for use as sounds, multi-sounds, samples, multisamples, programs or patches in a sampler or a sample playback unit. You cannot sell them or give them away for use by others in their sampling or sample playback units or computers.

These sounds cannot be posted electronically without written permission from SCARBEE.

These sounds cannot be used in any library/encyclopaedia DVD/CD-Audio or DVD/CD-ROM type products without written permission from SCARBEE. Information about licensing can be obtained by contacting SCARBEE.

Any use of SCARBEE samples on commercially released audio products must contain credit for the samples used.

This credit must include: SCARBEE & name of title used. We would also appreciate being notified of such use.

3. Installing S.I.D.

3.1 Optimizing System Performance

S.I.D. is a very powerful and demanding library made up of more than 28,300 – 24 Bit samples, so some additional care should be taken in order to get the best out of it.

- It is best to do a 'Defrag' or 'Speed Disk' pass on the destination Hard Disk prior to installation
- On PCs: check that your System has DMA access *enabled* for all attached mass-storage peripherals
- If you have more than one Volume or Partition on your destination Hard Disk, please use the highest one if possible: this ensures that you will be using the fastest part of the physical Hard Disk
- Make sure you have all Virus checkers and background tasks disabled, both during the install and when using S.I.D.
- Disable the Fast Find background task usually installed by Microsoft Office on some machines

3.2 Copying of files

Installing S.I.D.:

- Insert DVD 1

- Drag & Drop all the files and folders inside DVD 1 onto the destination Hard Disk

- When done copying (it will take between 5 and 30 minutes, depending on the DVD drive), eject DVD 1

- Insert DVD 2

- Drag & Drop all folders to the "24 Bit samples" folder placed inside the "Scarbee Imperial Drums" folder on your destination Hard Disk

- When done, eject DVD 2

- Insert DVD 3

- Drag & Drop all folders to the "24 Bit samples" folder placed inside the "Scarbee Imperial Drums" folder on your destination Hard Disk

- Eject DVD 3

Now you're done installing S.I.D!

4. Introducing the concept

4.1 The concept behind this library

A)   Drum Sample Libraries are usually thought of as being all about sound. While this is true, samplists often overlook the fact that the sound of a recorded drum is the result of a combination of *many* elements - the drum itself, the microphones, the recording techniques used, and even the actions of the hands and feet of the drummer, and of course no two drummers will hit a drum in the same way! One of the weaknesses many sampled drum kits have in common is the lack of musicality associated with their sounds and programs. This is due largely to inadequate programming skills and a lack of detailed attention to the processes required to successfully sample a drum set. It usually takes days to sample a whole kit correctly, and drummers are not famous for their patience! This is the reason that the incomparable Elio Rivagli is featured on the S.I.D. library. His drums are great, his drumming is solid and creative, he's been very patient and focussed person and has always had an enthusiastic approach to this project. He's got something that many other drummers (perhaps better known on a global scale, and perhaps extraordinary player)

simply don't have: he loves working with us and continues to be an enthusiastic supporter of the project (we're willing to bet he wants more royalties…).

B) The recording environment is also a fundamental factor in achieving a great drum sound. We are not talking about tech stuff here. We're referring to the fact that most drums are sampled completely dry or in huge reverberant spaces. During our careers we have been lucky enough to attend recording sessions with renowned international drummers in great rooms. If the room choice and sound aren't tailored to the production concept (something often overlooked by record companies and the producers themselves) recordings sometimes end up using only close microphone sources, since the ambient sound may be too 'huge'. Experienced engineers realize this and end up using foam, baffles, bass traps and the like to reduce reverb time and 'wash'. When recording a sampled drum kit, it's not possible to employ these types of methods to emulate these techniques without ending up with hundreds of gigabytes worth of audio files in an attempt to cover all possible room sizes. Our way of dealing with this issue has been to choose a 'small' room with a nice ambience, which is long enough to enhance the drum sound, but short enough not to clutter mixes with its presence. In a contemporary studio, it's a matter of minutes to add realistic reverb and ambience to this drum source:

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hardware reverbs, software reverbs and the new fantastic breed of 'sampling' convolution reverbs are available to help you get almost any ambience you could imagine.

C) We used overhead microphones to double as 'whole kit' microphones, allowing us to pick up not only a balanced stereo cymbal sound, but also the complete drumkit - helping to build the perfect mix.

D) We sampled as much material as possible. By this we aren't simply referring to the huge number of samples we recorded, but also to the great amount of thought we put into extracting as much useful source material available as possible when we recorded each individual drum of the kit. Another common misconception we found in the production of drum libraries is that users don't want to hear a drum 'bleed' onto other drum tracks. This is simply not true. Apart from the ambience and overhead microphones, we, and the majority of professionals we have consulted with, obtain most of the 'ensemble' drum sound in a mix from those 'bleed' tracks. We could have sampled every single element of bleed, but for reasons of economy of both space and memory resources we were selective in deciding which elements would feature. You'll find a useful reference table detailing these sounds in the documents included with this manual.

E) Sampling a few drums. Bucking the trend, we chose to sample just one drum set. We're all tired of investing in drum libraries which boast having loads of drum kits, only to find that we can't find even *one* kit which sounds 'right', so we selected Elio's best drum-set, a DW™ kit with Paiste™ cymbals, and had at it! That way we could focus on critical issues like microphone positions and continuity of sound between recordings, and do a stellar job of sampling, since everyone involved in the recording sessions knew the sound of this kit inside-out.

F) Since the structure of the drum kits in the HALion 3 version is modular, you can easily mute whichever 'microphones' you don't need simply by deleting their folders inside the HALion 3 programs. This way, for example, you can have an overall full sounding kit but use the close mic'd version of the kick drum. This is something you can't achieve from a standard drum recording.

G) No sampling of single drums was allowed! All the drums in the kit were recorded in their standard kit position with the rest of the drum kit and mounting hardware resonating with them. This was a critical factor in getting the 'live' drum sound we were looking for.

H) High sample rate and bit depth. Although we started using it as an experiment, the 88.2KHz/24bit recording setup was

maintained throughout the whole production. There is definitely better low-end depth and high frequency clarity in these high definition recordings and we can tell you with confidence that down-sampling at 44.1KHz sounds better than actually recording at 44.1KHz. 24 bit recording was essential since the dynamic range of a drum is huge. We always sampled and programmed with an ear to what the real-world balance of the drum kit is, and never simply pushed for a maximum recording level. For example, brush samples sound lower in volume in the programs because they *do* sound quieter in a drum-set! It's up to you, the end user, to squash them if you need to.

I) The full-length myth. Although we recorded every drum for full length of its decay, we provide intelligently truncated versions of certain sounds. We didn't cut corners, but we did avoid wasteful sample bloat! For example, if you play an open hi-hat it will sound quite clearly for a long time but then after that you'll still be able to hear a tiny resonance which can ring on for as long as 40 seconds. This is simply something which is of no practical use, and would be pointless to keep even if memory and hard disks continue to become cheaper and cheaper. We support every 'Save-Planet-Earth' campaign and we feel we struck the right balance with this approach. Luxury is ok. Greed isn't.

J)   The human factor. Drums are played by human beings and are the most expressive instruments on Earth. Each time a drum is hit, the sound it produces varies – even when the amount of force applied is the same (unlike a piano for example). Human beings play a big role in the variablity of a drum's sound. Drummers can't control their playing as precisely as computers do. The most striking differences between a drum computer and a real drummer mainly tend to come down to these timbral dynamics and the 'timing factor'. Instead of sampling a thousand different levels (although we *did* sample plenty!) we took another path and chose to sample *several different versions of a single 'velocity'* for bass drums, snare drums and hi-hats - the most used drums in the kit. With S.I.D. even when you play a drum key twice with almost identical velocities, you won't hear the exact same sample. This way you really can play drums like a drummer.

K)   The scaling factor. Drummers usually play the same instrument during a session but they can still obtain a great degree of expression and tonal change by simply varying dynamics of their playing style from song to song. You, the end user of this library, have to free yourself from the concept that 127 is always the 'right' velocity level! It isn't and we'll explain why - Firstly, when you play a brush drum kit you have the full dynamic range of the bass drum

available to you, but playing it at 127 will make it sound uncharacteristic for a brush kit, even if you lower the output volume of the bass drum microphones. Secondly, every style of music has its own conventions for drum sounds. Some sound best when played softly, some sound best when played firmly. We provide drums sampled over the full spectrum and you really can make the drummer play harder by raising the velocities of all drum hits gradually. With S.I.D., as you raise velocities, you won't be hearing the same drum sample played louder. You'll be hearing different recordings of the same drum played harder and harder. Thirdly, we also sampled very heavy hits. These 'overplayed' drums are generally mapped to the velocities between 124-127. If that's your kind of sound, fine – go for it (after all, we gave it to you!), but keep in mind that when drums are hit too overly hard they tend to lose focus and a lot of the 'meat' of the sound, especially in the low frequencies - just load a bass drum program and try it for yourself. Fourthly, you'll occasionally find that some drums change sound quite abruptly across certain velocities. This is due to the fact that the *original* drum we recorded changes 'attitude' that fast. We paid close attention to these hot spots, making sure to pick up the last hit before the sound changed abruptly and the first hit after. Hard to believe? Go and try it with a real drum yourself!

L) Direct to Tape. Over the years, we've purchased a great number of drum kit and groove libraries, but using them has always been a pain since the library designers tend to overdo the processing in order to compensate for the fact that the user (and potential buyer) hears nothing else while evaluating the product. Their original work is embellished. In the real world though, having a good kit or groove with too much EQ-ing, compression or reverb can suck the life out of otherwise well produced tracks and the only solution is to build up the whole mix from these sampled grooves or kits, which is not always desirable. We understand that lots of users want ready-to-be-used sounds, but we chose to give the user the potential to really mix the drums. This could also be a good product for audio engineering students willing to learn how to mix a drum-set.

M) Recording 'secrets'. We don't intend to make a huge deal about the microphones and other equipment we used to record this library. It's not that we want to keep secrets, but rather that what really has to be important to you is the <u>real sound</u>, not the instruments we used to pick it up. Could you mix better if you knew we recorded with a SSL instead of a Fostex multi-tracker? If we told you we used the best Neumanns in the world would you feel better? No, this is just marketing hype that we'll ignore. We'd rather focus on really useful information.

4.2 Main features

- A full DW™ Drum Kit with Paiste™ Cymbals recorded with a multi-track setup direct to disk after pre-amplification for the cleanest and most natural sound - ready to be tailored to your taste

- Full Emperor Kits with all separate outputs at your disposal for full mixing capabilities

- Extra programming features like Mod Wheel Switching (Midi CC#001), Sustain Pedal Switching (Midi CC#064) and Expression Controller Switching (Midi CC#011)

- Over 1300 samples on a single key through the use of Velocity and Mod Wheel sample switching

- Up to 76 Velocity switches or more, per sample type

- All kits are balanced as they were recorded. No additional compression, limiting or other forms of processing were imposed on the samples apart from cutting, trimming and a touch of advanced noise reduction

- Every drum is individually tuneable

- Joker example Kits with all microphones open and with different setup concepts: Ambience only, Overhead and Bass Drum Outside microphones etc.

- Particular attention has been devoted to sampling Bass Drums, Snare Drums and Hi Hats

- S.I.D.'s revolutionary concept: up to 4 versions of each sample at similar volume but each with just a slightly different sound, triggered by note-on velocity, makes programmed playing as variable as real playing but allows the programmer to maintain the steadiness and 'solid' feel of a good drummer

- The real feeling of a drummer playing. Avoiding loudness maximizing and similar tricks allows the drums to breathe

- No nonsense programming. Instead of going for 8, 12 or 16 Velocity switches by default we chose to give every drum and stick type the right amount of complexity - after a thorough analysis with Elio, without going over the top. This let us use more samples where needed and economise on drums which don't display as much variation, or aren't used as much

- First rate drumming. Assuming that you don't need a great player if you're sampling a drum kit is a major mistake. The wonderful sound we got out of these drums is largely due to the fact that Elio played them with real heart and 'attitude'

- The dedication of two keys - G0 and A0 – to Ghost Snare Drum hits (with over 130 samples) makes this special

playing style come alive and improves the 'programmability' of such grooves. Ghosts hits are located on keys adjacent to the main hits, a setup which we feel reflects the fact that drummers approach playing ghost notes in a different way to 'standard' Snare Drum playing

- Special Snare Drum Effects like: letting the stick fall freely onto the snare, brushing, ghosts, presses, double brush snaps, 'random' fills etc., can add a fresh flavour to any track

- BD In and Out microphones are phase compensated in order to obtain the fullest sound

- A tutorial on basic drum programming: available as a free download to registered users

- A tutorial with examples on basic drum mixing techniques: available as a free download to registered users

- These drums are a perfect sonic match to our upcoming Grooves/Loops Library (Q2/2004)

5. Quick Start

Important HINT: if you get this dialogue on screen when loading a kit or drum, do not panic!
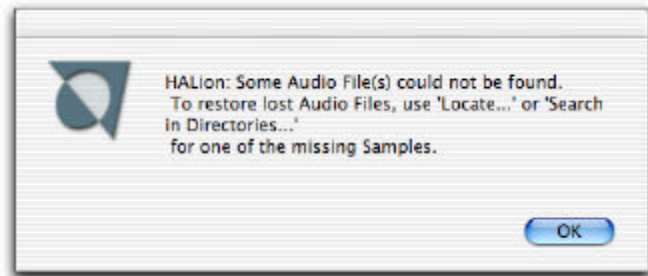
Just open the program/folder structure in HALion 3 and select a red ink-marked sample. Now, right click (Win) or ctrl-click (Mac) on it and select 'Search in Directories'.
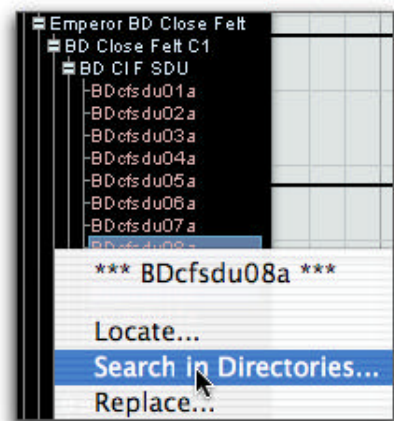
Point to the '24 Bit samples' folder and select 'Choose'.
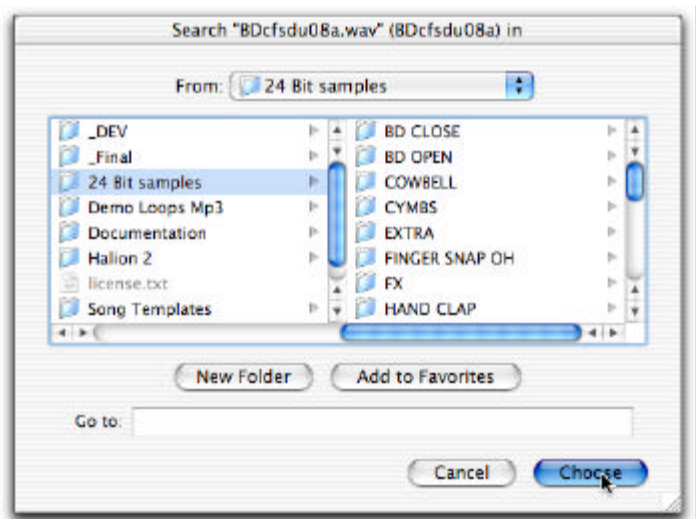
Wait patiently, then enjoy the sound of S.I.D.!

5.1 Mapping of kits

You will find mapping tables for the kits in a separate document included with the DVDs. The mapping approach strikes a good balance between being powerfully flexible and being quick to pick up. Most of the drums are mapped in a similar way to the General Midi standard.

5.1.1 Going Left and Right

Snare Drum and Hi Hat programs feature Left and Right sets of samples.

	Snare Standard	Snare Ghost	Hi Hat
L	**D1**	**G0**	G#1
R	E1	A0	**A#1**

The table above shows which Midi keys are assigned to these sets; please note that Midi Keys in **bold** refer to the commonly used hits: a drummer (if not left handed) plays Snare with the left arm and Hi Hat with the right arm, although of course this can vary during playing, for technical reasons (fills, n-tuplets, groups, rolls).

5.2.2 Multi-channel Midi

These HALion 3 Kits are programmed in a multi-channel format so that we can achieve user control over various playing techniques on different drums using midi continuous controllers. This means that each drum is addressed via its own separate midi track in the host sequencer.

If you need to play more than one drum at a time simply switch to your host sequencer and place the corresponding midi tracks in Record Ready, or turn on the Monitoring option, as shown in *Figure a*.

Figure a

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Combinations of these two settings may help you play more drums when recording on a single Midi track.

S.I.D.'s Kits are all configured to play on the following Midi channels:

Midi Channel	Drum Program
Ch 1	Bass Drum – BD
Ch 2	Snare Drum – SD
Ch 3	Hi Hat – HH
Ch 4	Ride – RD
Ch 5	Toms – TM
Ch 6	Cymbals – CY
Ch 7	Specials – SP or Cowbell – CB
Ch 8	Specials – SP or 2nd Snare
Ch 9-16	Specials - SP

Please take a moment to learn these settings since they are fundamental to S.I.D.'s approach to drum sequencing. Alternatively, you can load up one of the Song Templates included on S.I.D.'s DVDs. These include HALion 3 setup with the Kit Template bank, Track named and laid out, Drum Maps and advanced Input Filtering for instant multi-channel recording.

5.2 Multi outputs

The true power of S.I.D. lies in the fact that it gives you the ability to mix the drum kit as if it was an actual recorded one.

You have access to separate outputs for the appropriate microphones for each drum.

Table A: Separate outputs

Out No.	HAL. name	S.I.D. Name	Notes
1-2	Stereo 1	Toms	Tom 10 R – Tom 12 R/C – Tom 14 C/L – Tom 16 L
3-4	Stereo 2	Overheads	Placed over drummer's head
5-6	Stereo 3	Ride	To be pan-potted about 50% left
7-8	Stereo 4	Hi Hat	To be pan-potted about 50% right
9	Mono 1	BD inside	BD picked up from inside the head
10	Mono 2	BD outside	BD picked up from right outside of the "hole"
11	Mono 3	SD over	Microphone 'looking' at the top of the snare
12	Mono 4	SD under	Microphone 'looking' at the bottom of the snare
13-14	5.1 Surround	Ambience	Microphones pick up the whole kit from a distance

Table A shows how the recorded microphones are assigned to HALion 3 outputs. Please note that although the Hi Hat and Ride outputs are stereo, they actually output a mono signal. This will be fixed with the official release of the HALion 3 version of S.I.D.

Table B: Sampled channels set out by drum in Emperor Kits

Mic >>>	Bd In	Bd Out	Sd Ovr	Sd Und	HH	Ride	Toms	Overheads	Ambience
BD	X	X		X			res	X	X
SD			X	X			res	X	X
HH				X	X			X	X
TOM				res			X-res	X	X
RIDE						X		X	X
CYMBS								X	X

"res" refers to the sympathetic resonances set up in the rest of the kit when a particular drum is hit. Although this sound is more of an effect than an actual drum hit, it can add great depth and realism to a drum mix

Table B shows what we actually included in each kit's array of drum samples. Some of them are dubbed as 'res'. Those samples are mainly included to provide the sound of the other drums in the kit resonating with the one that is actually being played.

For example: when a drummer plays the Snare Drum, Toms always resonate with it.

5.3 Playing Dynamics

When playing, a drummer focuses mainly on groove – timing and dynamics wise.

Most of the S.I.D. programs feature highly definition multi-velocity level switching that allows you to play realistic crescendos and diminuendos.

Take care to set a dynamic range which is appropriate for the style you're working on. For example, when working with Brushes the Bass Drum should be played in the softer velocity range. Also, a single drum pattern can easily shift from country flavour to pop/rock feel by simply offsetting a few track velocities, which causes different samples to be triggered.

Figure b

Figure b shows the part of the Nuendo 2 Inspector which allows you to apply Velocity Shift, but you'll be able to apply the same processing with any compatible sequencer host. Nuendo 2 can also 'compress' the Velocity range.

5.4 Always look for the Mod Wheel

The Modulation Wheel – Midi CC#001 – is your best friend when programming drums with the S.I.D.!

The Mod Wheel was chosen as a controller to interact with S.I.D. because it is one of the few physical controllers which is provided on most Midi master keyboards and synthesizer keyboards. Luckily, the Mod Wheel is a great tool for controlling expression. We find it much more 'user friendly' than the faders or pots present on most Midi keyboards.

5.4.1 The Mod Wheel and Snare on D1 and E1

On the Standard (STD) Stick Snare programs and kits you can change playing technique by riding the Mod Wheel.

Technique	MW
Standard	0-39
Reverse Stick	40-79
Rim Shot	80-127

Values between 0 and 39 trigger the 'Standard' Snare samples. These samples were recorded with Elio hitting the centre of the skin with increasing force.

Values between 40 and 79 trigger 'Reverse Stick' samples. For these samples Elio hit the skin with the sticks reversed (the 'butt' of the stick hitting the drum) and gradually moved the strike zone towards the rim as he increased his playing force.

Values between 80 and 127 trigger 'Rim Shot' samples. These were recorded with Elio hitting the area on the snare right next to the rim. These hits can be very hard.

5.4.2 The Mod Wheel and Sustain Pedal on Hi Hat

The S.I.D. Hi Hat is probably the most complex drum ever sampled!

In order to be able to control up to 2712 samples on just two keys some ingenious programming was required. This Emperor HH 14 SUS XL program includes 'edge', 'mid' and 'bell' played hats *on the same key*, with incrementally more open samples for the 'mid' and 'edge' cymbal sounds.

Play HH with	Result
Mod Wheel	'edge'-played HH opens gradually
Mod Wheel + Sus Pedal	'mid'-played HH opens gradually
Mod Wheel@127 + Sus Pedal	'bell' sound is triggered

You can play Hi Hat on the 'edge' dynamically (with 14 unique velocity layers) on G#1 (Left) and A#1 (Right). You open the Hat by riding the Mod Wheel, which also has 14 degrees of 'openness' available.

By depressing the Sustain Pedal (Midi CC#064) you switch to the 'mid'-played Hat sound with the same spectrum of 'openings'.

If you raise the Mod Wheel to its maximum level (127) while the Sustain Pedal is depressed, you'll trigger the 'bell' sound. Try finding something closer to the real thing than this!

Taking a look at *Figure c* will help you understand the concept better.

Figure c

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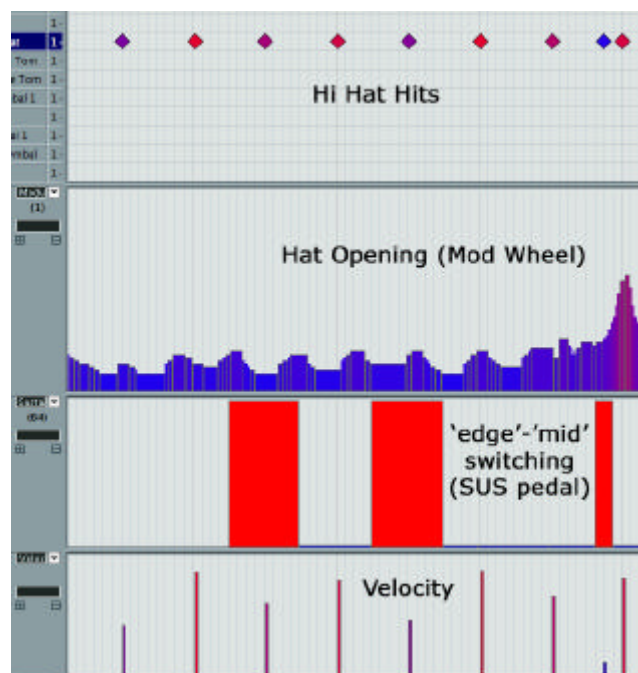
5.4.3 The Mod Wheel and Ride Cymbals on F#2

The Ride cymbal mapping is similar to the Hi Hat, but has a simpler layout:

Mod Wheel @	0-39	40-79	80-126	127
You hear	'edge'	'mid'	'bell'	'stop'

As you can probably appreciate, being able to ride the Mod Wheel gives you a much more intuitive way to switch sounds than if we had simply mapped alternate sounds to different keys or used key-switching techniques.

Hitting a 'stop' sample will mute any Ride samples which are still ringing.

5.4.4 The Mod Wheel and the other Cymbals

The other cymbals, when played in STD (standard wooden sticks), MIX (brush on R and stick on L arm) or TSN (Two Snares) types of Kits, offer the same 'stop' functionality as the Ride.

Just move the Mod Wheel to its maximum setting of 127 to trigger the 'stop' samples.

Since we had to use a trick to implement this 'stop' technique in HALion 3, please be aware that when triggering these samples

the actual polyphony - hits at the same time – of the Cymbal set is temporarily reduced to 1 note, but this shouldn't be an issue in real-life programming.

Cymbal	Midi Note
Crash 18″	C#2
Crash 16″	D#2
China 18″	G#2
Crash 14″	A#2
Splash 8″	B2
Splash 10″	C3

Cymbals diagram

5.5 Flam hits

A Flam Hit is made up of two consecutive hits on the same drum, the first one being the weaker and the second one the stronger. Flam Hits are usually played in a L-R stick order.

Flam drum playing technique is very tricky to emulate via sampling. Previously, sample libraries used to offer a limited number of '*pre-played*' flam hits. The problem with this approach is that it soon becomes obvious that these are recorded performances which are being recycled.

Flam technique is very context sensitive. The amount of time between the two hits may change due to different tempos and drummers' tastes. The volume variation between the two hits may also change dramatically from case to case.

S.I.D. Flam-dedicated keys are a new way of approaching this problem: you'll play the Flam like a real drummer since we give you the actual right hand hit – the second and harder hit - cut abruptly from a *real flam* and program it to be playable over the full Velocity scale.
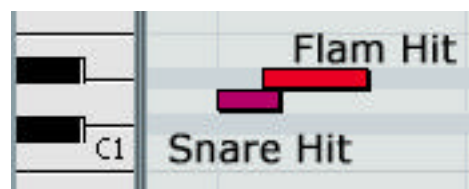
Figure d

5.5.1 Snare Flam hits

Positioned on D#1, the Snare Drum Flam hit is easy to play alongside the left hand Snare on D1. Just reach for it and keep this small tip in mind: a drummer uses both arms to play a flam, so he won't be playing other than Bass Drum and Pedal-Hat when playing the flam.

5.5.2 Tom Flam hits

These are positioned on white keys next to the corresponding Tom hit:

Tom 16″	Tom 16″ flam	Tom 14″	Tom 14″ flam	Tom 12″	Tom 12″ flam	Tom 10″	Tom 10″ flam
F1	G1	A1	B1	C2	D2	E2	F2

Tom Flam hits can be used in the same way as Snare Flam hits.

HINT: since, for reasons of memory conservation, we didn't feature separate L and R arm Tom hits you can use these Flam hits to emulate rapid repeated hits on Toms, like rolls. However, you'll need to adopt a slightly different approach for this compared to the more common Snare L/R keyboard technique you use on D1/E1 keys.

Please note that every Snare or Tom Flam hit mutes the preceding samples originating from the same drum.

5.6 Ghost Notes

Ghost-playing technique is really unique.

Since the drummer tends to play ghost notes quite *instinctively* we decided that it was important to dedicate a couple of keys to them. G0 and A0 are devoted to L and R arm ghost notes on the Snare Drum.

We feel that, by doing this, you can concentrate on programming and/or playing the main groove hits – Bass Drum, Snare Drum and Hi Hat - first.

Once you've established the fundamental groove, it's one simple step to overdub the ghost notes following your inspiration and/or the strict rules of real drumming.

What makes these keys unique is the fact that we feature over 50 velocity levels for each arm, L and R.

Thanks to this you can program or play freely without fear of sounding repetitive. Simply put: you're unlikely to ever play two consecutive hits using the same samples!

5.7 Brushes and brushing

Brushes (BRS) are among the most expressive things on Earth.

The same groove played with brushes – and even simply changing brush types – can take your playing and arranging in a completely different direction.

We love brushes so we've treated their recording and mapping with the same attention to detail as the standard wooden-sticks (STD) programs.

You'll soon see that the brush samples which accommodate classic 'brushing' technique – where the brush is dragged across the snare head - are the BR1 types. These are really useful if you're building a cool jazzy arrangement.

The other types, BR2 and BR3 - and let's not forget the bonus Toms BR4 - can be thought as 'light' sticks and can come in quite handy for country, pop, rock styles.

5.8 There's something in the 'Air'

If you dare to play A#0 on a Snare channel you'll hear something strange.

This is the sound made by the drummer's arm as it slices through the air before hitting a drum – the air swing.

You can artificially add this effect to make your tracks even more realistic, especially since this is a multi-sampled key.
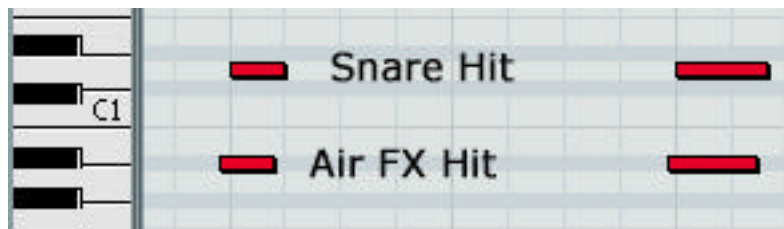
Figure e

Just select the hits you want to add 'air' to and copy them to key A#0 on Snare channel, then use the sequencer editing controls to slide the 'air' midi notes earlier, causing the air swing to anticipate the actual hit. You can use your ears or the table below and enjoy the results.

	'Air' FX Length
Samples@44.1KHz	5023
Milliseconds	56ms

To calculate a value in sequencer ticks use the following equation:

$$Pre\text{-}delay\ in\ PPQ = 56 / [(60,000 / BPM)/PPQ]$$

Where PPQ (Pulses Per Quarter note) is the resolution used by the sequencer and BPM (Beats Per Minute) is the current tempo of your song.

5.9 A quick mix balance

Drum mixing is one of the foundations of modern music.

S.I.D. drum kits are already balanced in an almost 'natural' way when you load them. Additional templates for the various sequencers will be available as free downloads for registered users a short time after initial release.

If you really need an idea of how to mix drums, just read the following tips.

- Basically, you can follow two directions: base the mix on close sources or general sources (Overheads and Ambience).

- The first approach, gives you more control if you need to process sounds with heavy compression and/or equalization, but this approach will give each drum its own 'space'.

- The second approach begins with a naturally balanced overall sound and adds close microphones to add focus to the main drums in the mix.

5.9.1 EQ

- Bass Drums will usually need some cut in the 200/400Hz area and a boost in the 'beater' area between 3 and 6KHz; you can add or cut low end to taste.

- BD in and out microphones can be used as alternate sounds or to reinforce each other: the 'in' sound is more focused and has more 'beater', while the 'out' sound has more 'air' to it and tends to blend better in a natural sounding mix.

- Snare Drums might need a low-cut or a mid-lo scoop (200-400Hz) and some more bite between 4 and 7KHz.

- SD over and under sources help you balance the sound. You can either use both or just one; 'under' will have more metallic sizzle, while 'over' will be duller and darker.

- Hi Hat can be filtered to taste, just balance and pan it accordingly to Overheads and Ambience sources. The rule is: the more you use Ambience and Overheads, the less you'll be able to influence the overall Hi hat sound by using its close sourced microphone.

- The Hi Hat comments are equally applicable when processing the Ride cymbal.

- Toms can be tricky. Due to the limitations imposed by the sampler's structure, we had to output them using just one

stereo channel. You may want to get more bite (2.5/5KHz) and maybe cut some resonating lows according to what's going on in the 'low' department in your song. You could even keep them unprocessed in a sparse arrangement or if they aren't played that much.

- Overheads stereo source provides both the Cymbals and a balance of the kit. You might need to apply a low-cut filter in order to de-emphasise microphone delay in the Bass Drum. You could also raise the highs if the song needs it.

- Ambience puts the kit in a space; this Ambience sounds good when low-cut is applied.

5.9.2 Compression

Compression can be used as sound design tool or as mixing tool.

Compression settings, ratios and thresholds are really up to the song, being dependant on arrangement and even on the BPM of the song.

One good common hint is to heavily compress the Ambience source, since this can reinforce the sound, allowing you to get a lot of 'live' feel without losing too much focus due to excessive level on your 'far source'.

5.9.3 Reverb

As a common rule, start by adding tiny amounts of reverb only to the Snare

When you find the right sound for your arrangement, take a chance and try adding it to Toms, maybe Hi Hat, Overheads and Ambience.

Also, since we chose a relatively dry Ambience source, it might be a good idea to dedicate a natural sounding room-reverb algorithm to it and listen to the results.

Reverb time is a very important factor when used with drums. If well chosen, reverb time can help the groove tremendously.

5.9.4 Phase

Phase relationships are another extremely important factor in drum sound.

We might even go so far as to suggest that you could almost mix drums by simply modifying the phase relationships and delays (in samples) between signal sources.

The Snare Drum 'under' microphone was recorded with the 'phase reverse' switch on, so it already sounds in phase with the Snare Drum 'over' source. Anyway, if you experiment with phase

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inverting the two snares you may get very interesting and useable sounds.

5.9.5 Other FX

We can't cover every possible effect which can be applied to drums, but remember that gates, phasers, flangers, delays, vocoders, synth-like filters and pretty much every other signal processor has a potentially interesting effect on drums, whether you apply them to the whole kit or to single drums, so dare to experiment!

6. Naming conventions

During the development of S.I.D. a number of decisions had to be taken.

Naming and abbreviations have been the toughest of these tasks.

Snare microphones for example are called Snare Drum Over and Under whereas in some literature they are referred to as Top and Bottom.

Overheads are right over the drummer's head, hence their name.

Ambience was chosen because it reflected the characteristic sound of these sources better than the word Room.

Toms are named according to their dimensions. The 10″, 12″, 14″, 16″ are actually two 'hanging' Toms and two 'floor' Toms.

Bass Drum Open and Close names are related to the front skin hole size.

Enclosed you'll find a document explaining the abbreviations used in this manual and in the library itself.

7. The Imperial names

Now comes the fun part!

We bet you have already wondered why we gave the library this 'Imperial Drums' name?

Well... we like it!

Apart from that, it helps identify the size and rank of this product and helps you in locating program sizes without using the ubiquitous L, XL, XXL and similar names.

7.1 Emperor

Kits included in version 1.0 are of the Emperor breed.

These are conceived as no compromise kits and need a fair amount of memory, hard disk speed and computing power.

In the Emperor format every single drum is provided.

7.2 King

King single drums usually feature a reduced set of samples:

- Bass Drums feature half the velocity switches of the Emperor equivalents.

- Snare Drums feature fewer 'special' hits and share the same samples for L and R arm Midi keys.

- Hi Hats feature fewer 'special' hits and share the same samples for L and R arm Midi keys.

These King programs let you save considerable resources without paying too much in terms of expressiveness.

7.3 Queen

Queen is a further reduced set of samples, but in a different way if compared to King

- Bass Drums feature 1/4 of the velocity switches when compared to Emperor

- Snare Drums feature a reduced technique set, roughly 1/2 the samples of the Emperor programs, but they retain the L/R Midi key differences.

- Hi Hats feature a reduced technique set, roughly 1/2 the samples of the Emperor programs, but they retain the L/R Midi key differences.

This approach lets your computer breathe even more and is recommended in all situations where there is no need for too much detail.

7.4 Prince

The Prince programs are to the Queen what the King programs are to the Emperor.

- Snare Drums have the same samples as Queen but share the same ones for L and R arms.

- Hi Hats have the same samples as Queen but share the same ones for L and R arms.

Savings start to be huge here and anybody with a decent computer setup should be able to play S.I.D., even setups which don't quite meet the minimum requirements indicated on the cover.

7.5 Joker and Specials

Joker is the place for strange and fun stuff.

We wanted to feature some odd extra playing techniques and this is where you'll find them.

In these folders you'll also find experiments we made by doing things like muting some sources or widely detuning certain drums. Try them, we think they are a good source of inspiration.

8. The drumsticks and playing techniques

Drumsticks are another drummer's secret.

Their influence on the sound is huge and even a simple change of stick brand will produce noticeably different results.

Elio is a Vic Firth™ endorser but we wanted other sounds to be featured too.

Elio's bag of tricks

8.1 Standard Vic Firth™ wooden sticks – STD

These are the mainstream drumsticks: about 80% of the music produced today is probably played with this kind of wooden stick.

8.2 Vic Firth™ brush sticks - BR1

These are another standard. The infamous brush technique is played with these brushes by simply dragging them across the snare's skin. Their sound is very gentle and soft - particularly useful for overdubbing standard stick grooves.

8.3 Hot Rod™ brush sticks - BR2

This is where things start to sound interesting: these brushes have a raw character and are a good mid-way sound between classic brushes and wooden sticks. They work particularly well on acoustic music and certain rock ballads.

8.4 Blasticks™ brush sticks - BR3

These brushes sound somewhat thinner than BR2 but when hit hard they are particularly mean. The different dynamic range and response makes them ideal for rock and pop ballads, and certain up-tempo grooves.

Regal Tip Blasticks™ can be bought at www.regal-tip.com

8.5 Webs brush sticks - BR4

These brushes are quite similar to BR1, but their plastic parts are wider making them sound 'meaner' while retaining some of the gentle character present in the classic brushes.

8.6 Vic Firth™ mallet sticks – MLT

Mallets owe their heritage to classical music, hence their usefulness for cymbal rolls. Being covered with felt, their attack is softer than standard sticks, making for a duller sound.

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8.7 Elio's Hands – HND

These hands ran the serious risk of tendonitis or worse during the recording sessions. Capturing hand-hit drum performances for a drum library recording session can be lengthy and painful process! Thanks Elio.

8.8 Elio's Hands Mute – HNDM

This sound is very similar to HND, but here the snare wasn't left 'ringing'.

8.9 Elio's Fingers – FNG

These samples feature Elio's fingers tapping on drums.

9. The Drums

DW™ Drums are Elio's drum-set of choice and they match his playing perfectly.

The sound of these drums is very strong, deep and focused, especially in the areas of Bass Drum and Toms.

We include the following pictures for your viewing pleasure.

The DW™ BD 'Close' and 'Open' featured on S.I.D.

SD A – Brass 14″x6″ Ludwig™ Snare

SD B – Wood 14″x5″ DW™ Snare

SD C – Wood 14″x5$^{1/2}$ Yamaha™ Snare

The DW™ Tom set: 10″x9″ - 12″x10″ - 14″x12″ - 16″x14″

10. Library organization

S.I.D. library features many programs and banks in HALion 3 format.

The library is primarily divided into Kits and Single Drums, with an extra GM mapped kit folder.

```
📁 01 Full Kits – banks        ▸
📁 02 Single Drums             ▸
📁 03 GM Mapped Kits           ▸
```

10.1 Full Kits - banks

This folder contains Emperor Kits, Joker and Templates folders

```
📁 01 Emperor                  ▸
📁 02 Joker                    ▸
📁 03 Templates                ▸
```
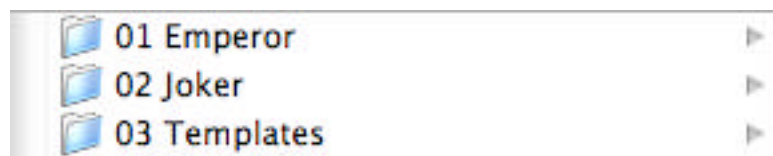
While the Joker folder feature special kits and examples of how to tailor kits to your memory or sound needs, in the Templates folder you will find basic templates for Kit construction. These are named after the sticks and techniques used and contain the single drums common to that kit. For Example the BR1 template contains BR1 Tom, Cymbals and Ride programs while leaving you free to load whichever Bass Drum, Snare Drum or Hi Hat you wish.
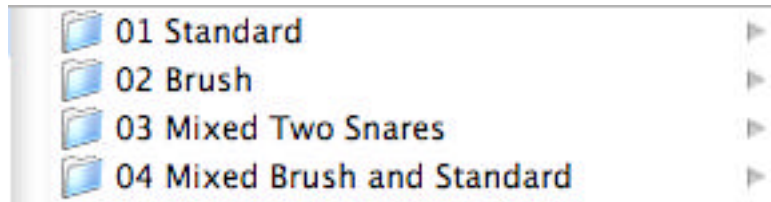
The Emperor folder is subdivided into four more folders.

The Standard (STD) folder refers to the standard wooden sticks Kits.

The Brush (BRx) folder features all of the brush sticks based Kits.

Mixed Two Snares (TSN) Kits are Standard Kits featuring a second Snare Drum on Midi Channel 8; these kits let the 'drummer' in you play up to two snares in the same song without overtaxing the CPU.

The second snare is indeed quite simple – just D1 Rim Hits and G0 Ghost Hits are featured – allowing for expanded snare options without the overwhelming memory needs of another full Snare program.

The Mixed Brush and Standard Kits allow you to play realistically with a different stick in each 'hand'. This technique is often used by drummers when they want the sound of wooden sticks on Hi Hat and Cymbals while they keep a more interesting sound on the Snare Drum. Please be aware that the Right hand always uses a standard stick while the Left hand uses one of the brushes featured in S.I.D.

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Tom Flam hits are omitted to allow for a Left hand-brush, Right hand-stick kind of mapping.

```
▼  📁 01 Emperor
   ▶  📁 01 Standard
   ▶  📁 02 Brush
   ▼  📁 03 Mixed Two Snares
         📄 Emperor TSN Kit A 596MB.fxb
         📄 Emperor TSN Kit B 535MB.fxb
         📄 Emperor TSN Kit C 534MB.fxb
         📄 Emperor TSN Kit D 479MB.fxb
         📄 Emperor TSN Kit E 649MB.fxb
         📄 Emperor TSN Kit F 635MB.fxb
   ▶  📁 04 Mixed Brush and Standard
▼  📁 02 Joker
   ▶  📁 01 Edit – detuned Kits
   ▼  📁 02 Edit – no Reso
         📄 NoRES–Emp STD Kit D 620MB.fxb
         📄 NoRES–Emp STD Kit U 475MB.fxb
   ▶  📁 03 Mics – AMB–OH–BDout–SDU
   ▶  📁 04 Mics – no AMB
   ▶  📁 05 Mics – OH–BDout
      📄 MALLET ROLLS.fxp
      📄 MUTE KIT.fxp
      📄 REVERSE KIT.fxp
▼  📁 03 Templates
      📄 Full Kit Tmplt BR1 065MB.fxb
      📄 Full Kit Tmplt BR2 086MB.fxb
      📄 Full Kit Tmplt BR3 088MB.fxb
      📄 Full Kit Tmplt EMPTY.fxb
      📄 Full Kit Tmplt MX1 140MB.fxb
      📄 Full Kit Tmplt MX2 144MB.fxb
      📄 Full Kit Tmplt MX3 140MB.fxb
      📄 Full Kit Tmplt STD 129MB.fxb
```

10.2 Single Drums

This folder features the Emperor single drums and all of the 'economy' and special versions.

```
01 Bass Drum      ▷
02 Snare          ▷
03 Hi-hat         ▷
04 Ride           ▷
05 Toms           ▷
06 Cymbals        ▷
07 Special Hits   ▷
```

Each of the folders shown above reveals more options when opened.

- Bass Drum folders feature an extra EQ folder. These Bass Drum program examples are already EQ-ed and can be useful if you need to get a good BD sound fast. We featured these because Bass Drums are not memory intensive programs and these processed programs might be helpful in understanding how to balance the two BD microphones.

- Hi Hat and Ride folders feature an 'EXP Pdl Midi CC11 Programs' folder. This folder contains programs which control Hat opening and Ride playing position via Expression Controller Midi CC#011. If you own one and want to use it, you will have to substitute Hi Hat program in the Kit you're currently using.

- ▼ 📁 01 Bass Drum
  - ▼ 📁 01 Emperor
    - 📄 Emperor BD Close Felt.fxp
    - 📄 Emperor BD Close No Cshn.fxp
    - 📄 Emperor BD Close Plastic.fxp
    - 📄 Emperor BD Cls Half Cshn.fxp
    - 📄 Emperor BD Cls TB Felt.fxp
    - 📄 Emperor BD Open Felt.fxp
    - 📄 Emperor BD Open Plastic.fxp
    - ▶ 📁 EQ
  - ▶ 📁 02 King
  - ▶ 📁 03 Queen
  - ▶ 📁 04 Joker
- ▶ 📁 02 Snare
- ▼ 📁 03 Hi-hat
  - ▼ 📁 01 Emperor
    - 📄 Emperor BR2 HH 13 SUS.fxp
    - 📄 Emperor BRS HH 14.fxp
    - 📄 Emperor MIX HH14 Edge.fxp
    - 📄 Emperor MIX HH14 SUS.fxp
    - 📄 Emperor MX2 HH13 Sus.fxp
    - 📄 Emperor STD HH 13 SUS.fxp
    - 📄 Emperor STD HH 14 Edg Pdl.fxp
    - 📄 Emperor STD HH 14 Mid Pdl.fxp
    - 📄 Emperor STD HH 14 Mix.fxp
    - 📄 Emperor STD HH 14 SUS.fxp
    - 📄 Emperor STD HH 14 SUSXL.fxp
    - ▶ 📁 EXP Pdl Midi CC11 Programs
  - ▶ 📁 02 King
  - ▶ 📁 03 Queen
  - ▶ 📁 04 Prince
  - ▶ 📁 05 Joker
- ▶ 📁 04 Ride
- ▶ 📁 05 Toms
- ▶ 📁 06 Cymbals
- ▼ 📁 07 Special Hits
  - ▶ 📁 AIR FX
  - ▶ 📁 COWBELL
  - ▼ 📁 FINGER SNAP
    - 📄 Finger Snap.fxp
  - ▶ 📁 HANDCLAP
  - ▶ 📁 MALLET Rolls
  - ▶ 📁 MUTE Hits
  - ▶ 📁 REVERSE Hits

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10.3 GM Mapped Kit

S.I.D. features one GM mapped kit.

This kit is mapped following the GM standard as set up by the Midi Manufacturers' Association.

We include this GM kit to allow fast auditioning in songs which were programmed with other GM compliant kits or with Standard Midi Files.

S.I.D.'s power is partially retained but we strongly encourage you to adopt the Full Kits as soon as possible, since they offer you many more options and sounds.

Additional GM kits are planned for future release, depending on user interest.

11. HALion 3 and hosts

Steinberg's HALion 3 is one of the most advanced sampling engines now available. Its folder structure allows for fast programming, modifying and customizing of S.I.D.

Note that there are optimizations available to help tailor S.I.D.'s performance to your computer's capabilities, so please read through this chapter. <u>Please update to the latest version of both HALion 3 and your host</u>.

11.1 HALion 3 use and optimization

- Preload Into Ram: this setting is crucial for S.I.D.'s performance. Our advice is to set this fader at the maximum level compatible with your system and the memory needs of other plug-in or applications you may be using at the same time as HALion 3. All the memory preload indications in the Banks names refer to a minimum 0.75 second preload setting.

- Hard Disk activity will increase considerably if Preload value is set lower than 1.50 seconds. If you encounter Hard Disk streaming problems, the first thing to try is raising this value.

- Sometimes playback quality can get quirky or Hard Disk streaming may stop working; this is usually due to problems in your system, but often quitting and reloading the host application will fix this problem.

- Voices: a good setting is at 64, but you can go up to 80 or 96 if you experience noticeable voice-stealing effects.

- Quality: this setting is best left at 100%; as soon as you start lowering it, it will degrade quality in a very evident way by lowering the sample rate and bit depth.

- Resampling Quality should be set to 'Best'. Even if S.I.D. doesn't make wide use of real time resampling this setting will make Joker Kits sound much better.

- Full quality during export only needs to be activated if you, for any reason, decide to lower the Quality setting form 100%.

- If you experience slow redraws, you are probably in the Keyzone page. All you have to do is switch to a different page.

11.2 HALion 3 in Cubase SX and Nuendo 2
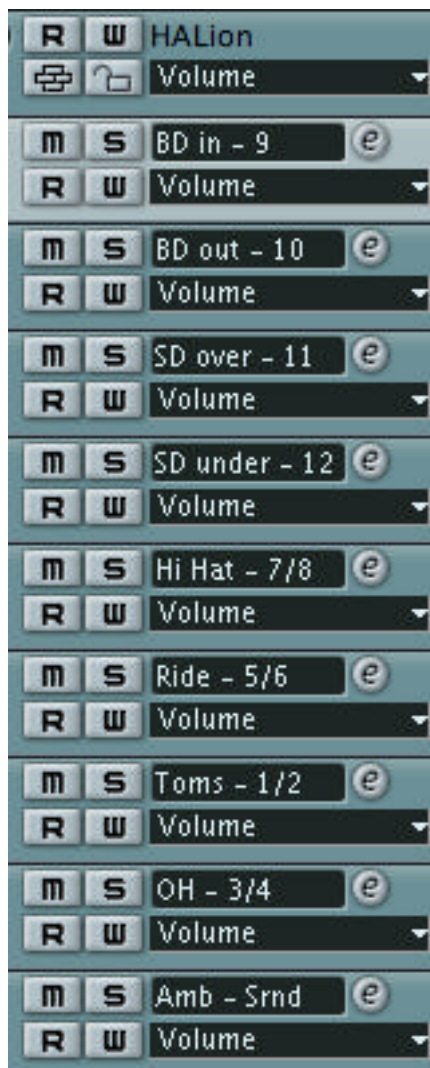
You can load up one of the templates we include with S.I.D. and start up your new songs from there or read through this.

When you open up HALion 3 in Cubase SX 2 or Nuendo 2 a number of outputs will be created: 4 stereo, 4 mono and a surround out.

The configuration and order of these outputs is fixed in HALion 3, but you can rename and rearrange your sequencer tracks in whatever way best suits your needs.

Track No.	Out No.	HAL. name	S.I.D. Name	Suggested name in host
1	9	Mono 1	BD inside	BDI - BD in
2	10	Mono 2	BD outside	BDO - BD out
3	11	Mono 3	SD over	SDO – SD over – Top
4	12	Mono 4	SD under	SDU – SD under – Bottom
5	7-8	Stereo 4	Hi Hat	HH – Hi Hat
6	5-6	Stereo 3	Ride	RD – Ride
7	1-2	Stereo 1	Toms	TM - Toms
8	3-4	Stereo 2	Overheads	OH – Overhead
9	13-18	5.1 Surround	Ambience	AMB

The table shown above illustrates the assignments and positions of drums in the templates included.

We have also included Drum Maps for S.I.D.'s Kit layouts so that you can load them up in SX or Nuendo and use them as a reference when programming.

You load Drum Maps from the Drum Maps Setup window, which is opened from the Inspector.
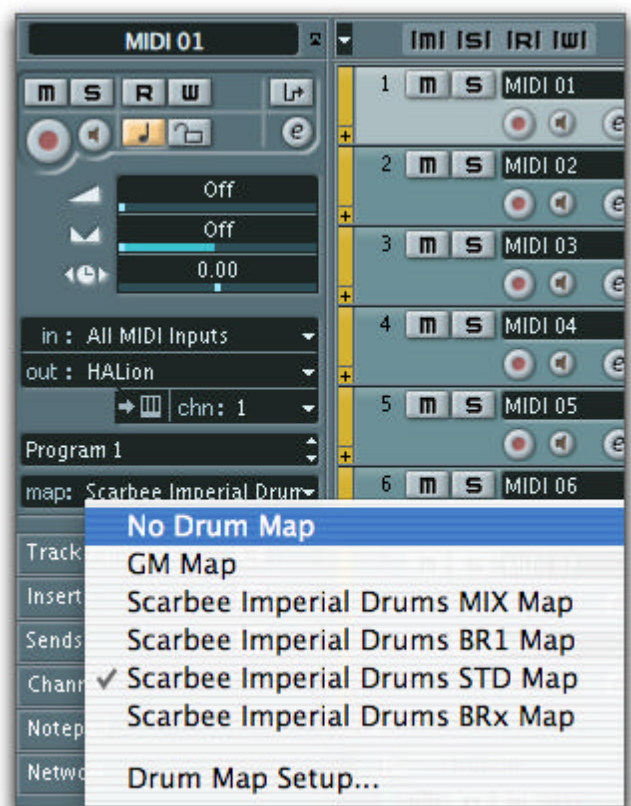
11.3 HALion 3 and V-Stack

S.I.D. in Steinberg V-Stack is an excellent option. It will allow you to run S.I.D. stand-alone on a VSTi dedicated computer and thus lighten the burden on your sequencer. If you are using Steinberg software, V-Stack is a cheap way to expand your VST System Link studio.

11.3.1 The 'Phase Invert' VST-PC plug-in

Available as a free download for registered users, this VST-PC plug-in allows you to invert channel phase inside V-Stack and other hosts which don't provide phase inversion (or reverse) switches.

Using this plug-in is foolproof: just click on the 'phase invert' switch to invert phase. Of course the plug-in will remember its state when reloading a session. It doesn't get simpler than this.
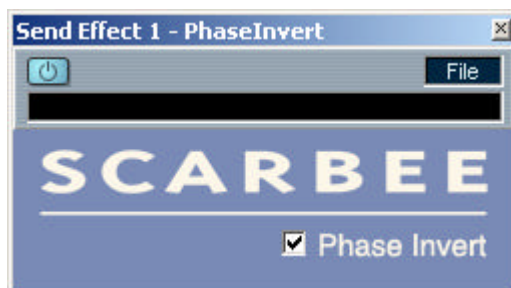
A special thank you to Alfonso de Prisco and Thomas Serafini for developing this simple, yet effective, plug-in.

11.4 HALion 3 and other hosts on Mac OS

The only wide spread sequencers which use the VST plug-in standard on OS X are Cubase SX and Nuendo 2; HALion 3 is now Audio Units and Stand Alone compatible so further testings are being lead with leading programs from other manufacturers like Emagic Logic Pro and Digital Performer 4.

11.5 HALion 3 and other hosts on Windows

S.I.D. works in Sonar with the DXi version of HALion 3.

Further testing with other hosts was not possible at the moment of writing this manual, but every fully compatible VST 2.3 or DXi host should run S.I.D. fine inside HALion 3.

For the latest news on supported formats and compatible hosts, please visit us at www.scarbee.com.

12. Customizing Kits

S.I.D. Kit customization requires some insight into HALion 3 architecture.

If you load one of the Kit template banks, you'll be able to load any of the single programs easily.

All you have to do is select SD channel if you want to load up a Snare Drum or select whichever other channel type you need to load. Then right click (Win) or ctrl-click (Mac) on the appropriate preset channel in the HALion 3 program list on the right.

Select 'Load Folder(s)' and browse for the program you need.
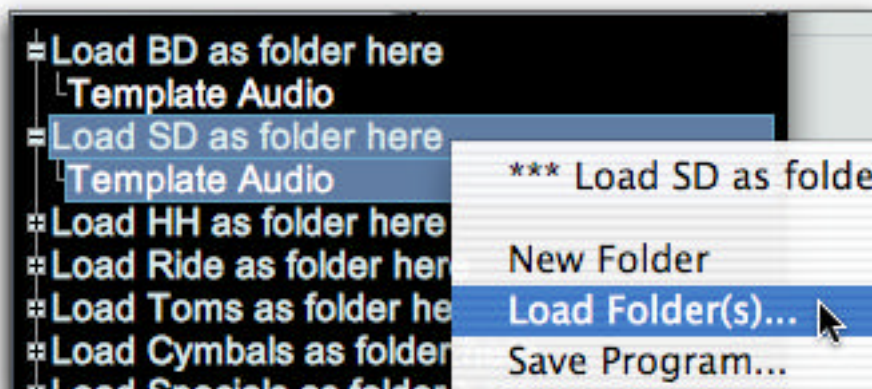
By doing this, you'll be certain to load the appropriate programs with the right polyphony settings.

If you are modifying a pre-loaded Kit, you are advised to do the same as above described, but load the new program 'as folder', then delete the old one by selecting it and hitting 'Backspace'.

You may also use HALion playback architecture to mangle the sounds to your taste.

Modifications can be obtained by selecting the appropriate folders or programs in the program list on the right and the moving the controls in the main HALion 3 interface.

Just make sure to put HALion 3 in the select/relative edit mode as shown here.

NO!!!!   YES!

13. Production credits and thankyous

Production Credits

Library concept, production and editing: Simone Coen

Drummer: Elio Rivagli

Recording Engineer: Maurizio Macchioni

Additional Recording Engineer: Enrico Tortarolo

Processing Presets: Simone Coen and Marco Martini

Recorded at Hyde Park Studio, Vimodrone (MI), Italy February 03

Edited at Chocolate Studio™, Monza (MI), Italy and at Sicilian Outfit, Patti (ME), Italy March 03 through October 03

Programming HALion 2/3 version: Simone Coen

Additional Production: Elio Rivagli and Maurizio Macchioni

Additional Developing Concepts, Publishing and Distribution:

Thomas Hansen Skarbye & Anne Skarbye, SCARBEE

Phase Invert VST plug-in concept and development: Alfonso de Prisco and Thomas Serafini

Cover Art and Design: Anne Skarbye

The SCARBEE Beta Test Team: Al Turner, Lars D. Terkelsen, Stefan Kengen and Rick Chadwick

Manual: Simone Coen with contributions by Rick Chadwick and Al Turner

Thankyous

Pierangelo "Pier" Troiano for his ongoing support

Diego Maggi at Backline, Milano, for extra Motu Audio System

Mauro Angeletti, Andrea Fortuna and everyone at Midiware, Roma, for Steinberg Nuendo 2, Cubase SX2, HALion 1, HALion 2 and V-Stack

Steinberg Gmbh for letting me be part of the HALion 3 team and my friend Alessandro Cardinale for the Cubase SX NFR

Didi Dori at Waves for TLN of their wonderful plugins

Giuseppe Frison, Francesca Bortot, Andrea Furfaro of Digidesign Italy for help and for providing additional HD 192 Audio interfaces

Aramini for DW™ drums, Paiste™ cymbals and Vic Firth™ drum sticks

Piero Chianura, Fabio Artoni and Roberta Bottini at Strumenti Musicali for teaching me so much about life, writing and communication

Our families, friends and fellow musicians for supporting us during all this period

The Skarbye family

The talented Beta Test Team: Al Turner, Lars D. Terkelsen, Stefan Kengen, Rick Chadwick

The Cubase.net forum posters and especially "pinkcanary", onbe of the best moderators around the net

All of our users

<u>Elio Rivagli endorses DW™ drums, Paiste™ cymbals and Vic Firth™ drum sticks</u>

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