Interference
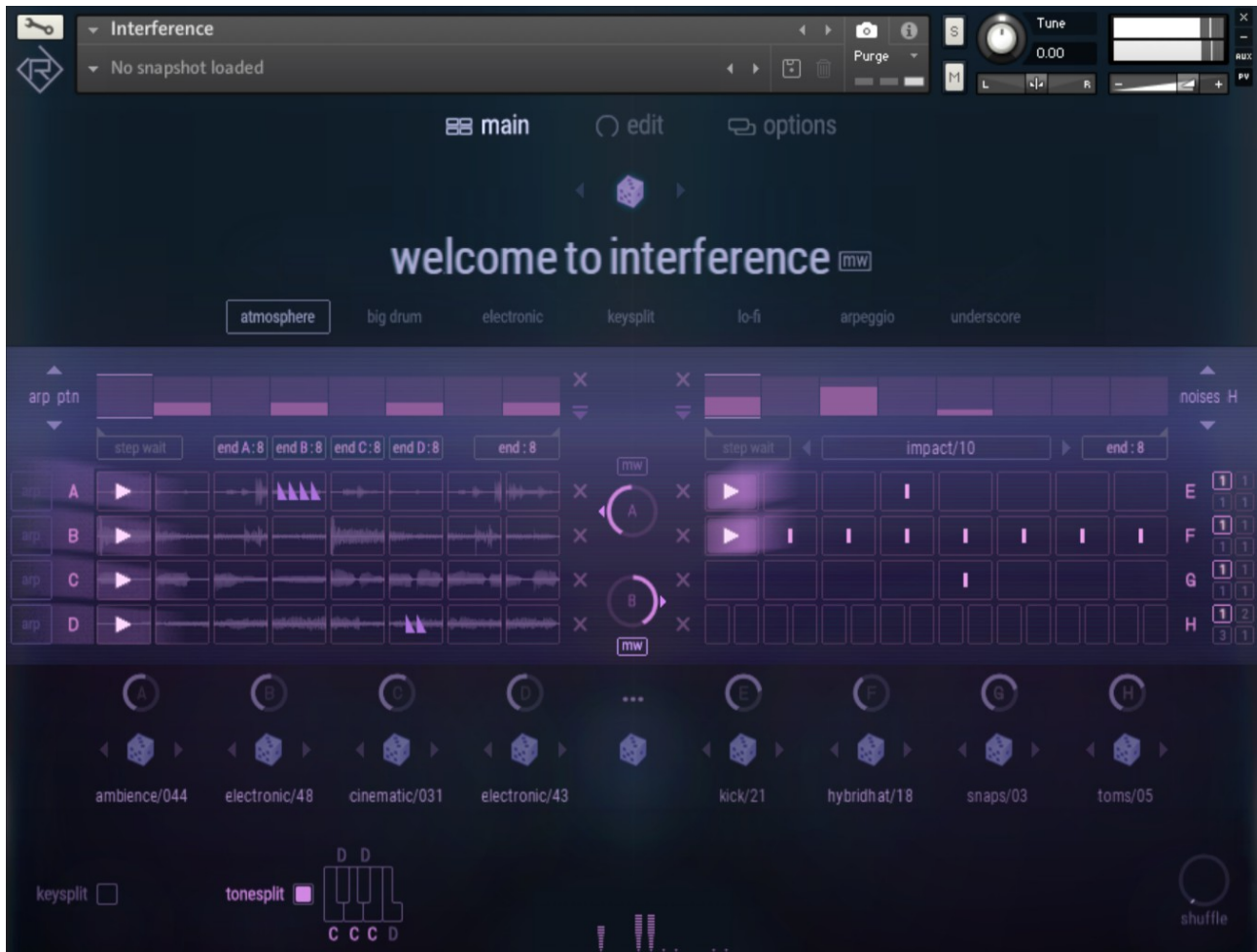

Next Generation Drum- and Loop-Sequencer

RIGID AUDIO

User Manual

Table of Contents

1   Welcome to INTERFERENCE

Thank you for purchasing INTERFERENCE, a next generation Drum- and Loopsequencer, that can be used to create all sort of inspirational backing grooves, cinematic underscores and creative musical phrases. INTERFERENCE comes with 255 handcrafted and categorized presets to get you started.

Interference is based on four timestretching loop-engines and four drum- and percussion parts, which can be programmed, played and mixed all individually. It does come with two times 400 categorized loops that you can randomize and around 1130 drum, percussion- and noise sounds. Each engine in Interference has a comprehensive set of editing tools, including control over basic things like pitch, pan and volume as well as more creative elements like filters, delay-based effects and three send-effects including a unique so-called "disturb"-effect.

Each engine in Interference can be altered and modulated via seperate modulation tables with around 43 modulation targets at the same time. Also, an Arpeggiator with four different harmonizing modes and free step lengths for each note can be used to vary loops in interesting ways. It is also possible to modulate any parameter externally using the modulation wheel - a dedicated mapping sub page allows for detailed finetuning of the start- and end ranges of each modulation assignment separately.

Furthermore, Interference does feature three dedicated pages for editing: A main-page where the user has a quick overview of what is going on, a more detailed edit page for access to all parameters and an options page for per-preset preferences.

We hope you enjoy INTERFERENCE!

2 Installation and Activation

To install and activate INTERFERENCE, the following steps are required:

> KONTAKT 7 or KONTAKT 7 PLAYER is required to run INTERFERENCE. You can download the free KONTAKT 7 PLAYER from the Native Instruments website (www.native-instruments.com)

2.1 Downloading and installing KONTAKT 7 PLAYER

To download KONTAKT 7 PLAYER:

1. Open the website of Native Instruments KONTAKT 7 PLAYER (https://www.native-instruments.com/en/products/komplete/samplers/kontakt-7-player/).
2. Click on the button „Free download" .
3. Enter your E-Mail adress and choose a Country and Area and click on „GET DOWNLOAD LINK".
→ A download link will be sent to the e-mail adress you provided.
4. Use the link in the e-mail to download your copy of KONTAKT 7 PLAYER.
5. Install and activate KONTAKT 7 PLAYER by launching the installer and following the given instructions.
→ You are now ready to install INTERFERENCE.

2.2 Installing INTERFERENCE

→ To install INTERFERENCE, double-click the installer application and follow the on-screen instructions provided. During the installation process, select the directory where you would like to have INTERFERENCE installed to, if asked/required.

2.3 Activating INTERFERENCE

When the installation of INTERFERENCE is finished, start the Native Access application, which was installed with INTERFERENCE or already was located on your system. It will connect your computer to the Internet and activate your INTERFERENCE installation. In order to activate your copy of INTERFERENCE, you have to perform the following steps within Native Access:

1. **Log In**: Enter your Native Instruments user account name and password on the initial page. This is the same account information you used in the Native Instruments Online Shop, where you bought INTERFERENCE, and for other Native Instruments product activations .

2. **Select products**: Native Access detects all products that have not yet been activated and lists them. You can activate multiple products at once. Select INTERFERENCE for activation.
3. **Activate**: After proceeding to the next page, Native Access connects to the Native Instruments server and activates your products.
4. **Download updates**: When the server has confirmed the activation, Native Access automatically displays the Update Manager with a list of all available updates for your installed products. Please make sure that you always use the latest version of your Native Instruments products to ensure they always function correctly.

Downloading updates is optional.
Once a product has been activated, you can simply quit the Native Access application.

3   Quick Start

3.1   Using INTERFERENCE as a Plug-in

To open up INTERFERENCE in your Host/DAW, do the following:

1.   Open the KONTAKT 7 / KONTAKT 7 PLAYER plugin in your Host/DAW.
2.   In there, switch to the „Libraries" tab.
3.   Open the INTERFERENCE Library to access the presets/instruments.
→   Double-Click on any preset to load it into KONTAKT 7/KONTAKT 7 PLAYER.

## 3.2   Using INTERFERENCE stand-alone

Do the following to launch INTERFERENCE using KONTAKT as stand-alone software:

1.   Open the KONTAKT 7 / KONTAKT 7 PLAYER application.
2.   In there, switch to the „Libraries" tab.
3.   Open the INTERFERENCE Library to access the presets/instruments.
→   Double-Click on any preset to load it into KONTAKT 7/KONTAKT 7 PLAYER.

4 Interface Overview

The INTERFERENCE interface is divided into three pages/sections:

4.1 The Main Page
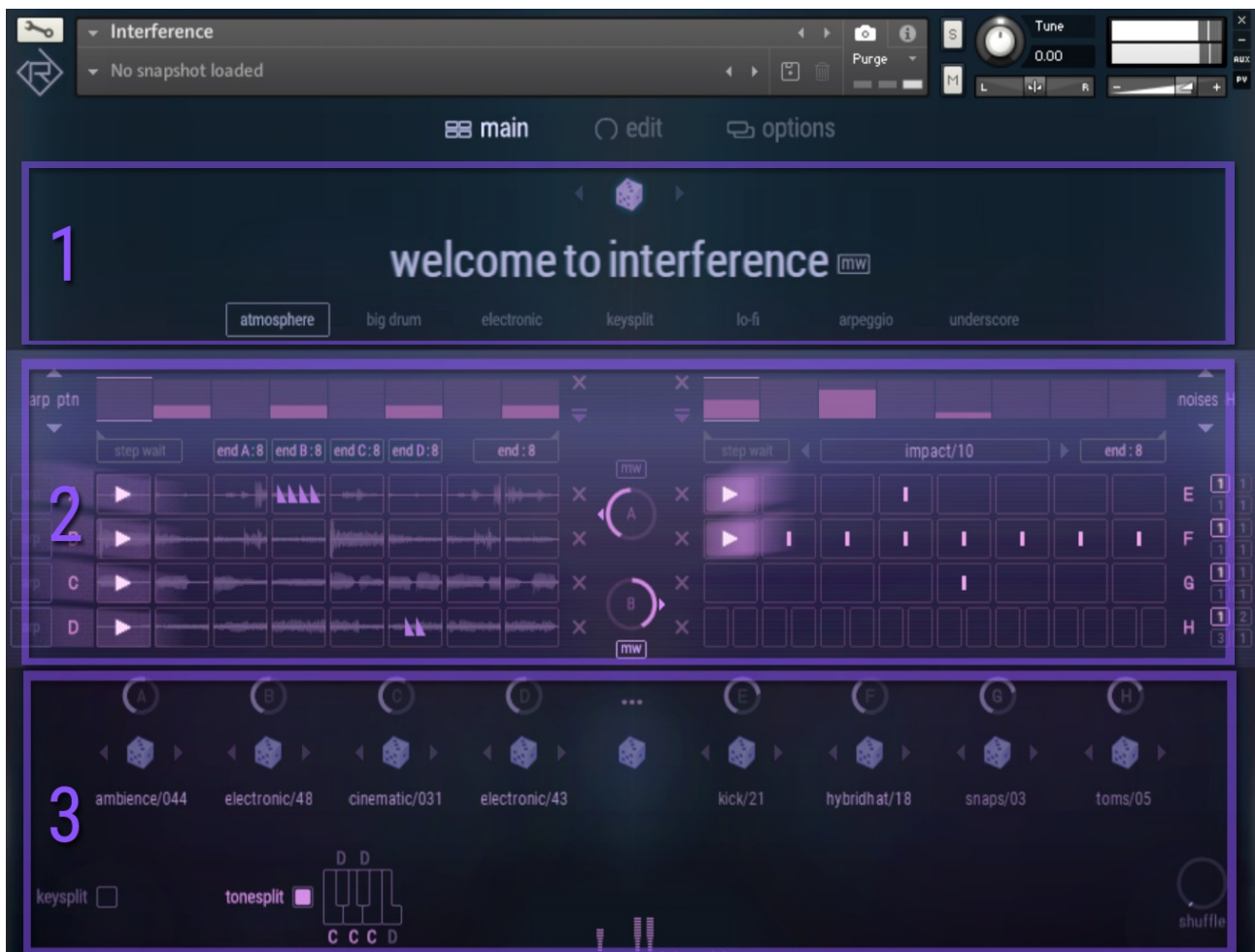
[1] **The preset section:** From here, you can choose presets, identify what preset is currently loaded and randomize presets or choose presets from the seven built-in categories.

[2] **The sequencing section:** In here, you can sequence loops and drums, adjust the table modulations in the top and choose patterns to be played back.

[3] **The sounds section**: This provides control over which loops and drum sounds should be played back as well as adjusting volumes for these. In addition, you can set up key- and tonesplits here as well as choosing the amount of global shuffle/swing.

4.2 The Edit Page
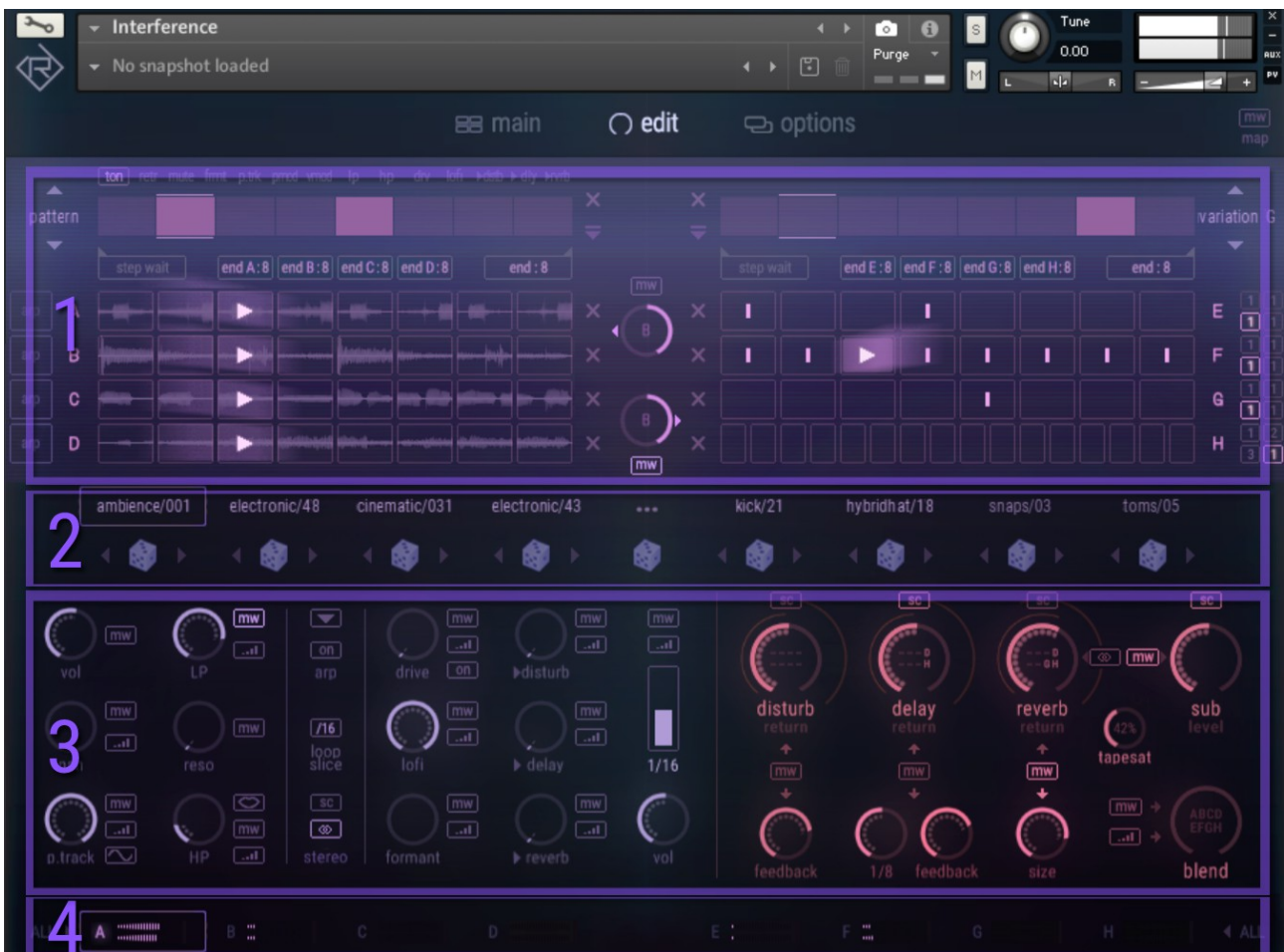
[1] The sequencing section: In here, you can sequence loops and drums, adjust the table modulations in the top and choose patterns to be played back.

[2] The sounds section: This provides control over which loops and drum sounds should be played back.

[3] The edit section / master FX section: From here, you can control every aspect of each loop and drumsound as well as configure global effects (right side), like for example reverb and delay.

Note that this section also changes, depending on which engine is currently selected:

[4] The engine selection section: From here, you can select one of the eight available engines (A – D and E – H) for editing. The engines A-D (left side) play back loop sounds whereas the engines E-H (right side) do play back drum and percussion sounds.

4.3   The Options Page
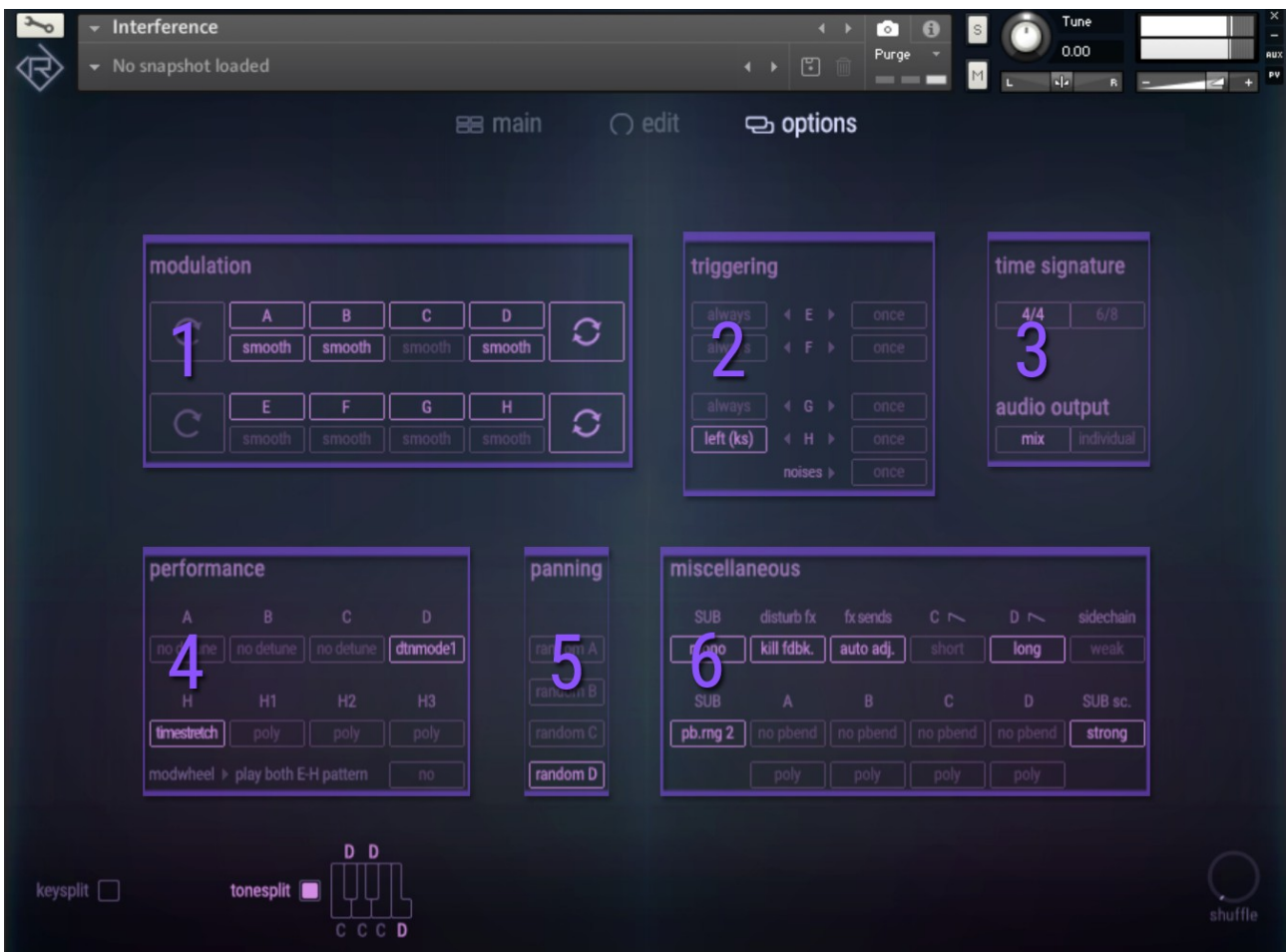
[1] The modulation section: This section lets you control various aspects of the table modulation in the edit page's sequencing section.

[2] The triggering section: From here, you can choose various note-triggering (keysplit) modes.

[3] Time Signature & Audio Output section: In here, you can choose a global time signature (4/4 or 6/8) and choose an audio output mode (MIX or INDIVIDUAL).

[4] The performance section: This lets you adjust different sound-altering options, for example a pitch-detune mode for a certain engine as well as timestretching for the H – engine.

[5] The panning section: Here you can choose to enable or disable random per-note panning for the engines A-D seperately.

[6] The miscellaneous section: Gives control over various things, like adjusting the SUB engine playback mode, pitch bend ranges and monophonic or polyphonic playback for the loop-based engines (A-D).
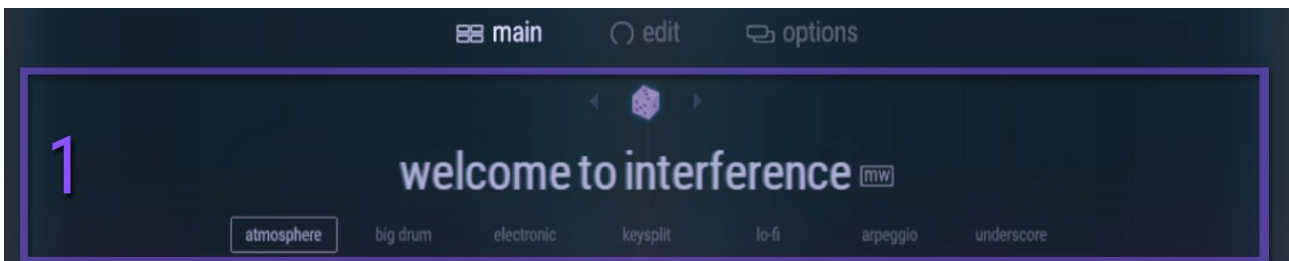
5 Interface Reference

The Interface Reference section in this manual covers every function, button and control for each of the three INTERFERENCE pages in detail.

5.1 The Main Page

5.1.1 Selecting Presets

To switch and / or select presets in INTERFERENCE, you can do the following:


Click on the little left and right arrows in section **[1]** to switch to the previous and next preset, respectively. Alternatively, you can click on the name of the current preset to open up a list of all available presets and choose one from there.

→ You can also use the category boxes below to jump directly to a certain category.

Finally, you can use the little dice button in the top- center, to instantly jump to a randomly choosen preset. Note that not only a random preset will be choosen, it will be randomized then as well.

5.1.2 Adjusting Engine Volumes

You can control the volume of each INTERFERENCE engine directly from within the main page:
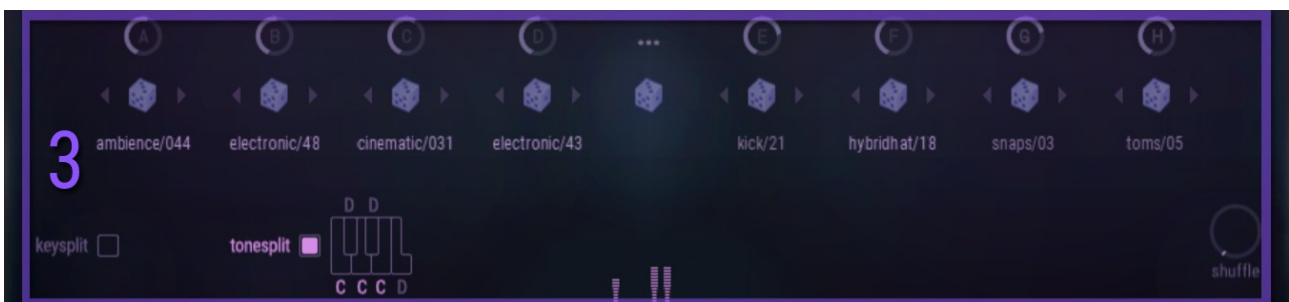
Use the volume knobs on top of each engine, to adjust the corresponding volumes directly.

5.1.3 Loop and Drum Menus

Use the left and right arrows to choose different loops/drums for each engine or use the dice button to choose one randomly. Alternatively, you can click on the name of the currently selected loop/drum to open up a menu with all available sounds.

5.1.4 Sound Randomization

The dice button's randomization is dependent on the randomization menu in the center:
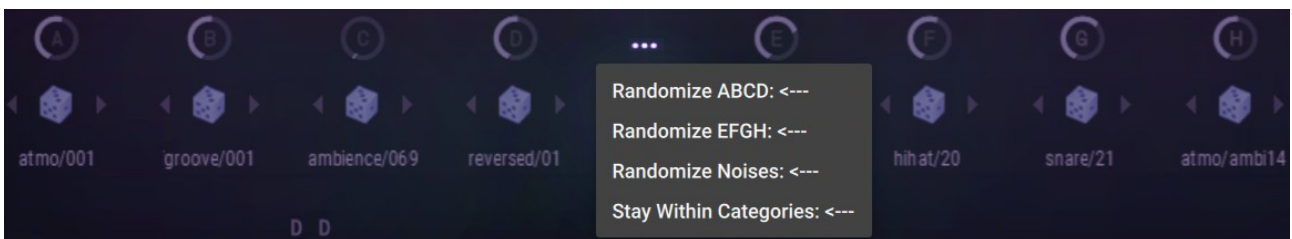
→ **Randomize ABCD**: When checked, the loop section (left) will be randomized.
→ **Randomize EFGH**: When checked, the drum section (right) will be randomized.
→ **Randomize Noises**: When checked, the noises modulation table (right) will be randomized.

→ **Stay Within Categories**: When checked, the randomization process will only choose random loops and drum sounds that match the current category (e.g. tape kick drum sounds or ambience loops).

5.1.5 Key- and Tone-Split

INTERFERENCE features key-split and unique tone-split functions, that we will cover in this section:
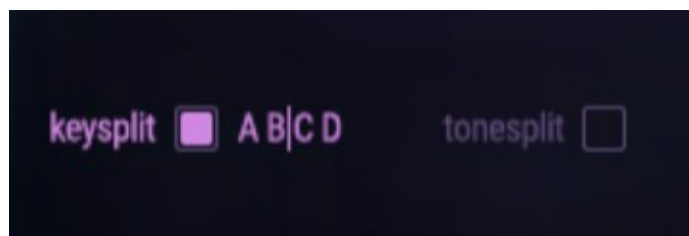
By default, all loops (engines A-D) will be triggered by the entire keyboard range. Using the key-split function, you can split these engines around a fixed split point (Middle C2, Note: 48). The on screen keyboard (if visible) will reflect this as well:
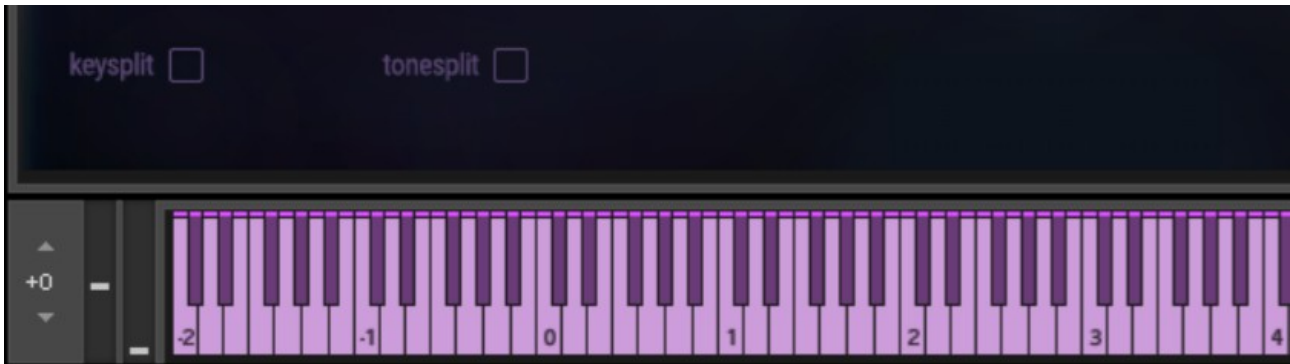
[Key-Split Off]
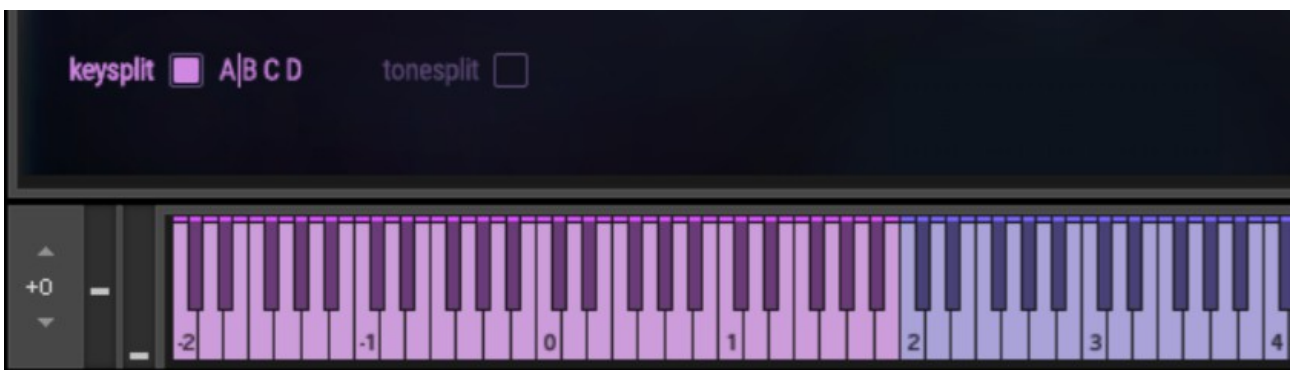
[Key-Split On]

In the above picture, a key-split for „A" and „BCD" has been set. That means, the left side of the keyboard will only trigger engine A whereas the right side will play back the engines B,C and D.

→ You can use the key split button to cycle through three different key-split modes.
→ The key- and tone-split functions are only available from within the main and the options page.

Now, let's move on to the tone-split function.

Instead of playing loops chromatically, you can use the tone-split feature to put each loop from the engine A-D onto it's own key on the keyboard.

You can cycle through various combinations:
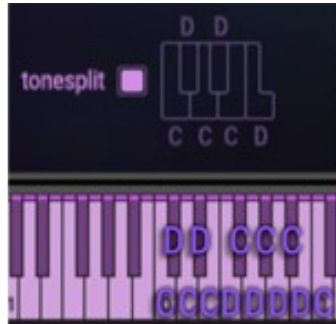
5.1.6   Shuffle

Use this knob to dial in the desired amount of sequencer shuffle / swing.

5.2 The Edit Page

5.2.1   Modulation Tables

In INTERFERENCE, each preset features comprehensive real-time modulation of internal knobs and parameters. This modulation is achieved using the modulation tables, which are available for each engine independently:

In the above picture, the Arpeggiator Pattern is changed dynamically and the Noises Engine (bound to Engine H) is triggering an impact sound. For more precise editing, you can click on the down arrow symbol to expand the tables. Click on the „X" to erase a certain table (set it to its default value).
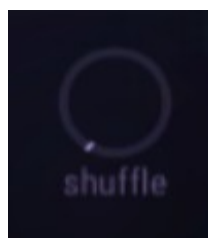
→ The modulation of **all** tables starts as soon as you trigger a note on your keyboard.

Here is an overview of all available modulation tables and targets.

Engines A-D (left):

1. sub octave **(global)**
    Adjusts the octave of the SUB oscillator (5.2.9 → Global FX).

2. blend **(global)**
    Can be used to alter the balance/mix of the engines A-D and E-H.

3. pattern (A/B)
    Decides, which loop engines pattern should be played back (A or B).

4. arp pattern
    Choose one of the four arpeggiator patterns to be played back.

5. arp octave
    Controls the octave range of the Arpeggiator.

6. stutter
    Enables or disables the volume gate effect for the currently playing pattern.

7. offset (samples)
    Loop sample offset.

8. toneshift
    Which loop should be played on the selected engine. Options: 0 (current) to +7 (offset).

9. retrigger FX
    Delay-based repeat/retrigger effect. The table controls the synced retrigger rate.

10. **mute**

Mutes the loop playback at a particular point.

11. **pan**

Left and right panning.

12. **formant**

Controls the formant-shifting (-12 to +12). Great to change the tonal character of a loop.

13. **pitch track**

Controls the amount of pitch-tracking. Great to achieve out-of-tune results.

14. **pitch mod**

Controls the pitch modulation envelope. Available options are: 0=Off, 1=Ramp Up, 2=Ramp Down, 3=Up Fast, 4=Down Fast, 5=Vibrato.

15. **volume mod**

Controls the volume modulation envelope. This is basically a tempo-synced saw wave altering the volume in different time-divisions.

16. **lowpass**

Lowpass filter Cutoff frequency.

17. **highpass**

Highpass filter Cutoff frequency.

18. **drive**

Adjusts the drive (distortion) amount.

19. **lofi**

Adjust the Lo-Fi (samplerate reduction) amount.

20. **disturb send**

Controls the amount of audio to be send into the global disturb effect.

21. **delay send**

Controls the amount of audio to be send into the global delay effect.

22. **reverb send**

Controls the amount of audio to be send into the global reverb effect

23. **phaser FX (global effect)**

The intensity of a global hidden Phaser effect.

Engines E-H (right):

24. **sub octave (global)**

Adjusts the octave of the SUB oscillator (5.2.9 → Global FX).

25. **blend (global)**

Can be used to alter the balance/mix of the engines A-D and E-H.

26. **pattern (A/B)**

Decides, which drum engines pattern should be played back (A or B).

27. **random step**

With high table values, this will alter the playback step position randomly.

28. **volume sound #1**

Lets you adjust the volume for drum sample #1 („I")

29. **volume sound #2**

Lets you adjust the volume for drum sample #2 („II")

30. volume sound #3
Lets you adjust the volume for drum sample #3 („III")

31. audio output
It is possible to route a drum engine into the loop engines (A-D). The possible outputs are A,B,C and D.

32. offset
This is a combined (pre)-delay (ms) and sample offset (%) table. Use it to shift back drum sounds a certain milliseconds or to advance in a certain drum sound.

33. variation
Each drum sound in INTERFERENCE has two built-in variations. Use this table to choose a variation.

34. loop
By using this table, you can enable on-the-fly sample looping. Use this table to adjust the loop-length.

35. reverse
Reverses the sample playback.

36. double-time
This will double the playback speed / triggering of a currently selected drum sound.

37. retrigger FX
Delay-based repeat/retrigger effect. The table controls the synced retrigger rate.

38. toneshift
Which drum sound should be played on the selected engine. Options: 0 (current) to +7 (offset).

39. mute
Mutes the drum sound playback at a particular point.

40. pan
Left and right panning.

41. pitch
Controls the pitch of the current drum sound. Note that you can only tune <u>down</u> drum sounds.

42. attack
Volume envelope attack speed.

43. decay
Volume envelope decay speed.

44. lowpass
Lowpass filter Cutoff frequency.

45. highpass
Highpass filter Cutoff frequency.

46. drive
Adjusts the drive (distortion) amount.

47. lofi
Adjust the Lo-Fi (samplerate reduction) amount.

48. disturb send
Controls the amount of audio to be send into the global disturb effect.

49. delay send
Controls the amount of audio to be send into the global delay effect.

50. reverb send
Controls the amount of audio to be send into the global reverb effect.

51. noises H

The Noises table is an additional sample playback engine on top of Engine H. (Sounds will be outputted to this channel as well). It has the same set of sounds and samples as Engine H.

You can use it to playback additional sounds. Note that the Noises Engine does not take note pitch into account. So it is best suited for ambiences and non-tonal sounds.

52. flanger FX **(global effect)**

The intensity of a global hidden Flanger effect.

5.2.2   Step Wait

All modulation tables do play back their eight steps infinitely. However, there might be cases where you don't want that. This is where the Step Wait feature comes in handy:
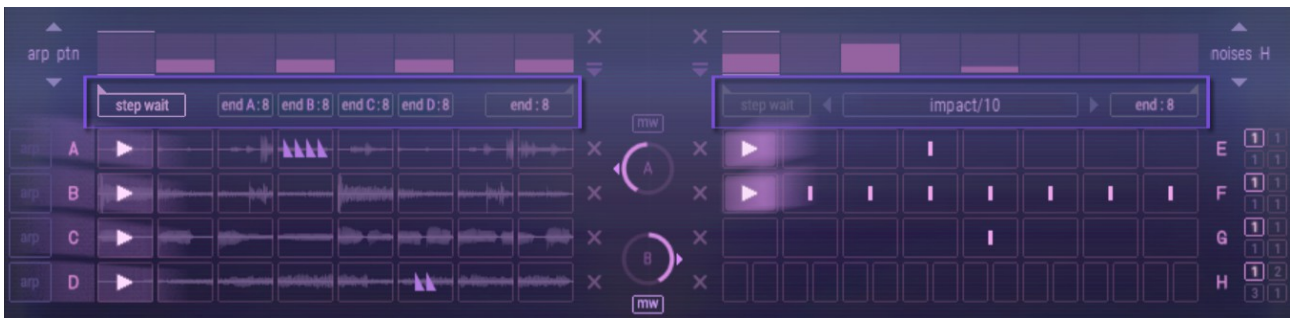
Once you enable the Step Wait for a particular table (it is available to all modulation tables seperately) it will hold that step for eight steps and then play the remaining eight steps in the current table.

When that is done, it will repeat the process.

5.2.2   Table Lengths

You can adjust the length (number of steps) for the table modulation using the „end: 8" sliders. By default, all modulations will run eight steps and then repeat forever.

Note that if you change the step length, it will be set for **all** modulation tables except the sample offset modulation tables (**A-D →table number 7**), which you can adjust seperately for the engines A to D.

Use the four centered „end:" sliders to adjust the step length for the loop and/or drum sequence patterns. This way you can achieve great syncopated rhythms easily.

5.2.4   Loop Sequencing

INTERFERENCE has four dedicated loop-playback engines:

Each engine (A -D) can play back a different loop and you can combine up to four of them as you prefer.

→ Click on the letters to the left to enable or disable a certain engine.

For each loop engine, you have eight steps that can use to either turn the playback on or off at that particular moment or you can add volume („trance gate") effects as well.

Clicking (cycling through) these little sequencing boxes will give you the following options:

 Dimmed (OFF)

 Playback (ON)

 Gated (1/16th)

 Gated (1/32th)

Clicking a certain box while pressing *[COMMAND/CONTROL]* will set it to Dimmed (OFF).

5.2.5   Drum Programming

INTERFERENCE features four dedicated drum and percussion engines:

Engine E delivers various kickdrum sounds, Engine F hihats and shakers, Engine G clap and snare sounds and Engine H does feature all sorts of percussion sounds, noises and ambiences.

→ Click on the letters to the right to enable or disable a certain engine.

Programming of beats and grooves is similar as in the loop sequencing section (engines A-D).

Click on any box to enable a certain step (if it was empty before).
It will show a „I" then, which means that it will play back the currently selected sample of the choosen engine at that specific step.

Like in the loop section, you can cycle through various options, in particular:

OFF	
I	Currently selected sound
II	Next sound in the sound menu
III	After Next sound in the sound menu
I₂	Currently selected sound (8 steps passed)
II₂	Next sound in the sound menu (8 steps passed)
III₂	After Next sound in the sound menu (8 steps passed)

Clicking a certain box while pressing *[COMMAND/CONTROL]* will set it to OFF.

The drum section in INTERFERENCE (E – H) also features four switchable step patterns per engine:

Each little box will show a value from 1 to 4. You can use these to cycle through four patterns and edit each one individually. These patterns will be played back from left to right, top to bottom and then repeat.

→ Note that patterns will be switched depending on the number of steps set (e.g. „END E: 8").

5.2.6   Pattern Switch Knobs

Each sequencer pattern in INTERFERENCE has an additional one, switchable via the Pattern Switch Knobs, which can also me controlled externally via the modulation-wheel. This gives you another set of sequencing steps per preset and is a great way to add some variation to it, especially when switching these via the modulation tables or in realtime:
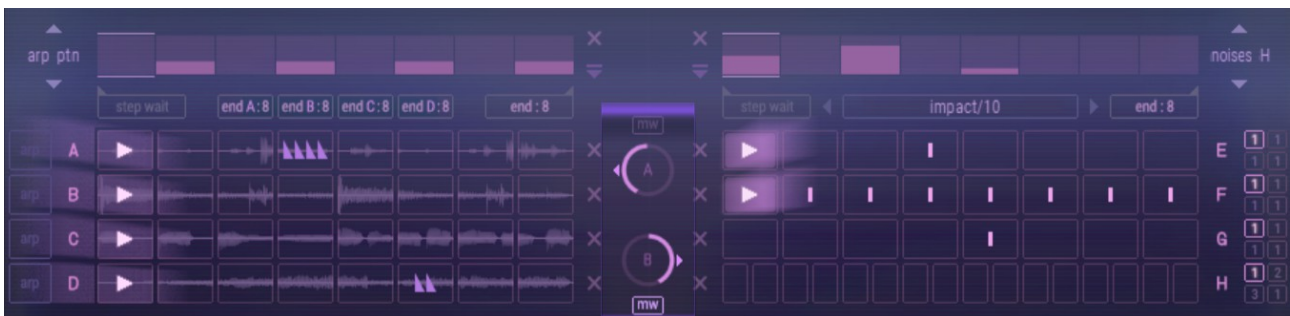
The top most knob (with an arrow pointing to the left) switches patterns for the left loop sequencing section in INTERFERENCE (A – D). The bottom one does the same for the right drum/percussion sequencing section. Drag the knobs up/down to toggle the pattern.

As an alternative, click on the little [MW] button to enable external modulation-wheel control.

Note that this feature is intended as a pattern addition. Each preset will always have pattern A set as the primary pattern.

→ Each pattern (A/B) can have a different set of sounds and loops, switched automatically.

5.2.7   Engine Selection

To select an engine in INTERFERENCE, use the engine selection buttons/labels at the bottom of the EDIT page:

5.2.8   Engine Settings and Parameters

INTERFERENCE has a comprehensive set of controls and features available to each engine.
This section covers these elements in detail.

Let's begin with the loop section **(Engines A – D):**
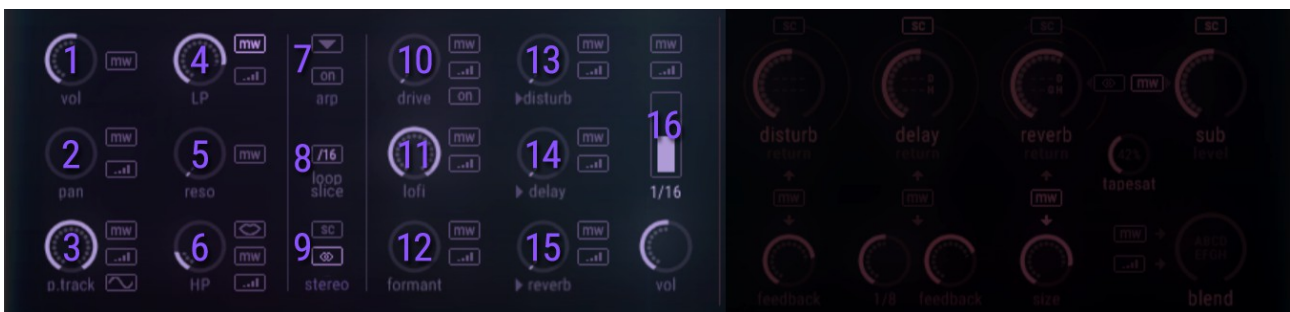
1	volume
	Adjusts the engine's volume. Use the [MW] button for external modwheel control.

2	panning
	Adjusts the left/right panning. Use the [MW] button for external modwheel control. Use the [ⅲ] button for table modulation.

3	pitch tracking
	Controls the amount of pitch tracking. Lower values will „move" the pitch towards middle C3. Use the [MW] button for external modwheel control. Use the [ⅲ] button for table modulation. Click the [$] (sine-wave) button to enable pitch modulation coming from the loop engine „p.mod" modulation table (#14).

4	lowpass filter
	Adjusts the lowpass filter cutoff frequency. Use the [MW] button for external modwheel control. Use the [ⅲ] button for table modulation.

5   resonance

Adjusts the filter resonance for both the lowpass and the highpass filter.
Use the [MW] button for external modwheel control.

6   highpass filter

Adjusts the highpass filter cutoff frequency.
Use the [MW] button for external modwheel control.
Click the [o] (mouth-symbol) button to enable a vowel-filter.

7   **arpeggiator**

Click on the down arrow button to open/close the arpeggiator panel.
Click on the [on] button to enable or disable the arpeggiator for the selected loop engine.

8   loop slice

Lets you cycle through four different slice playback dividers, as triggered by the sample offset modulation table.

9   SC / stereo

Click on the [SC] button to enable sidechaining (volume ducking) for the selected engine. The sidechaining is triggered, whenever a kick drum sound (Engine E) is playing.

Click on the button above the „stereo" label to toggle between stereo, mono and spatial audio for the selected engine.
Note: Spatial audio mode can ommit clicks/pops in certain cases (especially with high frequency content).

10   drive

Adjusts the amount of drive (distortion).
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.
Click on the [on] button to enable or disable the drive effect.

11   lofi

Adjust the Lo-Fi (samplerate reduction) amount.
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.

12   formant

Controls the formant-shifting (-12 to +12). Great to change the tonal character of a loop.
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.

13   disturb **(send level)**

Controls the amount of audio to be send into the global disturb effect.
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.

14   delay **(send level)**

Controls the amount of audio to be send into the global delay effect.
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.

15   reverb **(send level)**

Controls the amount of audio to be send into the global reverb effect.
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.

16   retrigger

Delay-based repeat/retrigger effect. The slider controls the synced retrigger rate.
Adjust the „vol" knob to control the overall volume of the effect for that particular engine.
Use the [MW] button for external modwheel control. Use the [⫴] button for table modulation.

Engine Settings and Parameters (Engines E – H):

1	volume

Adjusts the engine's volume.
Use the [MW] button for external modwheel control.

2	panning

Adjusts the left/right panning.
Use the [MW] button for external modwheel control. Use the [⑪] button for table modulation.

3	pitch

Controls the pitch.
Use the [MW] button for external modwheel control. Use the [⑪] button for table modulation.

4	lowpass filter

Adjusts the lowpass filter cutoff frequency.
Use the [MW] button for external modwheel control. Use the [⑪] button for table modulation.

5	resonance

Adjusts the filter resonance for both the lowpass and the highpass filter.
Use the [MW] button for external modwheel control.

6	highpass filter

Adjusts the highpass filter cutoff frequency.
Use the [MW] button for external modwheel control.
Click the [o] (mouth-symbol) button to enable a vowel-filter.

7	attack

Adjusts the attack envelope.

8	decay

Adjusts the decay envelope.

9	stereo

Click on the button above the „stereo" label to toggle between stereo, mono and spatial audio for the selected engine.
Note: Spatial audio mode can ommit clicks/pops in certain cases (especially with high frequency content).

10	drive

Adjusts the amount of drive (distortion).
Use the [MW] button for external modwheel control. Use the [⑪] button for table modulation.
Click on the [on] button to enable or disable the drive effect.

11	lofi

Adjust the Lo-Fi (samplerate reduction) amount.
Use the [MW] button for external modwheel control. Use the [⑪] button for table modulation.
Click on the waveform-symbol button to turn the Lo-Fi knob into a ringmod control.

12	shape

Controls a built-in transient shaper. Great to make drum sounds punchier.

13	disturb **(send level)**

Controls the amount of audio to be send into the global disturb effect.
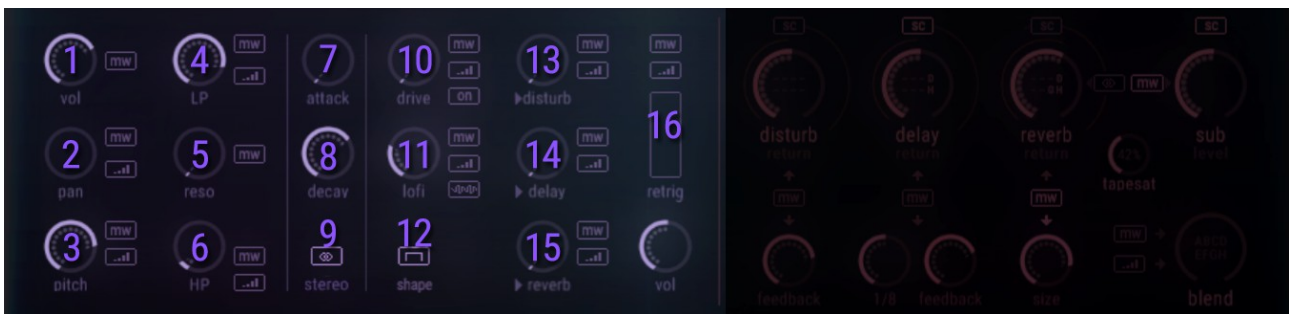Use the [MW] button for external modwheel control. Use the [ɪɪɪ] button for table modulation.

14	delay **(send level)**

Controls the amount of audio to be send into the global delay effect.
Use the [MW] button for external modwheel control. Use the [ɪɪɪ] button for table modulation.

15	reverb **(send level)**

Controls the amount of audio to be send into the global reverb effect.
Use the [MW] button for external modwheel control. Use the [ɪɪɪ] button for table modulation.

16	retrigger

Delay-based repeat/retrigger effect. The slider controls the synced retrigger rate.
Adjust the „vol" knob to control the overall volume of the effect for that particular engine.
Use the [MW] button for external modwheel control. Use the [ɪɪɪ] button for table modulation.

5.2.9   Global Effects

INTERFERENCE features global effects like a production-quality reverb, a delay and a unique so-called „disturb effect". In this section, we will cover all these effects:

1	disturb amount (return level)

Adjusts the overall volume of the global disturb effect.
Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

2	disturb feedback

Adjusts the feedback of the global disturb effect.

Warning! High feedback values can risk damage to your ears or eqipment when not used with caution.

The disturb effect features more than 100% of feedback, thus feeding its feedback back into itself then.

Please use this feature with caution. If you are experiencing a rising feedback be sure to turn down the global disturb volume or the disturb feedback itself quickly.

There is a menu option (→ options page) which is called „kill disturb feedback" which is also enabled by default that tries to help to prevent this by slowly decreasing the disturb feedback once it goes over 100%.

Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

3	delay amount (return level)

Adjusts the overall volume of the global delay effect.
Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

4	delay rate (tempo-synced)

Adjusts the delay rate. The delay rate is always tempo-synced to your Host/DAW.
Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

5	delay feedback

Adjusts the delay feedback.
Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

6	reverb amount (return level)

Adjusts the overall volume of the global reverb effect.
Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

7	reverb size

Adjusts the size/length of the reverb tail.
Use the [MW] button for external modwheel control. Arrows will indicate, what parameter you are controlling.

8	reverb stereo/mono

Using this switch you can set the reverb to operate in mono or stereo.

9	tape saturation

Controls the global high quality tape-saturation. Use this to add some dirt and warmth to your preset.

10	sub level

Adjusts the amount of the hidden sub (sine-wave) layer, that always plays together with all other engines.
Use the [MW] button for external modwheel control.

11	blending

Adjusts the blending (mix) of the left and right engines (A-D and E-H).
Use the [MW] button for external modwheel control. Use the [⦀] button for table modulation.

Finally, there are [SC] buttons that you can use to activate side-chaining (volume ducking) for the global effects as well. This ducking occurs once a kick-drum will be triggered on Engine **E**.

You can adjust the amount of volume-reduction in the INTERFERENCE options page.

5.2.10   Modwheel Mapping Page

You can set up comprehensive and complex modwheel mappings easily via a dedicated sub-page that you can reach from within the edit page:
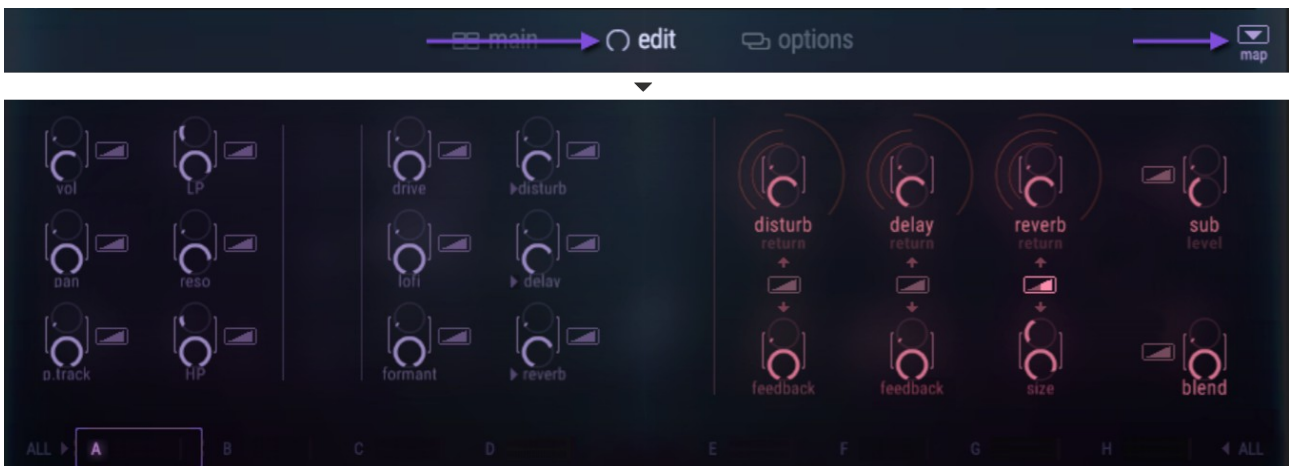
To adjust a mapping, you <u>first</u> need to select the engine in where the control you want to modify exists. Then you can adjust and fine-tune the modulation-setup:

1	start-point of modulation
	Adjust the top knob to set up the starting-point of the desired modulation.

2	end-point of modulation
	Adjust the bottom knob to set up the ending-point of the desired modulation. Note: You can invert the start and end-point knobs to get an **inverted modulation.**

3	range selection
	Here you can decide whether the modulation should use the **entire** modwheel range, or just the 1st or 2nd half.

5.2.11 The Arpeggiator

INTERFERENCE comes with a feature-rich arpeggiator, that has different playback modes and note-harmonizing functions.

To open up the arpeggiator sub page, you'll need to go to the INTERFERENCE edit page, **choose a loop engine (A-D)** and then click on the arpeggiator toggle button (down-facing arrow):

The arpeggiator looks like this:

1	enable/disable

Here you can enable the arpeggiator for the loop engines A – D individually.

2	step-sequencer

From here you can insert or erase steps that should be played by the arpeggiator.

The sequencer has five lanes, where each one represents a single note pressed on your keyboard.
Note that these are sorted from top to bottom. The arpeggiator will play back a maximum of five notes at once, that you can sequence and control individually.

Notes will be sorted in realtime (from low to high) – that means, when you press e.g. a three-note chord (C3-E3-G3)– the first three sequencer lanes (seen from the top) will represent these three notes:

Note: C3 →Sequencer Lane: 1
Note: E3 →Sequencer Lane: 2
Note: G3 →Sequencer Lane:3

If you let go e.g. the E3 note, it would then look like this:

Note: C3 →Sequencer Lane: 1
Note: G3 →Sequencer Lane:2

3   note inserting and table lengths

In this section you can insert notes into the five different sequencers by simply clicking a button for the desired lane.
Note that the step will be inserted and the playhead will move forward one step automatically.

This method can be useful if you have a melody line in your head that you quickly want to insert. You then only need to think of the notes in advance and which note (lane) should play these.

Use the „end" labelled sliders to adjust the length of each sequencer lane.
Note: For that to work you'll need to switch into arpeggiator phrase mode (see #4).

4   pattern selection and arpeggiator options

From here you can switch patterns (1 - 4) to edit them.
Note that patterns will be switched by the „arp ptn" modulation table (see #5).

Click on any pattern to recall it and open it for editing. Note that each INTERFERENCE preset has its own set of four different arpeggiator patterns as defined here. Also, the various playback options are per preset and per pattern as well:

[phrase] – toggles classic or phrase mode. The phrase mode can have individual pattern lengths.
[hrm only] – cycles through different note-harmonizing modes (more than two notes need to be held down for that to work!).
[rev at end] – when a sequencer lane ends, instead of starting from the beginning, it will play backwards.
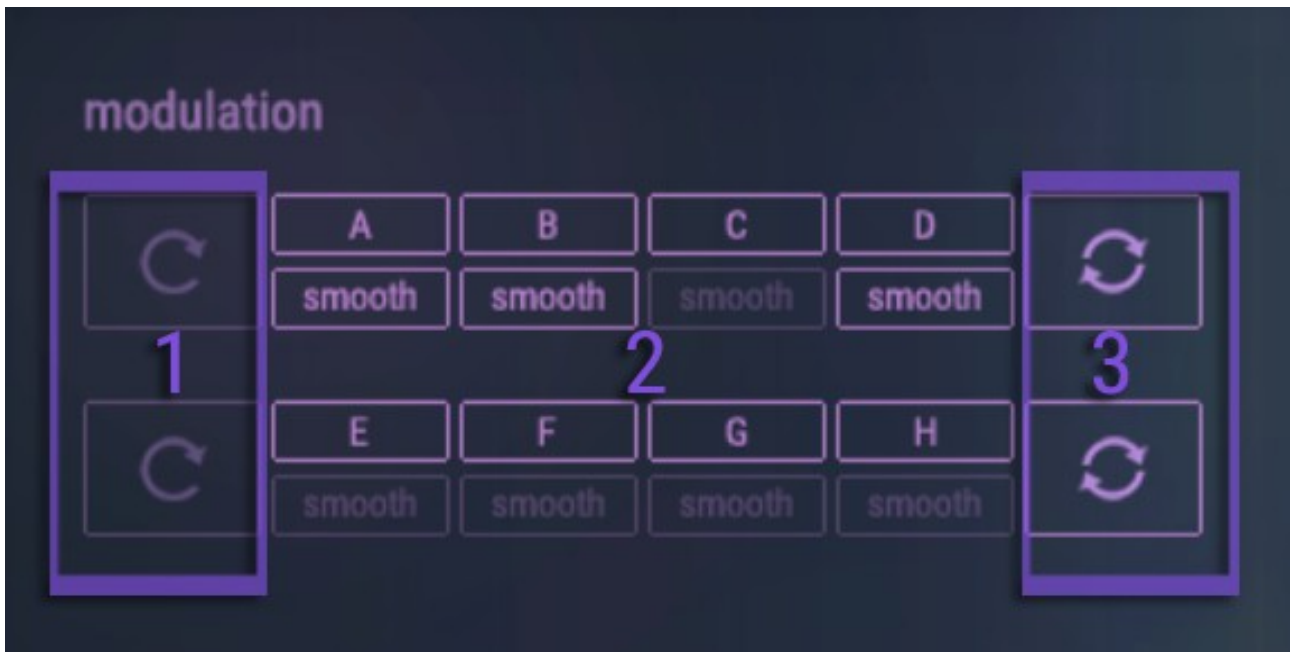**[dbl.speed]** – toggles between 1/8th notes or 1/16th notes playback speed.

5   table pattern modulation

You can switch between the four available arpeggiator patterns by using the „arp ptn" modulation table here.
In case you only want to have e.g. play back pattern 1, simply erase the table completely.

5.3 The Options Page

5.3.1   Modulation Section

1	table modulation restart

Whenever you press a note, the modulation tables in INTERFERENCE will start modulating.

You can use the restart switches to turn that on or off. So that means, when you release a note and press one again, the modulation will continue from where it was before (and not start from zero again).

2	modulation enable / smooth modulation

Use the A – H switches to globally turn on or off the modulation for/from these.

Use the [smooth] buttons to enable or disable the so called „smooth" modulation.
By default this turned off and results in a stepped modulation which can sometimes sound unnatural. When using the smooth modulation, values inbetween the steps are being interpolated, thus resulting in a way smoother modulation.

3	table modulation loop

Here you can enable or disable the endless looping of table modulation. If turned off, the modulation will run once and then hold the last step forever until you press a new note.

5.3.2   Triggering Section

1	trigger keyrange

When using a keysplit, this section lets you choose whether the drum-section (Engines E-H) should be triggered always, only from within the left range of the keysplit or the right range.

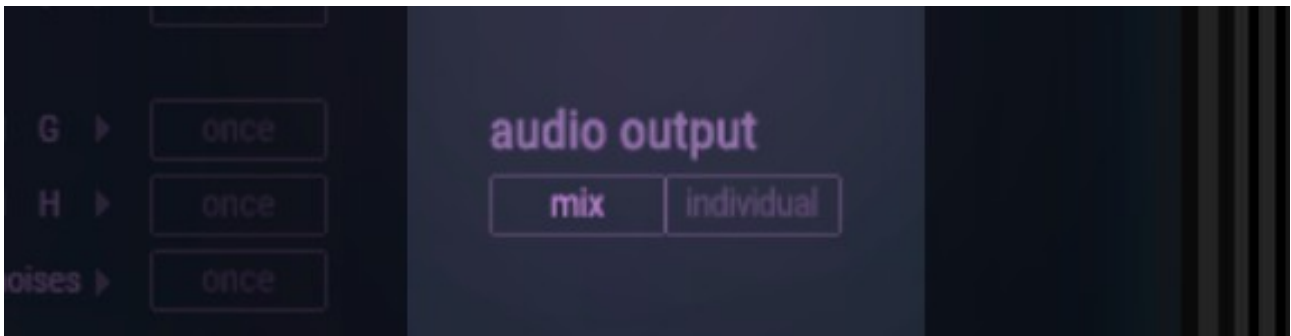| 2	one-shot

Here you can decide if the drum-section (Engines E-H) step-sequencer should play the whole time or just once.
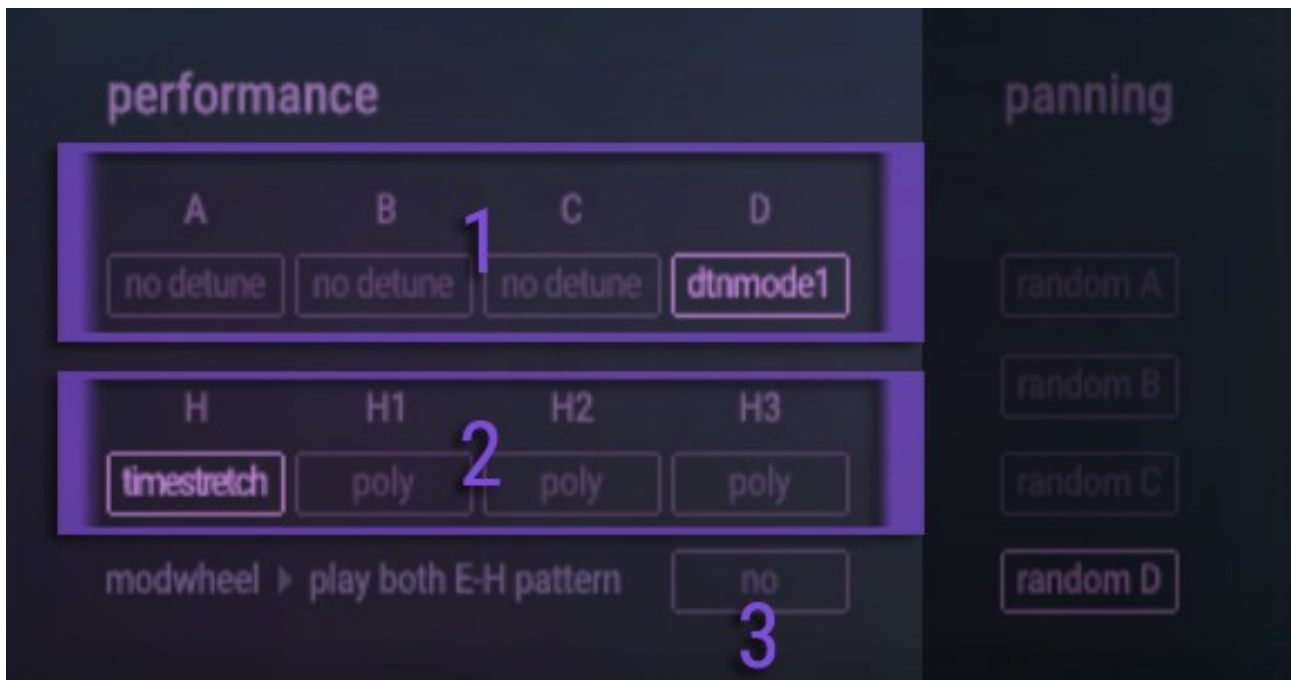
5.3.3   Time Signature

Here you can choose the time signature for the current preset. (4/4 or 6/8).

5.3.4   Audio Output

Select the audio output mode here. When using the „individual" mode, each engine will be routed to its own audio output. Refer to the KONTAKT 7 manual for routing the individual audio outputs to your Host/DAW.

5.3.5 Performance Section

---

1   detuning modes

The engines A – D can play back loops slightly detuned to give them, an „analog feel". This is especially suited for e.g. synthesizer or bass loops.

You can set up two modes from here: „dtnmode1" will randomly detune each step (slice) by a small amount (-/+ 25ct). The second detune mode will randomly detune loops based on which notes you play (random microtuning).

---

2   engine H timestretching / playback modes

Engine H, which has been designed to play back percussion sounds, noises and ambiences, can be operated in a normal sampler mode or by using a timestretching algorithm. To enable the timestretching for engine H, click on the [timestretch] button.

Once in timestretch mode, you can use the decay knob to adjust the length of the timestretching. The longer the decay, the longer the note(s) will play. Keep in mind that this will increase CPU usage.

Use the [poly] buttons to enable polyphonic (chromatic) playback for the engine H samples I, II and III (→ **5.2.5**).

---

3   play both E – H pattern

When this function is set to [yes], moving the modulation wheel up will play patterns A & B at the same time, rather than switching between them. This is great for a live performance where you want to thicken up e.g. a drum groove.

5.3.6   Panning Section
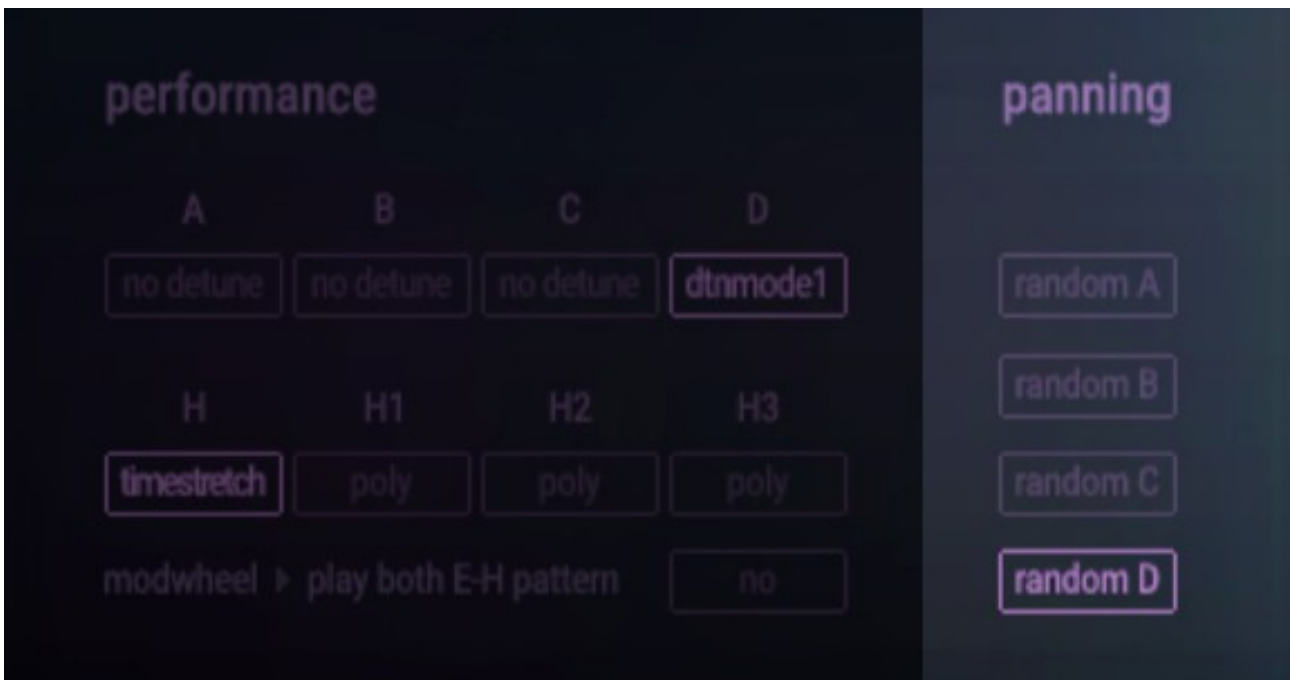
In here you can enable or disable individual random per-note panning for the engines A – D. This is a great and easy way to widen up the stereo image.

5.3.7   Miscellaneous Section

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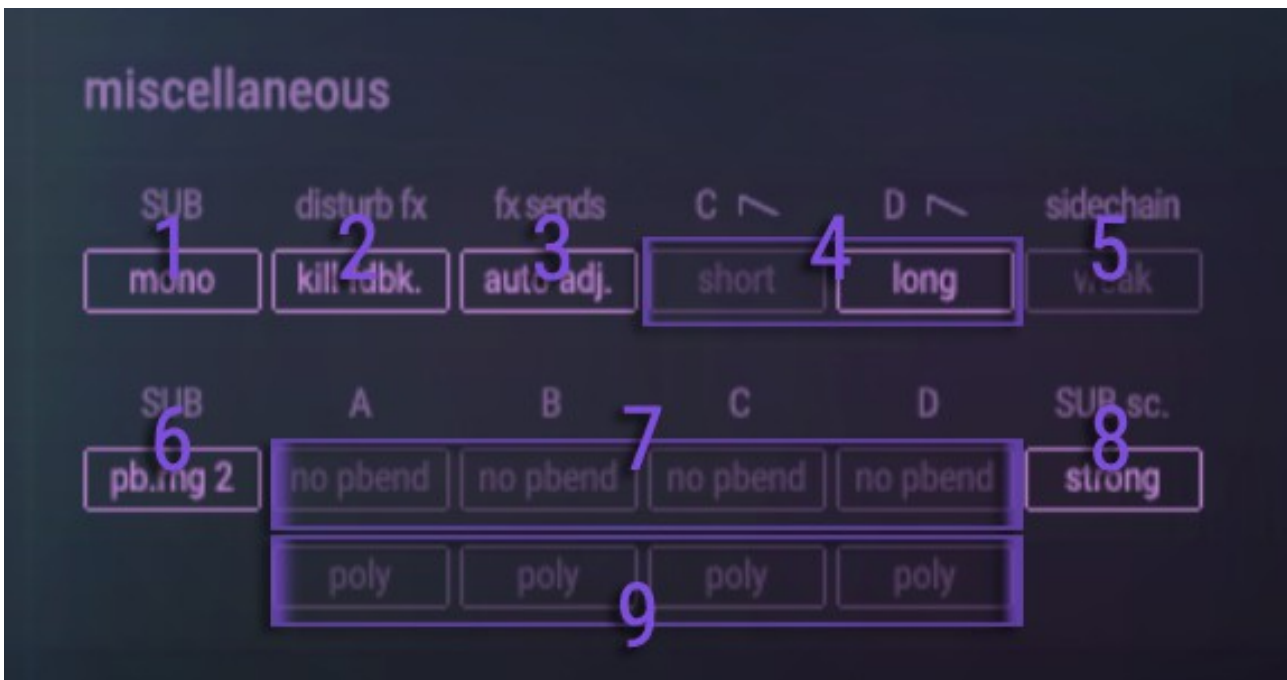
1   SUB mono/poly

Choose if you want to play back the hidden SUB layer monophonic or polyphonically.

---

2   disturb FX kill feedback

When this button is enabled, using disturb FX feedback settings of more than 100% will automatically slowly turn it down back to 100% to avoid loud feedback noises and resonances which could potentially damage your ears and/or your equipment.

Note that this option is enabled by default.

---

3   fx sends auto adjust

Each engine has three send effects, which are disturb FX, delay FX and reverb FX.

All audio sent from the engines will be sent in pre-fader mode. That means that the volume of an engine won't affect the loudness of e.g. the reverb tail. The benefit of that is that you can have e.g. 100% reverb (wet) for an engine.

But since this might be confusing at first, this option (when enabled) will automatically adjust the effect send knobs (levels) to match the volume knobs so that the correct balance of the two will be kept.

---

4   engine C / D release (decay) time

Use these buttons to alter the amplitude envelope for the engines C and D. You can choose between short (default), medium and a long release. Please note that longer release times will increase CPU usage.

---

5   sidechain amount (global)

From here you can adjust how strong or weak the sidechaining should occur. This affects all engines and send effects, that do have an enabled [SC] button.

---

6   SUB pitchbend range

Here you can adjust the pitch bend range for the hidden SUB engine.

---

7   A - D pitchbend ranges

Here you can adjust the pitch bend ranges for the engines A – D seperately.

8	sidechain amount **(SUB)**

From here you can adjust how strong or weak the sidechaining should occur for the hidden SUB (sine-wave) engine.

9	A - D mono/poly

In this section, you can choose whether to play back the engines A – D polyphonically, which is the default, or to use them in mono mode. When using mono modes for one of these, you have the option to choose a key note priority as well.
The two options that you can choose from are **low** (lowest key) and **high** (highest pressed key).

6   Host Automation & MIDI-Learn

Every knob or slider in INTERFERENCE can be controlled externally via a MIDI-controller:
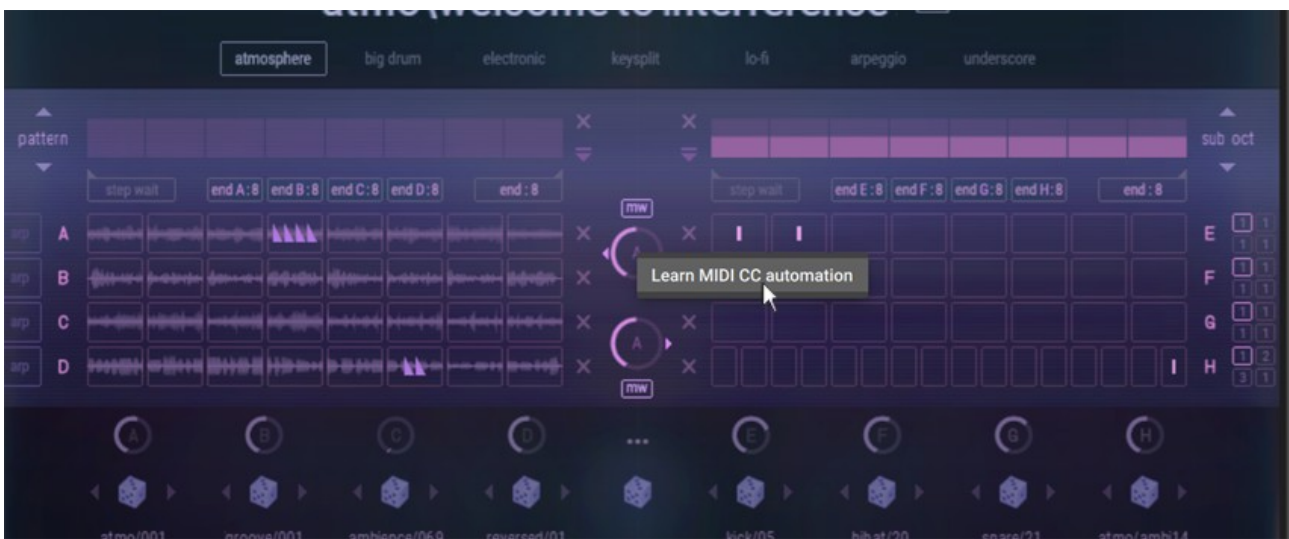
To assign a knob or slider to a MIDI continoues-controller, right-click the desired control and choose „Learn MIDI CC automation". Now move the desired controller on your external MIDI hardware. Once that is done, the control is now ready to be modulated externally.

Also, almost all controls in INTERFERENCE are pre-mapped inside KONTAKT to report/output automation data to the underlying host/DAW. Please refer to your host/DAW documentation on how to use host automation in detail or if you have any questions or issues.

INTERFERENCE
Concept, design and development: Dennis Lenz
Factory preset design: Dennis Lenz, Pierre Fink

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