groundshaker

FULLY-RANDOMIZABLE GROOVEBOX
WITH MIDI EXPORT FOR KONTAKT 6.4.2

RIGID AUDIO

USER MANUAL

TABLE OF CONTENTS

3) INTRODUCTION
4) INSTALLATION
5) PLAYING KITS
6) RANDOMIZATION
12) THE DRUM SECTIONS
13) PATTERN EDITING
17) PATTERN DENSITY
18) OPTIONS MENU
25) REMOTE CONTROL NOTES
28) EXTERNAL SEQUENCING
28) MIDI CLIP EXPORT
30) IMPORTING AUDIO FILES
31) AUDIO ROUTING SETUP
32) AUTOMATION AND MIDI CC LIST
33) KNOWN ISSUES
34) TROUBLESHOOTING

INTRODUCTION

Groundshaker is your new production-ready, four-layer groovebox with over 1000 source WAV sounds spread across five categories for a ton of inspiration right out of the box.

Groundshaker is based on randomization and can thus create an infinite array of creative and complex drum pattern with the click of a single button.

You can fully control what you want to randomize. May it be a pattern, a drumsound, an effect or all together.

Furthermore, Groundshaker features a layer sequencer to spice up things even more.

On top of that you can export your randomly created patterns as a MIDI clip via drag and drop for further (external) mangling and editing.

Attention: Low frequencies and high volumes.
Be carefull with your ears, headphones and loudspeakers!

INSTALLATION

There is no special installation required.

Simply extract the contents of the downloaded archive (RA_GROUNDSHAKER.zip) to any location on your computer.

To load up Groundshaker in KONTAKT, head over to the KONTAKT file browser and load „RA_GROUNDSHAKER.nki“:

PLAYING KITS

To audition a factory pattern / groove, simply trigger a MIDI note within the „sequencer range" on the MIDI keyboard:

Note: Depending on the sequencer playback mode, you might need to hold the trigger note for the pattern to play. Changing the playback mode is described in the OPTIONS MENU pages.

RANDOMIZATION

Since Groundshaker is based on randomization with all its sudden glory, the most important switch is the **!**-button in the top section of the interface:

Pressing it will launch a lot of things in the background:

→ *choosing a random base pattern for each section.*
→ *altering steps randomly in each pattern.*
→ *loading up a new random set of sounds.*
→ *manipulating effects and switches for each layer.*
→ *randomly creating a new layer sequencer pattern.*
→ *and so on...you've guessed it - the list is quite long.*

When you are happy with the results, you can go on and edit the pattern to your liking using the various other knobs, functions and features.

Hint: Sometimes, while you're tapping that **!**-button like crazy there might be a generated groove that you did like but you were too fast. It is already gone.

In those cases, you can always click on [REVERT] on top of the **!**-button to bring back the previously generated groove.

Hooray!

You can also control various aspects of the randomization or in other words, <u>what you want to be randomized</u> and what not:

In the above example, triggering the **!**-button will randomize the source [WAV] sounds of all drum layers while keeping the existing patterns ([PTN]) and effect ([FX]) button settings.

It will also randomize the layer switches (A to D) as well as the half time switches since the only locked section is the „tight" section.

Also note that the layer volume knobs (and drum section volumes) won't be randomized at all. You can use these to adjust levels in advance for the „whole session".

Note: Wherever you see a little lock icon you can use this to omit a particular section from randomization.

Next to the [FX], [PTN] and [WAV] randomization toggle switches is the layer sequencer, that can run on top of all other patterns and spice things up through layer toggling:

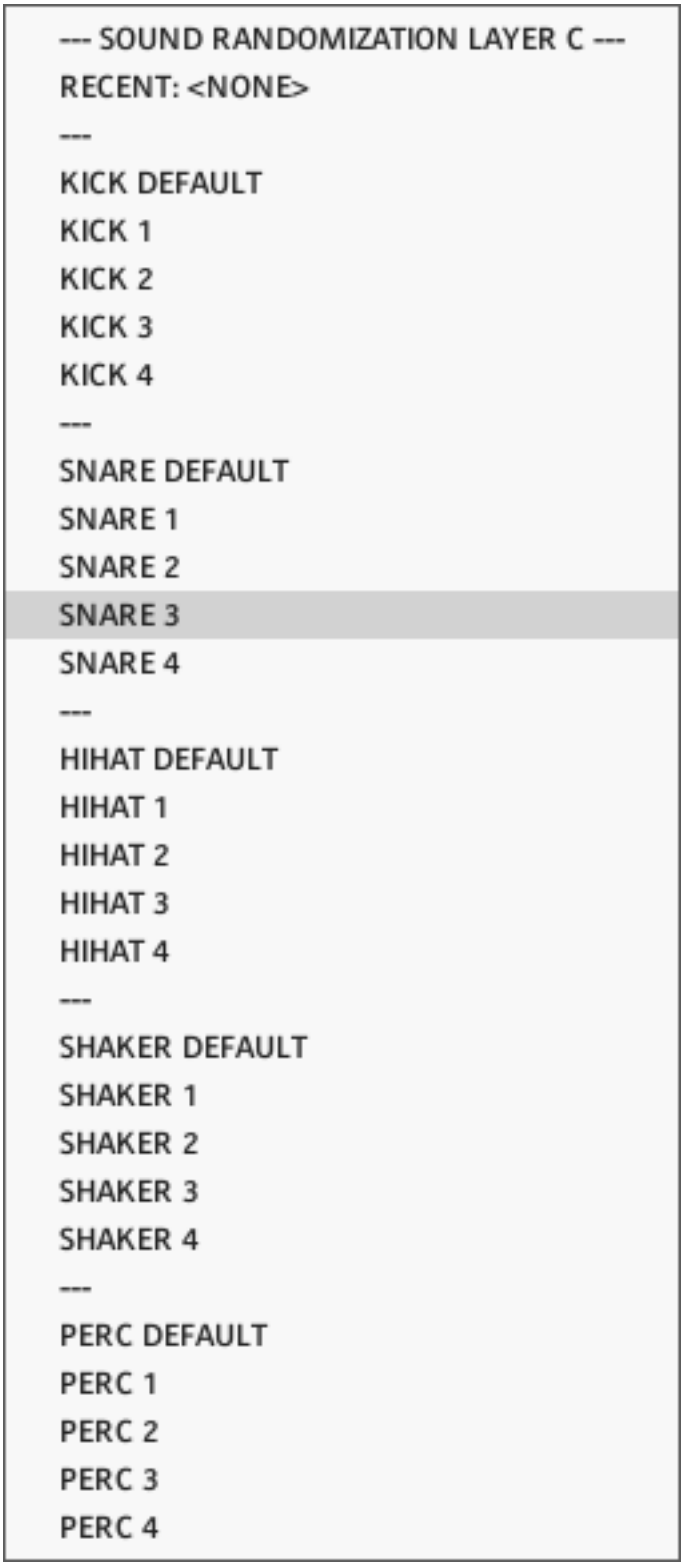
Click on the [ABCD] switch in the right corner to toggle it.

To randomize the layer sequencer pattern, use the big **!**-button with the [PTN] switch turned on.

In the left section there are further randomization options for the Groundshaker source drum sounds:

Here you can randomize the source sounds (only) for a whole layer at once. (Kick, Snare, Hihat, Shaker and Percussion) by clicking on the ?.

Next to each ? is a little dropdown arrow that opens up a sound randomization menu where you can randomize single sounds for certain layers individually:



In the example picture, we will randomize the 3rd snare sound from/for layer C.

You might be wondering what 3rd snare sound means! Well, let me clear things up:

Each drum section (Kick, Snare, Hihat, Shaker and Percussion) can play back either its default drum sound or one of four pre-randomized sounds. To enable that feature for a particular drum section, simply toggle the [>?>] button.

In the above picture you'll see a „3", meaning that the shaker section was just playing random drum sound no. 3.

Now you know what 3rd drum sound means!

But just randomly playing one of four drum sounds would end up in a mess most of the time.

It would just sound like what it is: completely random.

That is why Groundshaker uses a more sophisticated approach to that:

In each sequencer lane, each random drumsound from one to four is mapped to steps 1-4, 5-8, 9-12 and so on.

That way you have a perfect mixture of fortuity and variety.

THE DRUM SECTIONS

Groundshaker comes with five distinct drum sections:

From left to right you have Kick, Snare, Hihat, Shaker and Perc(ussion).

Click on the section name to turn it on or off completely. Triggering the section icon will preview its current sound.

To adjust the volume for a section, turn the VOL knob up or down. To change the sound of a drum section, simply click on the ?.

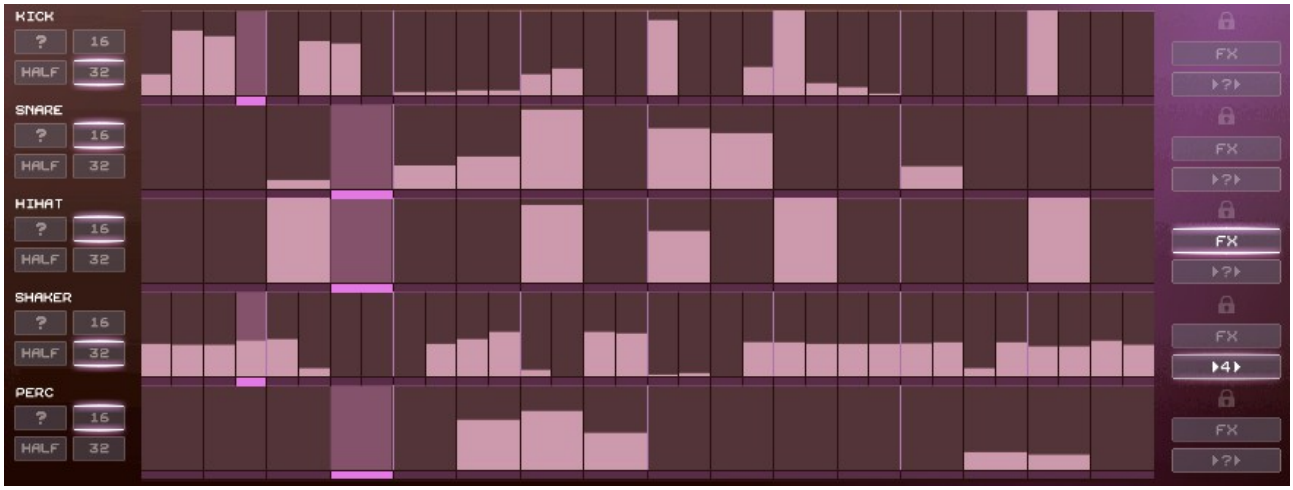
If you don't want a drumsection to be included within sound randomization, toggle the lock icon.

You can also control how velocity affects the volume envelope of each section. For that, you can use the VEL/DEC knob at the bottom:

If it is centered, velocity won't affect the envelope.
If it is turned to the left, velocity will affect the volume.
If it is turned to the right, velocity will affect the envelope decay. **Note:** Lower velocity values will result in a „snappier" sound.

Use **<CONTROL/COMMAND(„Apple Key")>** to reset a knob to its default value.

PATTERN EDITING



The Groundshaker sequencer is made up of five patterns for the five individual drum sections (Kick, Snare, Hihat, Shaker and Percussion). You can of course randomize and sequence each one individually.

You can draw (click) in steps into the sequencer pattern simply via left-clicking anywhere:

A right-click will give you a straight line that you can use to create e.g. a rising snare roll:

There are a few additional pattern editing helpers, that you can use via pressing **<ALT/OPTION>** while doing the editing:

1) set velocity to step 1

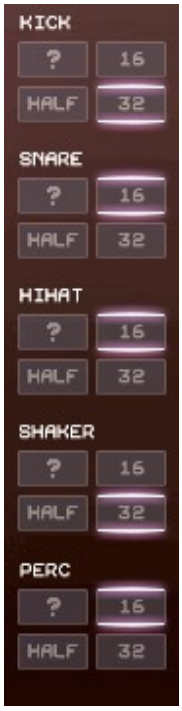
When clicking on the 1st step in any sequencer while pressing the **<ALT/OPTION>** key, all other steps will be set to the same value as the first one.

This is especially handy if you want to adjust the volume or decay for a particular drum sound within the whole pattern.

2) quick repeat

When clicking anywhere in the sequencer while pressing the **<ALT/OPTION>** key, you can achieve pattern repeats in steps of four:

This is useful for hihat or percussion rhythms that should be identical over the whole pattern length.



To alter the length of each pattern, click on the [16] or [32] steps buttons. To randomize the pattern steps, click on the ?

If you want a pattern to play back at half its speed, simply toggle the [HALF] switch.

Note: Toggling section and layer half switches will toggle themselves and vice-versa as you can only have a drum section <u>or</u> a layer half time speed going on.

Finally, in the right corner, you can toggle buttons for effects and random source sound playback.

Toggle the [FX] button to enable or disable randomly choosen effects for a particular drum section.

Use the [>?>] switch to engage the random one-of-four source sound playback for a particular drum section.

In further descriptions, we will also call this feature „random sound repeat".

PATTERN DENSITY

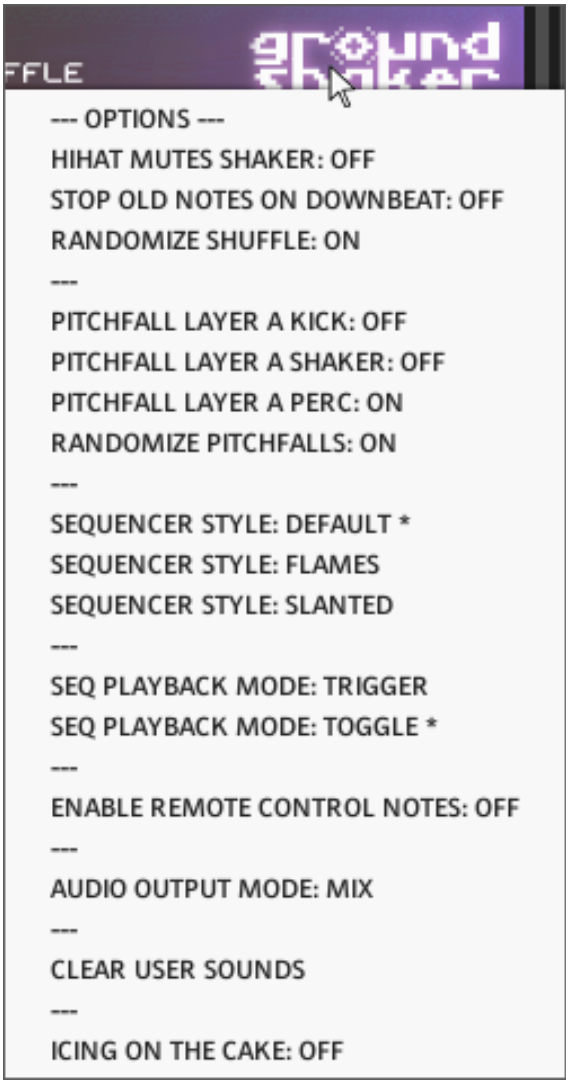
Sometimes, you might want to have control over the density of a particular pattern, so that you can thicken or thin out things. That's where the density knobs come into play:

Using these you can alter the pattern's density comfortable.

Note: Once you apply randomization or draw in steps manually, the density slider will jump back to 100% and thus making the density changes permanent.

OPTIONS MENU

You can click on the groundshaker logo in the upper-right corner to open up an options menu:



-) hihat mutes shaker
Decides, if a hihat will be played „exclusive" and thus mute the shaker or not.

We can see the shaker as an open hat in this case. If you play the hihat closed, it can't be open at the same time.

-) stop old notes on downbeat
When this option is enabled, all audible notes will be cut in volume on the downbeat, which is the first beat in every bar. So, for a 4/4 beat, you would have four cuts.

This option is a great to get a staccato-like groove.

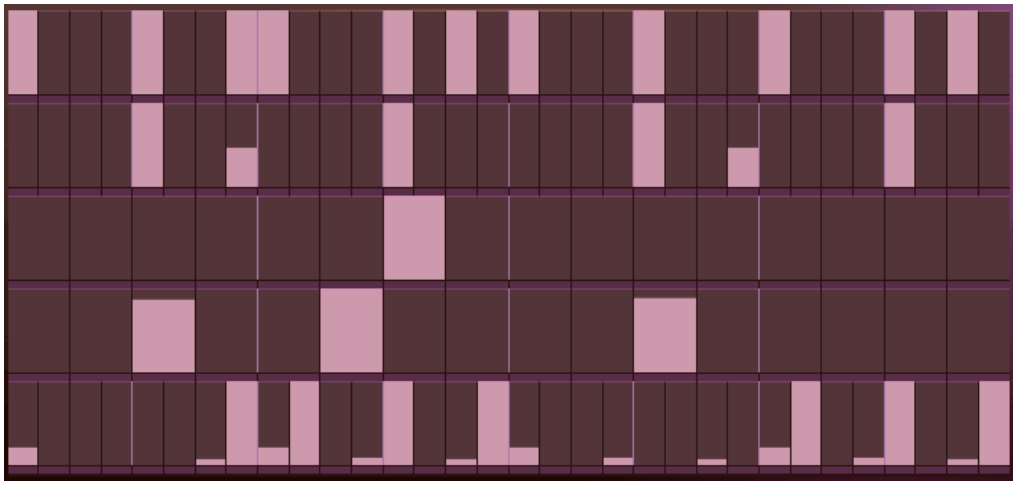
-) randomize shuffle
Whenever you trigger the **!**-button to randomize things, it can also randomize the shuffle knob at the top right on the interface. Here you can decide, if you want to do so or not.

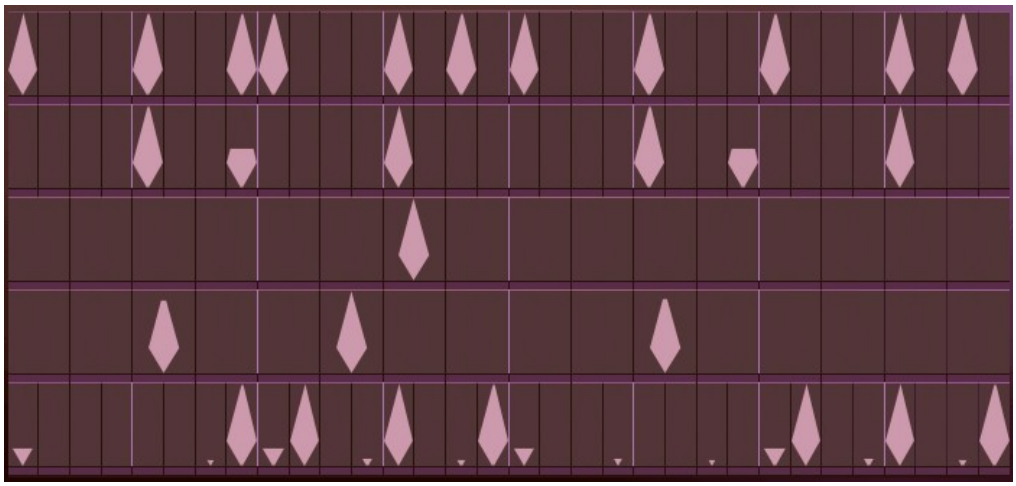
-) pitchfall layer a kick/shaker/perc
This option will do a so called „pitch fall" over the course of the whole pattern. Best used with a step length of [32] steps.

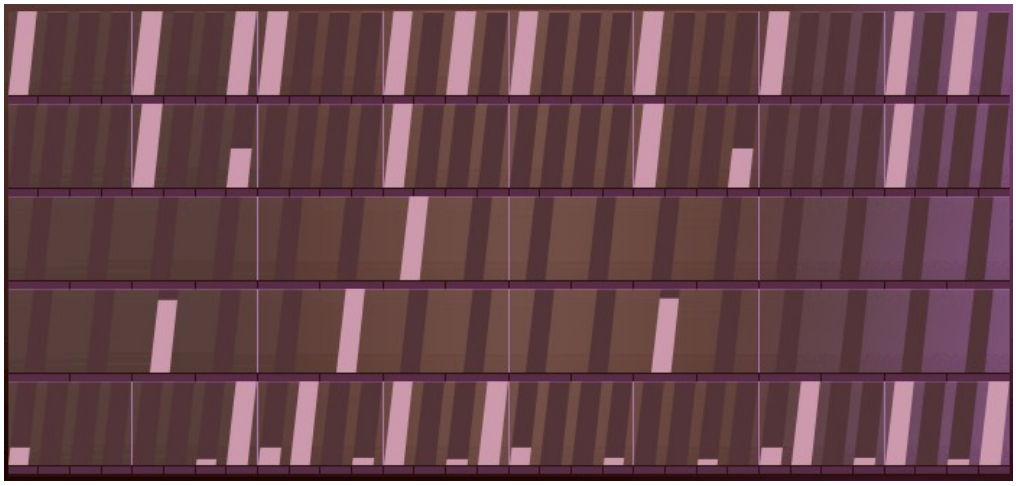
-) randomize pitchfalls
Decides, if the pitch fall effects should be randomized by the **!**-button as well.

-) sequencer styles

Here you can choose from three different sequencer styles:







-) seq playback mode
This option lets you select a sequencer playback mode.

When **TRIGGER** mode is selected then the sequencer will start playback as soon as a MIDI note* has been received.

Note: A MIDI note* in the sequencer range:

The playback will continue as long as you hold the MIDI note. Once you let go, it will stop.

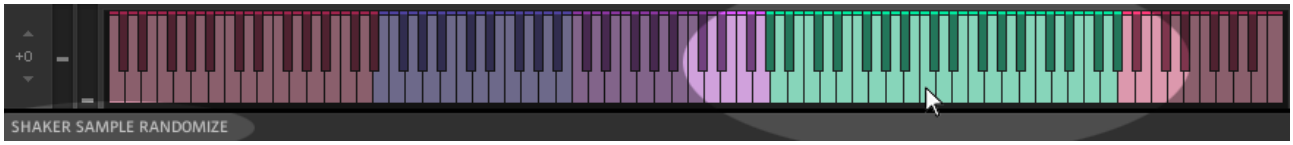
When **TOGGLE** mode is selected, which is the default, then the sequencer will start playback as soon as a MIDI note* has been received as well but it will continue to play even if the note isn't held anymore. Press any MIDI note* again to stop the playback.

This mode is great for messing around as you don't need to sequence anything externally and you don't need to hold a key the whole time.

Note: Changing the playback mode will be permanent and instrument-wide. That means if you re-load Groundshaker or any Groundshaker factory kit, the playback mode will be the one you've choosen previously.

-) enable remote control notes

This is an advanced option and great for live-performance:



Enabling the remote control notes/keys, will update the Kontakt onscreen keyboard with a new section of mint keys.

You can use these to remotely trigger various randomization functions and buttons of Groundshaker without the need for a mouse.

You can hover over the keys with the mouse to get a hint of what each note does.

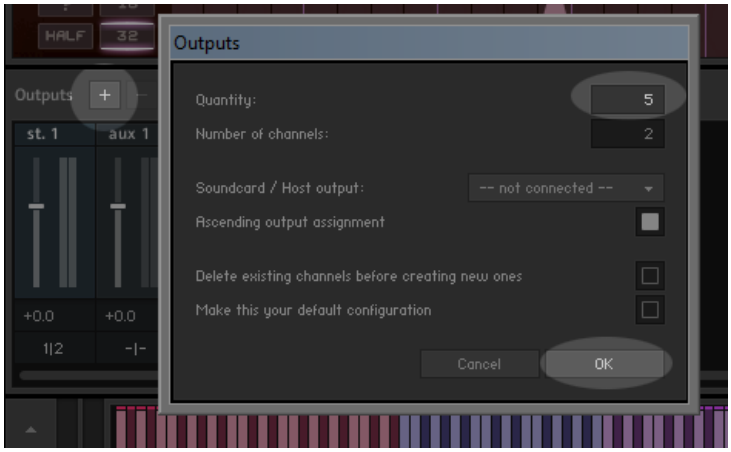
Note: A complete list of keys with a description can be found on → **page 25** (remote control notes).

Note: If you can't see the Kontakt GUI keyboard, press <**F3**> to open it up.

-) audio output mode

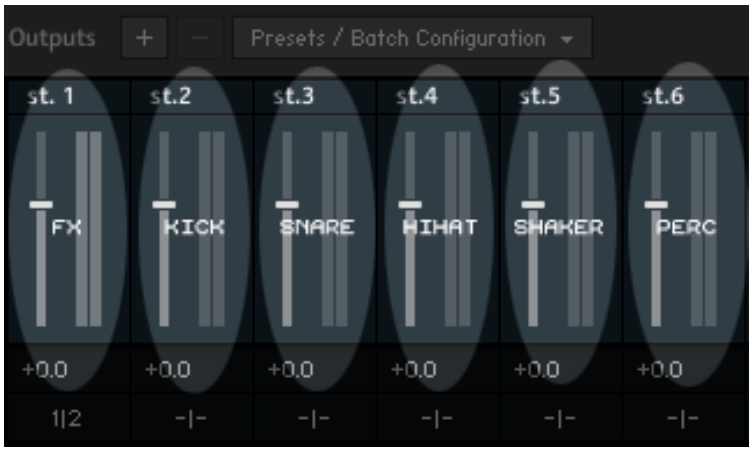
If you want to route the single drum sections to individual outputs e.g. inside your DAW for further mixing and processing, you can set this option from „mix" to „**individual**".

To use individual audio outputs in Kontakt, you first need to setup additional audio channels:



(Press <**F2**> to open up the Outputs window)

Click on the + icon to open up the Outputs dialog and add five additional stereo channels and select „OK":



-) clear user sounds

Whenever you have imported audio files via drag and drop to any drum section and you want to get rid of them, you can trigger this option which will unload all user imported sounds. Note that it might take a second or two.

-) icing on the cake (IOTC)

„Icing on the cake" is a little gimmick and a combination of additional effects processing for the snare and the percussion drum section.

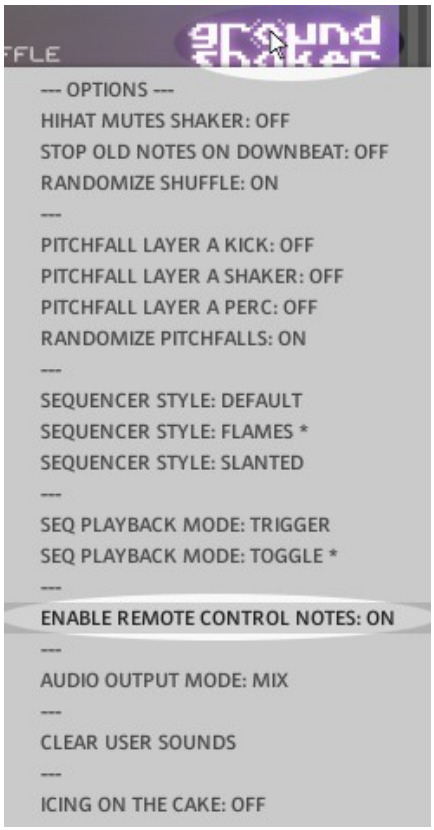
It works like this:

If any step's velocity in either the snare or percussion sequencer is less than 64, delay, chorus and reverb effects will be applied randomly from time to time to both the snare and the percussion sections.

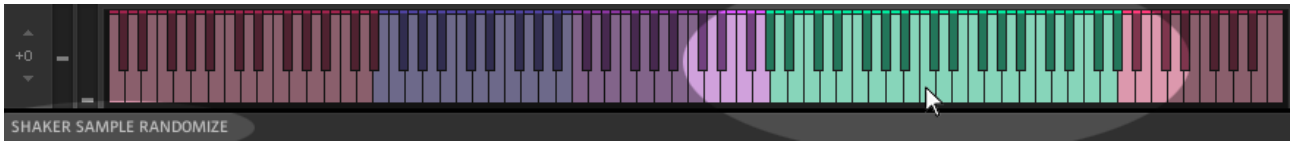
This is a great way to add some flair to your entire groove.

REMOTE CONTROL NOTES

In the options menu there is an entry which is called „Enable Remote Control Notes“:



When this is enabled, the Kontakt keyboard will show an extra range of mint coloured keys for controlling several Groundshaker buttons and functions remotely:



Here's the long awaited list of things you can trigger using these remote control notes:

G#3 - randomize layer A
A3 - randomize layer B
A#3 - randomize layer C
B3 - randomize layer D
C4 - layer A toggle
C#4 - layer B toggle
D4 - layer C toggle
D#4 - layer D toggle
E4 – kick pattern randomize
F4 – snare pattern randomize
F#4 – hihat pattern randomize
G4 – shaker pattern randomize
G#4 – perc pattern randomize
A4 – kick sample randomize
A#4 – hihat sample randomize
B4 – snare sample randomize
C5 – shaker sample randomize
C#5 – perc sample randomize
D5 – kick fx toggle
D#5 – snare fx toggle
E5 – hihat fx toggle
F5 – shaker fx toggle
F#5 – perc fx toggle
G5 – kick random sound repeat toggle
G#5 – snare random sound repeat toggle
A5 – hihat random sound repeat toggle
A#5 – shaker random sound repeat toggle
B5 – perc random sound repeat toggle
C6 – kick on/off toggle

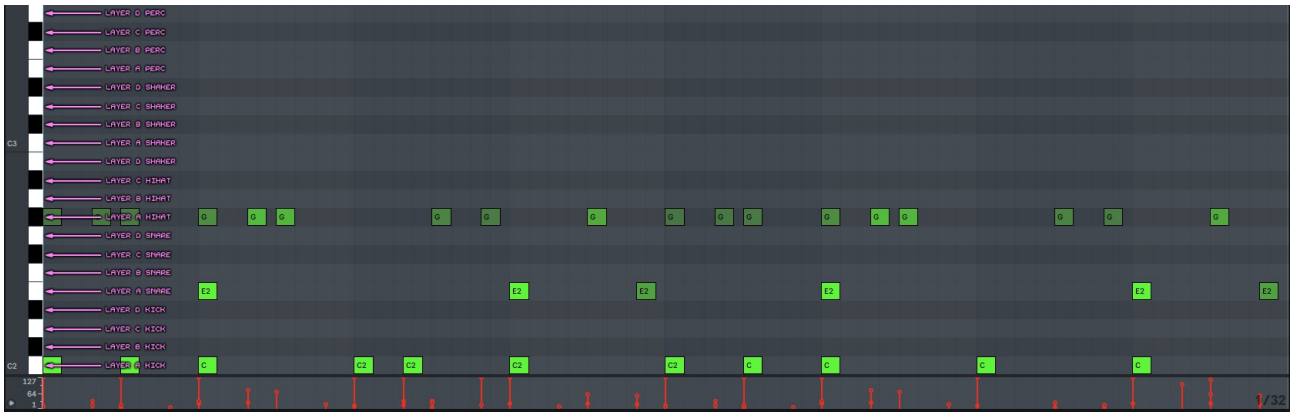
C#6 – snare on/off toggle
D6 – hihat on/off toggle
D#6 – shaker on/off toggle
E6 – perc on/off toggle
F6 – pitchfall kick toggle
F#6 – pitchfall shaker toggle
G6 – pitchfall perc toggle
G#6 – icing on the cake (IOTC) toggle

Note: The state of the „enable remote control keys" option will also be remembered instrument-wide.

EXTERNAL SEQUENCING AND MIDI CLIP EXPORT

Besides using the internal sequencer, you can also trigger drum sections externally from your DAW as well.

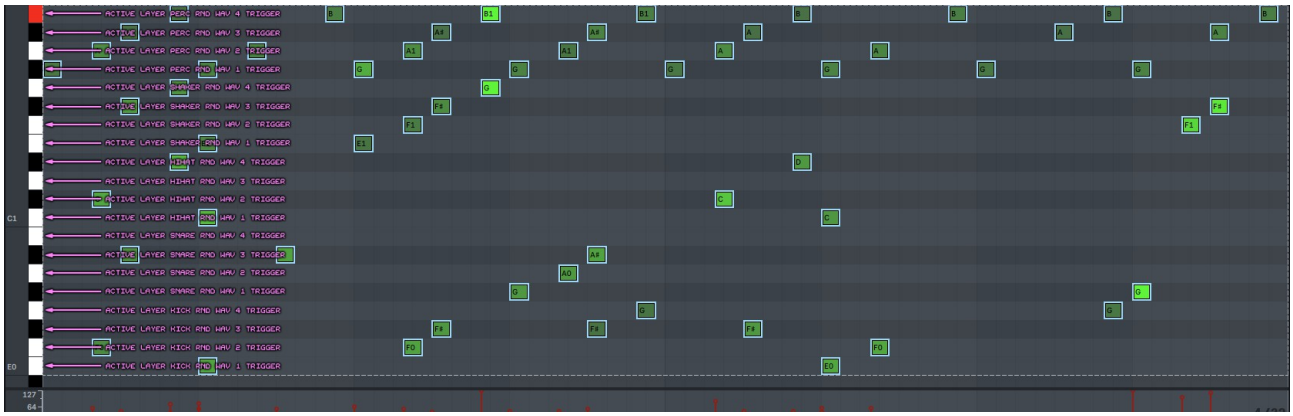
To do this, try dragging a MIDI clip from the little boombox in the bottom-right corner to your DAW:



Example of a dragged MIDI clip in Ableton Live with note descriptions.

Note: Exporting MIDI clips takes into account which layers are currently active. The shuffle amount will be taken into consideration as well. Note that the layer sequencer will be ignored.

Depending on whether you have sections with enabled random sound repeat (→ **page 16)** function or not, notes generated within the exported MIDI region might look like this as well:



These are the separate MIDI note triggers for the individual random sound. Yes, you can trigger all these as well.

IMPORTING AUDIO FILES

You can import your own audio files (WAV,AIF,NCW) into Groundshaker easily. Each section can hold up to four audio files (one for each layer).

Simply drag and drop any audio file from anywhere into the desired section. It will then light up and show an importing message. Once the import is done, you're ready to rock.

Once a file has been imported, the section will no longer show its own name but a „user" message instead.

To get rid of imported sounds, use the menu option (→ **page 24)** „clear user sounds".

Note that you can use imported and factory sounds at the same time. When you import a single sound into any section, it will be treated as a sound for layer A.

If you import four sounds at once, these will be mapped to the layers A,B,C and D. If you import one single sound into the same section again, the user sounds for the layers B,C and D will be erased and only layer A will have a user sound again.

AUDIO ROUTING SETUP

Please refer to →**page 23** „audio output mode“.

AUTOMATION AND MIDI CC LIST

Groundshaker can be controlled (automated) by MIDI CC (continous controllers) or host (DAW) automation:

Libraries | Files | Database | Expert | **Automation**

Host Automation | MIDI Automation

in order to automate, drag to a knob or fader:

host par.	assigned to
# 000	Shuffle Amount - RA_GROUNDSHAKER
# 001	Layer 2 Volume - RA_GROUNDSHAKER
# 002	Layer 3 Volume - RA_GROUNDSHAKER
# 003	Layer 4 Volume - RA_GROUNDSHAKER
# 004	Tighten Layer 1 - RA_GROUNDSHAKER
# 005	Tighten Layer 2 - RA_GROUNDSHAKER
# 006	Tighten Layer 3 - RA_GROUNDSHAKER
# 007	Tighten Layer 4 - RA_GROUNDSHAKER
# 008	Kick Volume - RA_GROUNDSHAKER
# 009	Snare Volume - RA_GROUNDSHAKER
# 010	Hihat Volume - RA_GROUNDSHAKER
# 011	Shaker Volume - RA_GROUNDSHAKER
# 012	Percussion Volume - RA_GROUNDSHAKER
# 013	Kick Density - RA_GROUNDSHAKER
# 014	Snare Density - RA_GROUNDSHAKER
# 015	Hihat Density - RA_GROUNDSHAKER
# 016	Shaker Density - RA_GROUNDSHAKER
# 017	Percussion Density - RA_GROUNDSHAKER
# 018	Kick Velo To Volume and Decay - RA_GRO...
# 019	Snare Velo To Volume and Decay - RA_GR...
# 020	Hihat Velo To Volume and Decay - RA_GR...
# 021	Shaker Velo To Volume and Decay - RA_G...
# 022	Percussion Velo To Volume and Decay - RA.
# 023	not assigned
# 024	not assigned
# 025	not assigned
# 026	not assigned
# 027	not assigned
# 028	not assigned
# 029	not assigned

Libraries | Files | Database | Expert | **Automation**

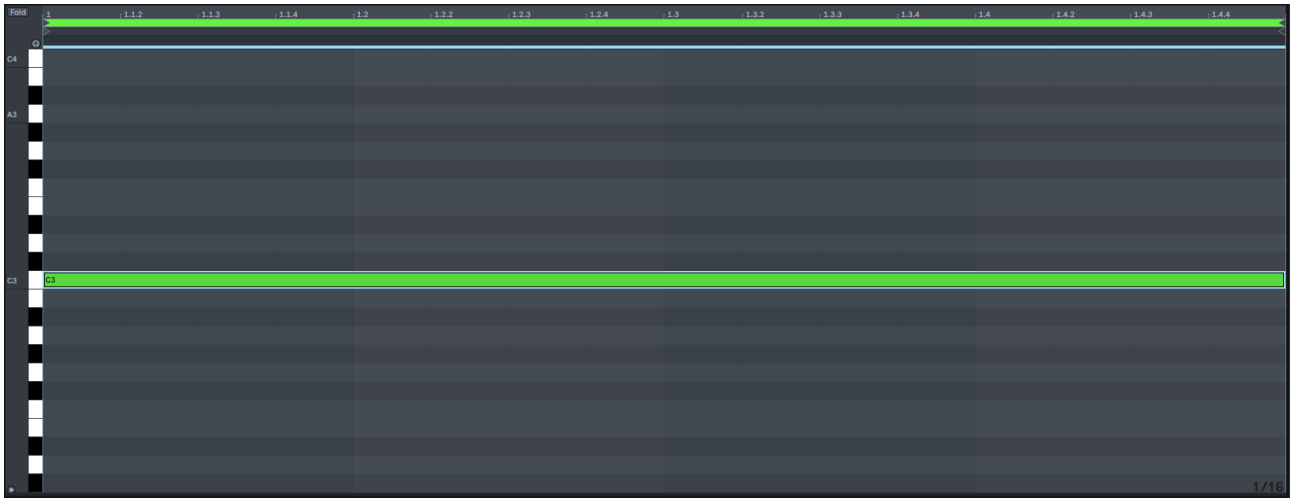
Host Automation | **MIDI Automation**

in order to automate, drag to a knob or fader:

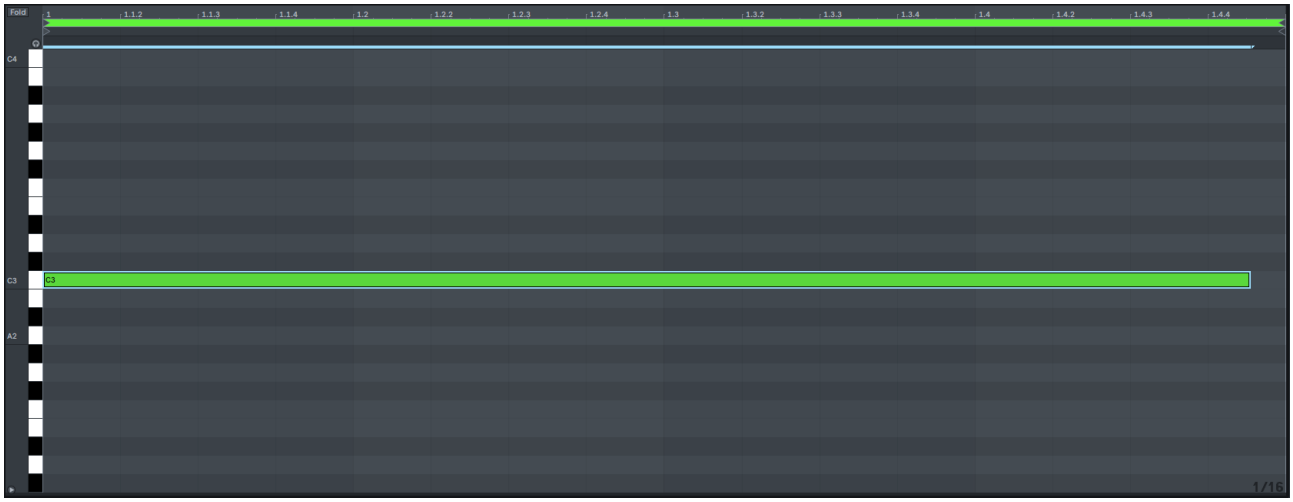
MIDI CC	assigned to
CC 85	Shuffle Amount - RA_GROUNDSHAKER
CC 86	Layer 2 Volume - RA_GROUNDSHAKER
CC 87	Layer 3 Volume - RA_GROUNDSHAKER
CC 88	Layer 4 Volume - RA_GROUNDSHAKER
CC 89	Tighten Layer 1 - RA_GROUNDSHAKER
CC 90	Tighten Layer 2 - RA_GROUNDSHAKER
CC 91	not assigned
CC 92	not assigned
CC 93	not assigned
CC 94	not assigned
CC 95	not assigned
CC 96	not assigned
CC 97	not assigned
CC 98	not assigned
CC 99	not assigned
CC 100	not assigned
CC 101	not assigned
CC 102	Tighten Layer 3 - RA_GROUNDSHAKER
CC 103	Tighten Layer 4 - RA_GROUNDSHAKER
CC 104	Kick Volume - RA_GROUNDSHAKER
CC 105	Snare Volume - RA_GROUNDSHAKER
CC 106	Hihat Volume - RA_GROUNDSHAKER
CC 107	Shaker Volume - RA_GROUNDSHAKER
CC 108	Percussion Volume - RA_GROUNDSHAKER
CC 109	Kick Density - RA_GROUNDSHAKER
CC 110	Snare Density - RA_GROUNDSHAKER
CC 111	Hihat Density - RA_GROUNDSHAKER
CC 112	Shaker Density - RA_GROUNDSHAKER
CC 113	Percussion Density - RA_GROUNDSHAKER
CC 114	Kick Velo To Volume and Decay - RA_GRO...

KNOWN ISSUES

If you are using your DAW to trigger the Groundshaker sequencer in „trigger" mode (→**page 21**) make sure that when your DAW is set to loop mode that you have a little gap in the sequenced note right before the loop begins to start/play again. Otherwise it might drop audio or play „double-speed" - we still have to find a way to fix this.



No good.



Good!

TROUBLESHOOTING

In case you're having any issues, please refer to the troubleshooting PDF that you have received within your download or which is available in the release archive:

RA_Kontakt_Troubleshooting_EN.pdf

Thank you – have fun with Groundshaker!

RIGID AUDIO

Groundshaker Lead Development: Dennis Lenz
Thanks to Pierre Fink for additional help!