

AC-DR

ACOUSTIC DRUM MACHINE

USER GUIDE

Soniccouture

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INSTALLING YOUR SONICCOUTURE PRODUCT

If you do not own Kontakt, you can install the free [Kontakt Player](#)

The AC-DR library is installed via [NI NATIVE ACCESS](#).

[FULL INSTALLATION INSTRUCTIONS](#)



LIBRARY SPECIFICATIONS

- 3 GB Library
- Up to 10 round robins per layer
- Accent / Normal velocity layers
- 3 Beat Tools drum sequencers
- 24bit 96khz Stereo Sampling
- Kontakt Player 6.7+ / NKS compatible



AC-DR: CONCEPT



Automated snare sampling, Bean Tree Studio



Echo Chamber 1, Rockfield studios October 22

Drum machines from the 1980s seem to dominate dance music, hip-hop, chart pop and contemporary music in general. Yet there seem to have been very few new examples of that genre which takes advantage of modern sampling techniques. The drum rompler is certainly ubiquitous, with hundreds of instruments offering different styles of ultra realistic acoustic drum kits - and in many ways it would be fair to say that *these* are the natural evolution of the 'drum machine', since the aim of those early models was to offer the most natural sounding accompaniment that technology could muster at the time; the ways in which they fell short have ironically become the sonic character beloved to producers everywhere. It is also true that there are now many recreations and modernised versions of the classic boxes, particularly the TR-808 and TR-909.

The common format of the classic drum machine has contributed many useful factors to rhythm production. For example, having only two 'velocity' layers - 'Accent' and 'Normal' - lends its own clean rhythmic compression to a drum track, freeing up space in the mix where all the myriad shades of true drum dynamics would have been. The static or almost static nature of the sounds themselves allow a timbral repetition and transient consistency which is attractive in a rhythm track, although far from 'natural'. Step based sequencing gives an immediate & intuitive method for building layered rhythms.

Our aim with the AC-DR project was to create something in the spirit of the original boxes - with a new instrument using acoustic drum samples. Instead of the tiny, static samples of the LinnDrum or EMU Drumulator, we would be free to use as much recorded audio



as we liked - but instead of trying to recreate a real drum kit, we would try to create something with the spirit of an 808 or 909.

This means an instrument designed for use in electronic music, that would fit into the same kind of productions and sonic spaces. Something that would offer an 'analogue' sensibility to digital drum samples by splitting them down into component parts for tweak-ability. Instead of the hundreds of velocity layers of the drum rompler, the dynamics should be narrow: just Accent and Normal. To add a sense of liveliness, the modern practice of ['round-robin' sampling](#) would be employed; this is an crucial point, because where a LinnDrum type digital drum machine's defining sound is the 'machine-gun' repetition of single hits, the classic analogue machines (808 etc) have an organic 'chatter' to them, where each hit is demonstrably a unique electronic event, with small variations in tuning and timbre. A modern drum machine should seek to re-create this appealing sense of life within very tight parameters: the round-robins must not be so audible that a minimal 4/4 repetition reveals obvious variation as this would be distracting in a production. The desired effect would be entirely subliminal, noticeable only when switched off.

THE SAMPLING PROCESS

We experimented for some time with alternative recording techniques for acoustic drums that step away from traditional studio drum mic-ing. Using a very dead recording space to give a crisp, dry sound was the first step. Tuning the drums towards the highest end of their range also takes them closer to the sound of classic drum machines: the 909 bass drum particularly has a very high pitch when compared to an acoustic bass drum, yet is renowned for its deep, punchy sound. The way that this bass drum sits in a modern dance/pop mix is largely down to its higher pitch.

Specialist Ukko drum contact mics were used on many drums - to create the 'knock' and 'shell' sound on the bass drums and toms, the 'metal' sounds on the hi-hats & rides, and the 'body' channel for the cowbell. While these mics are certainly not great sounding on their own, they add a certain synthetic texture to the mix.

We evolved a particularly unusual process for snare drums: using a Poly End Perc auto percussion device, 8 separate recording passes were made for each snare:

- Snare Off
- Snare On Loose
- Snare On Medium
- Snare on Tight



These takes were then repeated with damping applied to the top head. This process enabled us to separate the snare off 'body + rim' sounds of the snare from the bottom mic 'wire' sounds; the Polyend giving great precision in terms of hitting exactly the same spot at exactly the same velocity. This meant the different recordings all line up perfectly and recombine into the multi-signal sound you hear in the instrument.

The Polyend Perc was not used to record any other instruments, however, as the natural methods were preferable for sonic reasons.

The 'Trans' (transformer) signal was created by sending the samples through an Overstayer saturation hardware unit. Again, as with all the sampling, a full set of 10 round-robins was captured so that the variation of the samples is repeated in the response of the distortion.

The recording process itself was combined with editing concurrently - short takes of hits were recorded, then edited directly using a proprietary tool for selecting identical round robins. If the take was not tight enough, then more takes would be recorded until the set of round robins could be completed.

ECHO CHAMBERS

Once all sets of bass drums, snares, rimshots and toms were finalised, we set off to Rockfield Studios in south Wales, to utilise their two amazing echo chambers. Inspired by a visit to Capitol? Studios in the 1960s, owners Kingsley & Charles Ward applied Welsh farmer know-how and built their own - 7 layers of lacquer on the curved plywood ceilings being the key to the reflective sound. Chamber 1 is a much bigger sound than Chamber 2.

The full sets of round robins for each drum (signals summed) was played back through two echo chambers and the results recorded. The 'SPACE' signal on the BD, SD, RS, TT channels is a mono mic from each chamber, and you can choose Chamber 1 or 2. The signal here is mono because the intention is not so much that it functions as a natural reverb, but as an additional sound design element to drums sound. EG: the SPACE signal forms a very useful noise element particularly in the BD module - if you close down the decay until it is only a short attack it adds definition to the front of the kick drum sound.

If the full stereo reverb effect is desired, the echo chamber IRs can be found in the FX1 list of spatial effects.

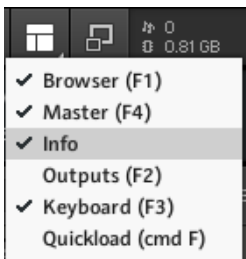


THE KONTAKT INSTRUMENT

SNAPSHOTS (PRESETS)



Kontakt stores presets as Snapshots, and we've provided a selection of different kits and grooves as Snapshots. **To access them, click the 'camera' icon** at the top of the Kontakt window and you'll see a drop down menu. The Factory section contains the ones we've made, and your own will be stored in the User section.



BUILT-IN HELP

If you activate the Info pane in Kontakt, you can hover over any control in the instrument and a short note will appear in the Info pane at the bottom describing what that control does.



THE MAIN PANEL



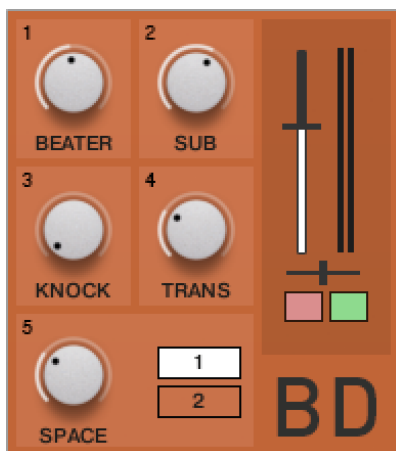
- The AC-DR panel features a grid of 11 blocks, each one representing a different drum type. Each block features:
 - LEVEL FADER - This is the main 'mixer' control for each drum. There is no additional mixer window.
 - PAN FADER - as above
 - MUTE + SOLO BUTTONS
 - SIGNAL KNOBS: These vary depending on the drum type. Each channel can be edited in depth if desired. See EDIT PANEL section.



BD: BASS DRUM



- Bass Drum Types: Mapex CherryBomb 18", Gretsch 20", Saturn 22", Premier 24", Gretsch 26". Switchable from within EDIT PANEL.

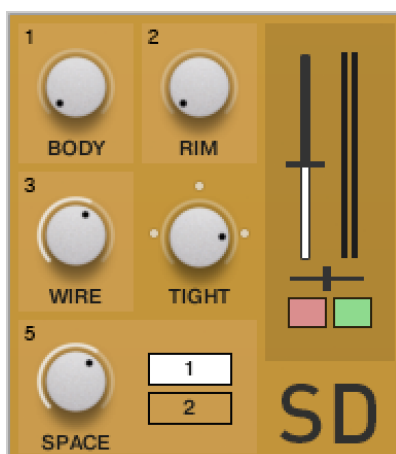


- BEATER: Mic signal from beater side of drum
- SUB: Mic signal from front drum head
- KNOCK: Ukko Contact Drum Mic on shell
- TRANS: Overdriven signal from Overstayer NT-02A Saturator.
- SPACE 1 + 2: Live mono signal from 2 echo chambers in Rockfield studios, UK. Select using 1/2 buttons.

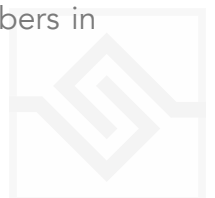
SD: SNARE DRUM



- Snare drum types: 13X6 (Yamaha Custom Brass), 14X (Mapex Cherrybomb 14x6), 14R (Mapex Razor Maple 14x5) 14T (Tama Maple 14x6.5)
- All Snares switchable from damped to undamped (select DAMP in EDIT PANEL)



- BODY: Close mic signal from centre of top head
- RIM: Close signal from clip-on Earthworks snare mic pointed at drum rim.
- WIRE: Mic signal from bottom head, recorded separately.
- TIGHT: 3 levels of snare wire adjustment
- SPACE 1 + 2: Live mono signal from 2 echo chambers in

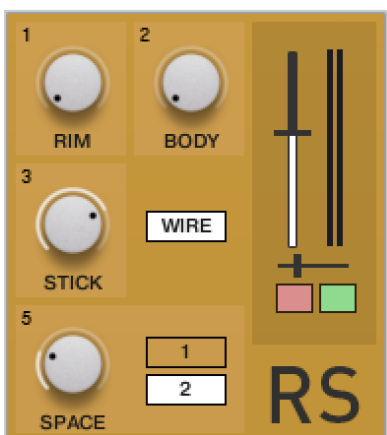


Rockfield studios, UK. Select using 1/2 buttons.

RS: RIMSHOT



- Rimshot types: Wood (Tama 14 w/maple hoops), Steel (Unnamed 14 inch steel snare with low rim)

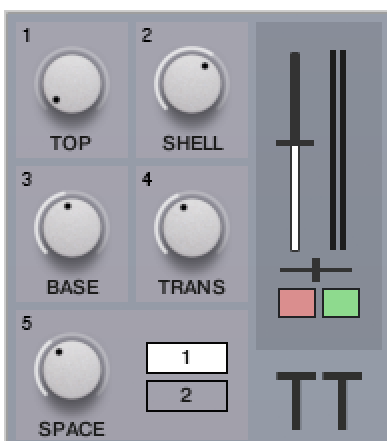


- RIM: Close signal from mic pointed at point of contact
- BODY: Close signal from clip-on rim Earthworks snare mic pointed at drum body.
- STICK: Ukko Drum Contact mic below rim
- WIRE Button: switches snare wire ON or OFF in samples.

TT: TOM-TOMS



- Mapex Saturn Toms, 12, 13, 14, 16. Switch between STICK and MALLET. MALLET set is tuned a tone lower than STICK.



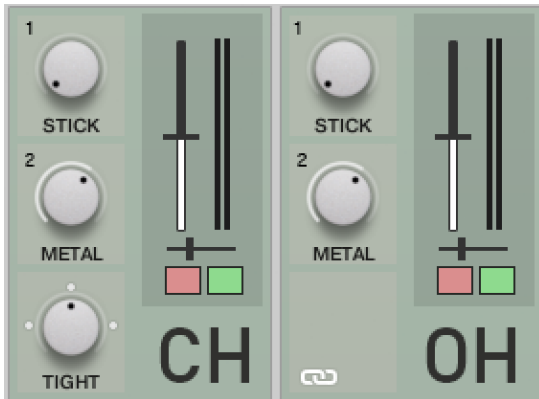
- TOP: Mic signal from top head of drum.
- SHELL: Ukko Drum Contact mic on drum shell
- BASE: Mic signal from lower head
- TRANS: Overdriven signal from Overstayer NT-02A Saturator.
- SPACE 1 + 2: Live mono signal from 2 echo chambers in



CH + OH: CLOSED HAT & OPEN HAT



- Hi-Hat types: 12" PSX DJ Hats, 14" Paiste Heavy Reflector, 16" Paiste Masters Thin Hat
- Articulations: Closed (CH), Half (HH), Open (OH)

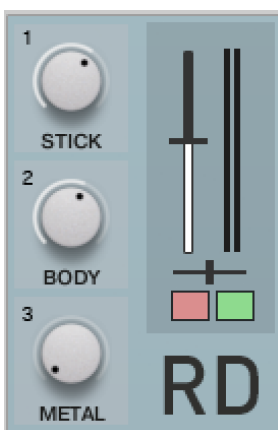


- STICK: Mic Signal 3 feet above hi-hat
- METAL: Ukko Drum Contact mic on bottom hat
- TIGHT : 3 levels of pedal tightness for CH only.
- Link button: syncs controls between CH block and OH block. When Link is OFF you can create a different OH sound to the CH settings.

RD: RIDE CYMBAL



- Ride Cymbals: Paiste Masters 20" Bluebird, Paiste Masters 21" Extra Dry, Paiste 22" Big Beat
- Articulations: Edge, Bell.
- Rides do not feature Accent /Normal, they are single layer.



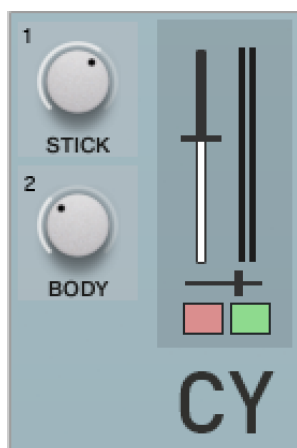
- STICK: Mic Signal cymbal top
- BODY: Mic Signal further back
- METAL: Ukko Drum contact mic



CY: CYMBAL



- Cymbal types: Paiste Signature 17" Fast Crash, Paiste Signature Thin China 18"

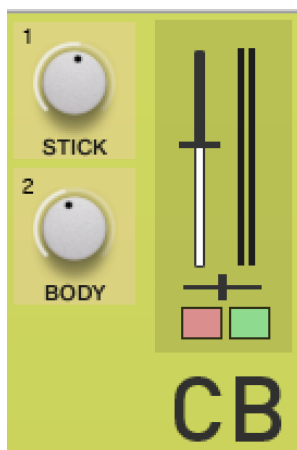


- STICK: Mic Signal cymbal top
- RING: Mic signal process through home-made oil-barrel reverb.

CB CL: COWBELL & CLAVES



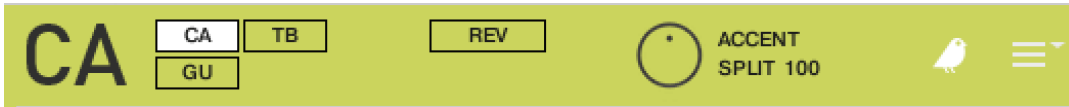
Percussion Block 1: Cowbell or Claves. Either can be selected in the block. DAMP button affects cowbell only.



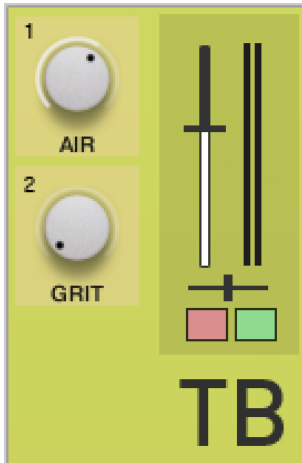
- STICK: Mic signal
- BODY (CB): Ukko Drum contact mic fixed to underside
- BODY (CL): Close mic signal



CA TB GU: CABASA TAMBOURINE & GUIRO



Percussion Block 2: Cabasa, Tambourine, Guiro

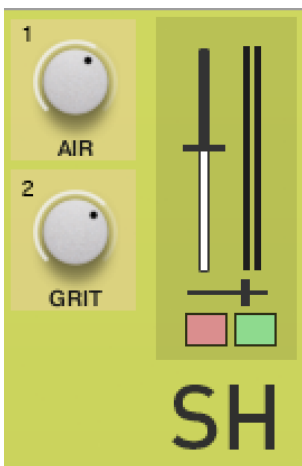


- AIR: Mic signal a few feet back
- GRIT (CA, GU): Close mic signal
- GRIT (TB) : Overstayer Saturator NT-02A

SH: SHAKER



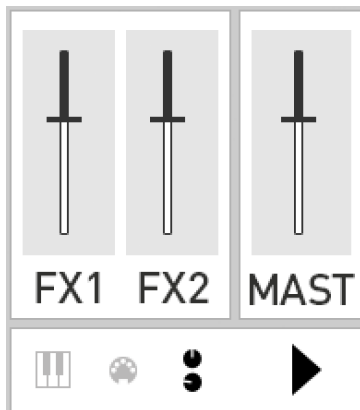
- Shakers: Meinl Egg (Soft), Menil Waka.
- Accent /Normal is a Back /Forth articulation.



- AIR: Mic signal a few feet back
- GRIT: Close mic signal



MASTER BLOCK



- Effects return faders - click on name to activate FX PANEL
- Master Fader - click name to activate MASTER BUS PANEL
- MAPPING (Keys icon) - Activate MAPPING PANEL
- SELECT BY MIDI - When active, drum blocks will be selected by last note played
- EDIT PANEL (Dials icon) - Activates / hides central edit panel.
- PLAY - Activates current Beat Tools sequence.



THE EDIT PANEL



- Clicking any drum channel name (BD, SD, RS etc) will launch the EDIT PANEL for the selected drum. The Dials icon will also toggle the panel on or off.

THE CONTROL BAR AT THE TOP

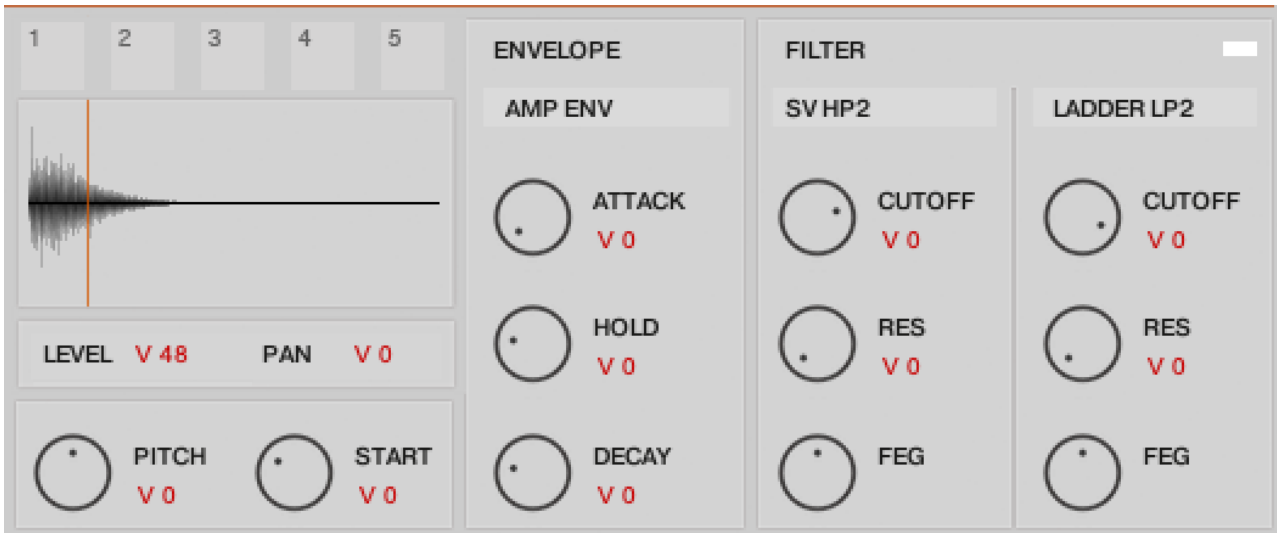


- DRUM BUTTONS: Select a different drum size / type. Varies according to drum. Switching types this will not alter the other settings (envelope, filter, EQ etc.)
- REV : This button reverses the drum. You may need to use the START offset control to hear /fine tune the reversed sound, as by default it will play front he end of the tail of the sample.
- ROBIN : Enable /disable round robin samples. Each hit has 10 alternate samples.
- MENU: Polyphony options. LIMIT TO 1 for a self-choke effect, UNLIMITED for a natural decay, FUZZY LOGIC to save cpu while retaining a natural sound.

ACCENT

- ACCENT :The dial sets the level for the accent layer - make the accent louder or quieter in relation to the NORMAL layer.
- SPLIT: Sets the MIDI velocity level at which the Accent is triggered. e.g. - Above 100 = Accent, Below 100 = Normal. If you only wanted to hear the Accent layer, you could set this to zero.





PITCH, START, ENVELOPES & FILTERS

Each drum has its own unique set of filters and processors.

- **PITCH:** Adjust the tuning of the drum. Hold shift for fine values, Alt for semitones.
- **START:** Offset the sample start time. Useful when using reverse, or to change the attack sound.
- **ENVELOPE:** Adjust Attack, Hold, Decay times. This enables you to shape the drum hit.
- **FILTER ENVELOPE:** (click AMP ENV menu): Apply a different time envelope to both filter cutoff frequencies.
- **FILTERS:** Two filters are available per drum; click the drop-down menu to choose from many different types of LPF, BP (band-pass) and HPF filter. TIP: using a HPF around 50 - 70hz with a small amount of resonance dialled in will give you more low end punch.



VELOCITY MODULATION WITH RED NUMBERS

Any parameter with the red V number next to it can be modulated using the incoming MIDI velocity. A positive value will increase the effect at high velocity values. Different Kontakt parameters will behave in slightly different ways.

EG: If you set the LEVEL velocity to 100, then very low velocity hits will be very low in level (quiet), and high velocity hits will have the full level set by the fader.



EG 2: If you set the AMP ENV DECAY velocity to 100, the high velocities will have the full decay time you have set with the knob, low velocities will have a progressively shorter decay.

EG 3: If you set the filter CUTOFF velocity to -100, then low velocities will have the full cutoff frequency value set with the knob. High velocities will have a cutoff value much lower than the set frequency. If you set the cutoff velocity to 100, then high velocities will have progressively higher values than the set frequency.

EG 4: If you set the PITCH velocity modulation to 100, then high velocity notes will increase in pitch *above* the set value.

EDITING INDIVIDUAL DRUM SIGNALS

To really unlock the sound-design power of AC-DR, it is possible to use the various envelopes and filters differently on each signal. A classic example would be to high-pass only the BD BEATER signal so that it's just a click, then lowpass the SUB signal to cut out midrange mud. You might also want to experiment with setting the pitch & envelopes differently on each signal, which can give powerful results.

To do this, simply click on one of the number squares above the waveform - as shown below:



This will activate the individual edit mode, and you will see a white highlight appear around the ENV + FILTER blocks. Only elements that have a white outline can be edited individually - compressor, transient and EQ etc cannot.

If you activate button 1, you will see that the corresponding knob on the drum block will also highlight - this is the signal you are editing.

To de-activate individual edit mode, click the number square once more so that the white outlines disappear.

DRUM CHANNEL PROCESSORS

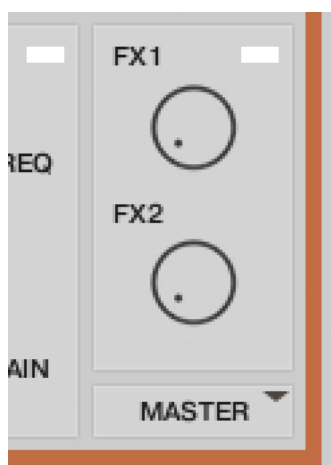
Think of these like an outboard rack in your studio. They apply across all the signals in your drum, and cannot be applied individually to each signal (see previous section.)



- Each module can be switched ON/OFF using the grey/white square in the top right of each box.
- COMPRESSOR: Kontakt's Pro compressor module. Very precise and versatile for shaping and tightening up drum sounds.
- TRANSIENT: A very useful simple module for quickly shaping the ATTACK and SUSTAIN of an individual drum.



- **EQUALISER:** Kontakt Solid BUS EQ - an SSL channel EQ emulation. Shelved High and Low sections (switchable to a Bell curve) with 2 parametric mid-bands.
- **SAT:** A saturation effect. Gentle harmonic distortion can give your sound more presence. Better used at low values.
- **FX 1 FX 2:** Send controls to the two global effects modules. FX1 = Convolution Reverb FX2= Replika Delay. Click on the FX1 FX2 return faders to edit the effects. ON / OFF switch cuts both FX sends at once.



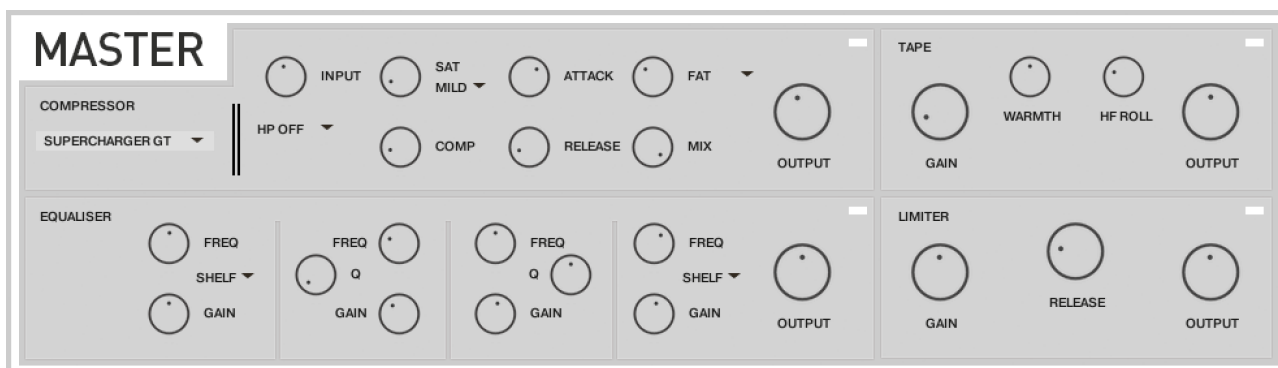
ENABLING SEPARATE OUTPUTS

You can route each drum out to a separate virtual output in your DAW if you wish. Select from the menu below the FX send knobs.

Note that you will need to setup Kontakt's outputs to what you want first.

You can do this in the [Outputs pane in Kontakt](#).





MASTER CHANNEL EDIT

The MAST channel features 4 nice BUS processors for mastering the output of AC-DR, and you can get some very nice results here.

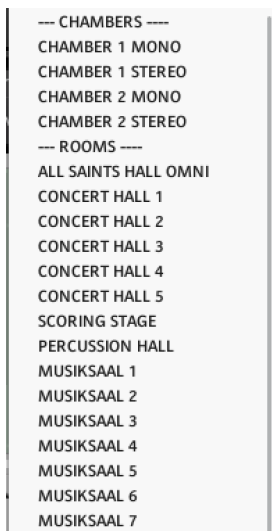
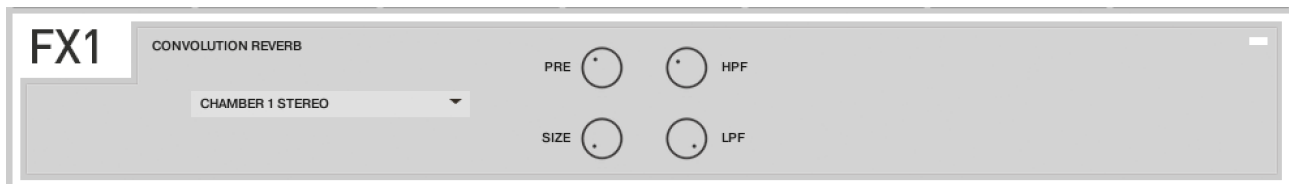
NOTE: If you route individual drum channels out into your DAW mixer as outlined in the previous section, you bypass these processors, giving a small difference in sound to the snapshot kits.

- **COMPRESSOR:** This can be switched between [Supercharger GT](#), Feedback Comp and Solid Bus Comp. Supercharger GT is our favourite, and gives a huge range of compression and saturation effects. All types have a MIX control for parallel compression techniques. A more in depth guide can be found in the [Kontakt Manual](#)
- **TAPE:** A tape emulation effect. Drive the GAIN knob until you hear an effect, then back it off a little way. Subtle, but has a nice rounding effect on the bottom end, and the HF ROLL is nice for giving beats a vintage feel.
- **EQUALISER:** The same SOLID EQ as on the individual channels. Download manual [here](#)
- **LIMITER:** Useful mainly for stopping the output clipping. Set and leave it alone.



FX1 + FX2

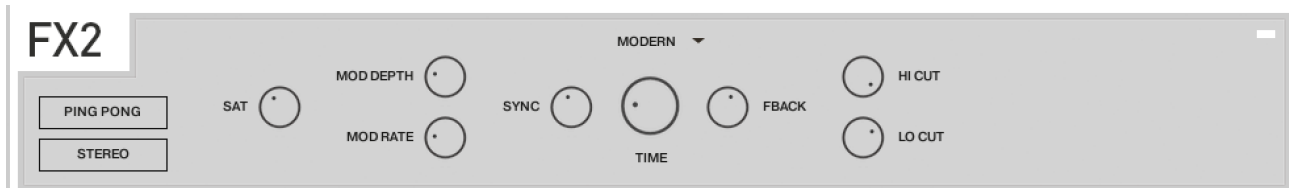
FX 1: Convolution reverb.



This is a simple reverb processor that features a large collection of Soniccouture's custom impulse responses, collection over the last 20 years. Click the menu to browse these.

- **SIZE:** This is useful for shortening a reverb tail to fit with the timing of your beat.
- **PREDELAY -** Moves the start of the reverb effect later, to give clarity to the transient of the dry sound.
- **HPF LPF:** Use these filters to cut bass or top end from the reverb tail.

FX2: Replika XT Delay



This is a very powerful delay module, available as a dedicated plug-in from NI. Check out the full [manual](#) here.

- Replika has several different delay modes, click the drop down menu to select them.
- **MODERN:** Clean and defined.
- **ANALOGUE:** Emulation of BBD delay.
- **TAPE:** Emulation of classic tape delays.
- **VINTAGE DIGITAL:** Crunchy emulation of early delay effects.
- **DIFFUSION:** Clean delay combined with unique reverb effect.





THE BEAT TOOLS



MIDI BEAT EXPORT

On all Beat Tools if you drag this icon into your DAW window, it will make a MIDI file of the beat you have created.

THE BEAT-SHIFTER

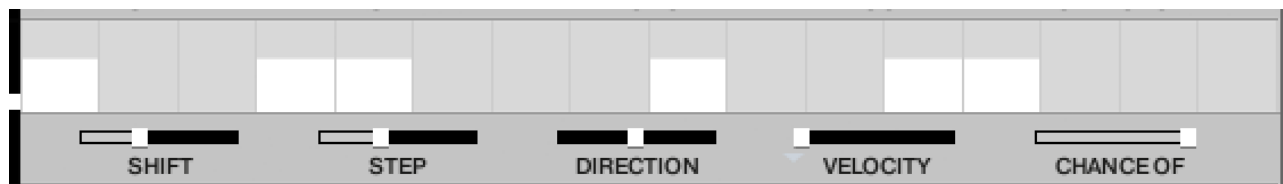
BASIC CONTROLS

PLAY: The Beat Shifter is enabled when the play arrow is pressed (bottom right). If AC-DR is running within a host DAW, the host transport will control the start and stop of the beat. There are 8 tracks that have identical controls. Firstly, using the drop down menu on the left, you can choose which sound in the current kit you want to trigger with that row, here

The screenshot displays the Drum Machine software interface. On the left, there are 8 tracks labeled BD, SD, CH, HH, RS, TT3, TT4, and RD (EDGE). Each track has a set of controls: SHIFT, STEP, DIRECTION, VELOCITY, and CHANCE OF. The BEAT SHIFTER panel on the right includes a play button, a gear icon, a refresh icon, a list icon, and a download icon. Below these are buttons for EXPORT BARS (set to 1) and VELOCITY QUANTISE. The bottom control bar features three circular knobs for RATE (1/16), SWING (9%), and STEPS (16), along with a large play button. The text 'DRUM MACHINE Soniccouture' is visible in the bottom right corner.

the first row is set to KICK. The table allows you to draw notes at varying velocities, which will be triggered by the cursor as it moves across the screen.

BEAT SHIFTING



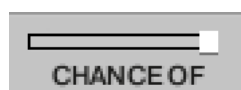
Where things get interesting are with the five small sliders along the bottom of each track, which are labelled **SHIFT**, **STEP**, **DIRECTION**, **RANDOM**, and **CHANCE**. These introduce changes that evolve the pattern while it's repeating.

SHIFT controls the likelihood of the hits in that track moving shifting to the left or right (earlier or later) in time. When it's at zero, all the way left, the pattern hits stay exactly as you drew it, and no shifting will happen. The further right the slider the higher the chance of a SHIFT, the more likely it is that the hits will shift on each repeat. When the pattern SHIFTS, it moves your programmed beat to other positions on the grid, thus altering and evolving the beat based on what you started with.

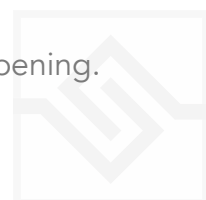
STEP size tells the generator how far to shift, if a shift is to happen. If STEP is set to 1, then a note can only shift one grid position at a time. If it's set to 2, then if a note shifts, it will shift two grid positions, etc. Note that if you set STEP to even numbers your beat will evolve in more naturally rhythmic ways than if you set STEP to odd numbers.

DIRECTION tells the generator in which direction to shift the beats, if a beat is to be shifted. When it's in the middle (default), the chance of a hit moving to the left or to the right (i.e. earlier or later in the bar) is equal, so beats can move in either direction. If the DIRECTION is set all the way to the right, then beats will ONLY move to the right (later), and if set all the way to the left, beats will only move to the left. Note that hits will "wrap" from the end of the bar to the beginning, or from the beginning to the end, if moved beyond the beat LENGTH.

VELOCITY slider introduces small amounts of randomness to the velocity of the played notes if you want to introduce some more human feel.



CHANCE OF slider sets the percentage chance of a hit happening.



If CHANCE is at 100%, the beat will play as you see it, if CHANCE is at 50% then about half of the hits won't play at all.

There are 2 more Chance sliders hidden behind the drop-down menu. **All are active at once.**

CHANCE MISS: If you set a value here, it will increase number of 'miss-hits'; a hit on the key next to the intended one.

CHANCE ROLL: increase this slider to hear occasional rolls. works well with snares. Set to 100% and all hits will be rolls.

BEAT SHIFTER SETTINGS



EXPORT BARS: here you can set the length of the MIDI file you drag into your DAW.

If you have setup a shifting pattern using the controls outlined above, the shifts that occur on

each new bar will be included in the resulting MIDI file, meaning that you can export up to 128 bars of continually evolving beats!



- **FREEZE:** sets all SHIFT sliders to zero, freezing the pattern as it is, and stops it evolving on the next repeat. This is useful if you suddenly hear a pattern you like, and want to keep it. You can assign a MIDI note below the FREEZE icon to trigger the FREEZE function if you like.



- **REVERT** sets the pattern to how it was the last time you hit STORE



- **STORE** stores the current state of the pattern



- **SAVE** saves the pattern to disk, so you can share it with other kits

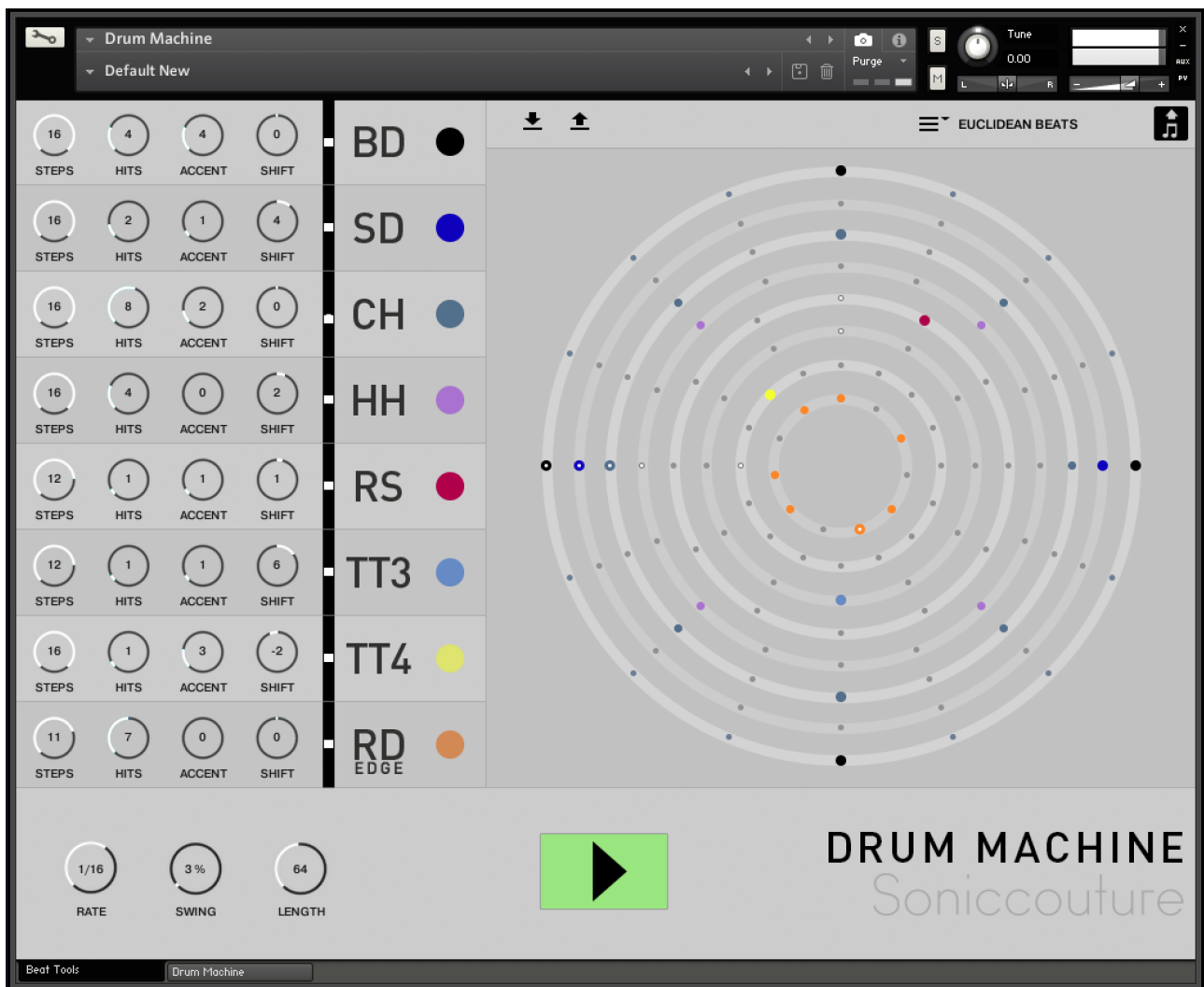


- **LOAD** loads a pattern from disk

- **SWING** adds swing to the rhythm of the beat.
- **STEPS** is the number of steps in the pattern.
- **SPEED** sets the duration of each step.



EUCLIDEAN BEATS



Euclidean Beats are a way of thinking about rhythm that has become popular over the last few years. Essentially the basic idea is to take a number of STEPS (say a bar of 16 steps) and evenly distribute a number of HITS within those steps. If you use 16 STEPS and evenly distribute 4 HITS, you get a very basic 4 beat bar, since the most even way to divide 4 HITS in 16 STEPS is to put one HIT every 4 STEPS. So far so disco.

It gets more interesting when the numbers are less even. For example, 3 HITS in 8 STEPS gives you a nice funky rhythm that's quite commonly heard in a lot of different musical styles.



Another thing you can then do to those HITS is SHIFT their position. The default is always to start with a HIT, so the first HIT will typically occur on STEP 0. However if you SHIFT earlier or later you get a slightly different rhythm, even though it will still be built from same basic ratio of 3 HITS to 8 STEPS.

TRACK CONTROLS

There are 8 tracks each with identical controls.

STEPS sets the length of the pattern

HITS sets the number of times to strike that drum during those STEPS. You cannot alter how those HITS are distributed within the STEPS, they are always evenly distributed (Euclid's algorithm).

SHIFT moves the position of the hits earlier or later.

ACCENT lets you add a certain number of accents to the hits. ACCENTS are evenly distributed among the HITS using the same algorithm used to distribute the HITS among the STEPS (Euclid again).

GLOBAL CONTROLS

PLAY Clicking on this PLAY control starts the beat pattern. Clicking again on it will stop the beat pattern. Within a DAW the generator will start and stop with your host transport.

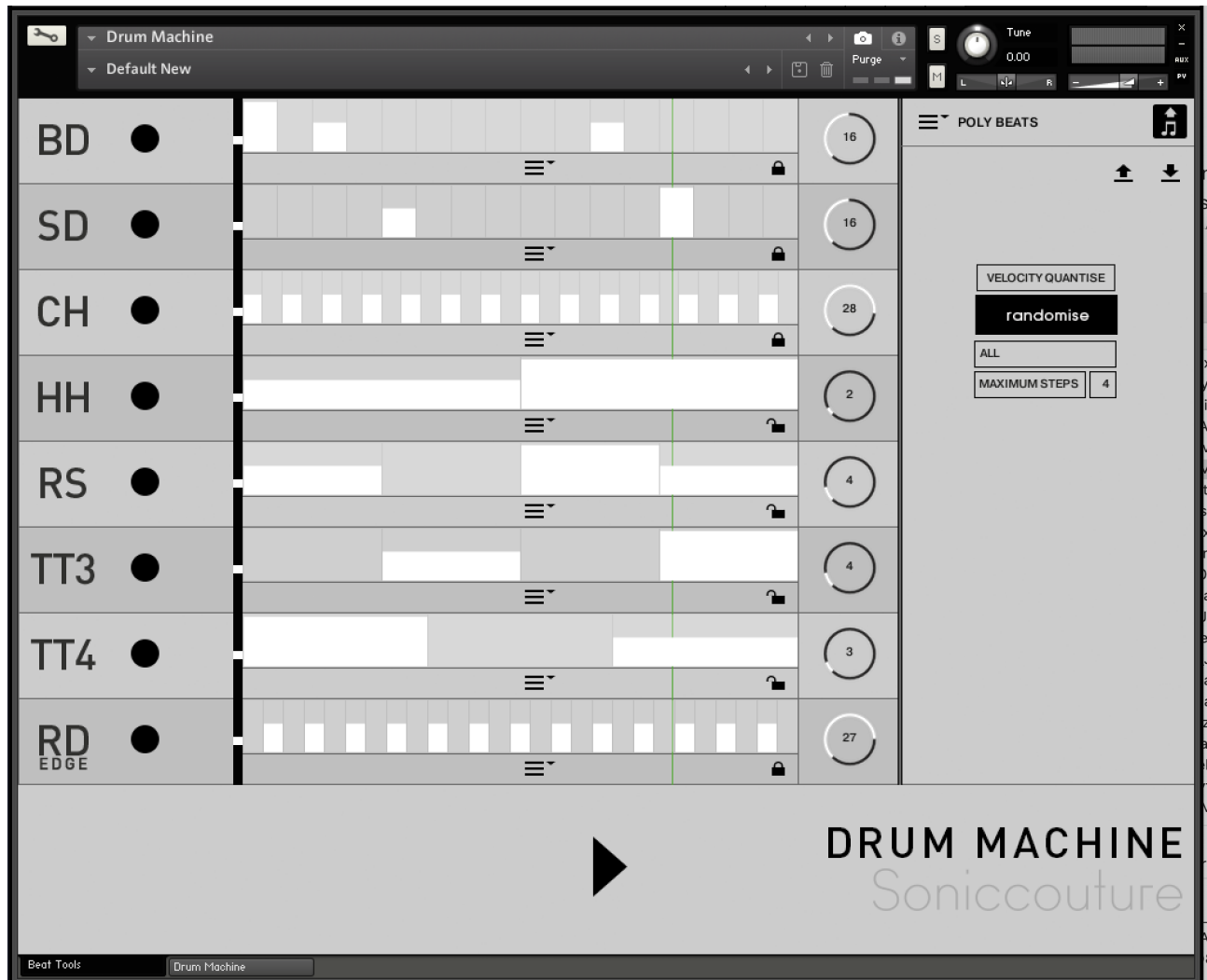
RATE is the sync note value (from 1/4 note to 1/32 note), and is always calculated in relation to the host tempo. **SWING** adds a shuffle to the beat.

LOOP forces the pattern to restart after a certain number of steps. This might not be obvious at first, but you can potentially create a pattern with odd numbered steps needing several years before the sequence would naturally repeats at the beginning again. To force those kind of things into a usable musical time-frame you can set the LOOP as you like. (You can also set LOOP to NEVER if you don't like to dance.)

If you'd like to read more about Euclidean beats and why they're getting so much attention, Google Godfried Toussaint, he wrote an original paper that started the fad some years ago.



POLY BEATS



Poly Beats is a way to divide the bar into arbitrary subdivisions, or polyrhythms.

(This is distinct from the *polymetric* behaviour of Euclid, which loops different tracks after various numbers of steps, but in which the steps are all the same duration. In a *polyrhythm* the overall pattern length stays constant, and the duration of the steps is adjusted to fit the required steps into that pattern length. The pattern length in Poly Beats is always one bar.)

Polyrhythms can quickly sound very strange and unnatural, this is definitely the beat programmer for the left field composer.



CONTROLS

There are 8 identical tracks.



ON / OFF

VEL

VELOCITY MENU

LOCK

GRID SIZE

DRUM TYPE

Drum type and On/Off switch at the far left of each track. On the far right the large knob with the numerical is the divisor. If you set this to 8, you will divide the bar into 8th notes. Note that you are only adjusting the GRID size... where you choose to draw your beats is still up to you, the velocity etc is still editable.

- VELOCITY FADER offsets the velocity values of the entire track
- VELOCITY MENU contains quick tools for populating the steps with different patterns.
- LOCK Any track with the padlock shut will be excluded from the RANDOMISE function, see below.
- GLOBAL CONTROLS
- PLAY starts or stops the sequence. If you are in a DAW the host transport control will also start and stop the sequence.
- RANDOMISE randomly changes the grid size of each track, and notes occurring on that track. To the right is a menu with some choices about how to randomise the polyrhythmic grids, choosing only powers of 2 or 3, even, or odd values.
- MAXIMUM STEPS The maximum grid size that randomise can create.



SUPPORT

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<http://www.soniccouture.com/en/support/>

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While you are waiting, you will find lots of answers to common questions in our FAQ.



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