

K-DEVICES

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SOUND

||| HERSE

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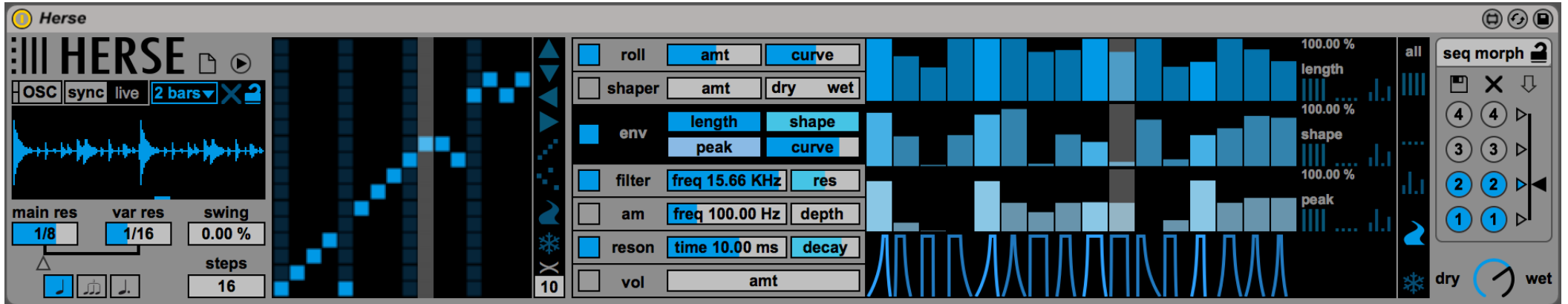
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1. THIS IS HERSE

Thank you for choosing HERSE!

HERSE is a Max For Live audio effect designed to slice and process incoming audio in many possibilities.



This document will guide you through a complete overview of the product. After reading it, you should be able to use it on perfect, so we recommend that you take the time to read this guide in its entirety.

Ableton Live 9 and the Max For Live add-on are required (refer to our website to know which are the Live version supported for every released version): HERSE is a Max For Live device and works both on Mac OS® X and Windows®.

HERSE is currently available as single product.

Thanks to the Max For Live total integration, each HERSE parameter is described in the Live Info View.

We suggest to follow K-Devices via [Facebook](#), [Twitter](#) or sign up our [Newsletter](#), in order to stay updated with K-Devices news and HERSE future updates.

2. INSTALLATION

To install the device double click on the .alp file contained in the downloaded package. Device, presets, live sets and Ableton Live Lessons will be automatically installed.

HERSE device will be installed in the Ableton Live Library: you can find it in the “packs” tab of the Live 9 browser.

3. PACK CONTENTS

In addition to the Max For Live device, HERSE contains:

- 41 presets;
- 3 Live Sets.

4. HOW HERSE WORKS

HERSE is a signal processor based on several effects applied to a main slicing section. Each effect takes advantage of exclusive step sequencers, in order to apply different effect amount per each step: these include roll, a waveshaper, an amplitude envelope, a low pass filter, amplitude modulation, resonator and an output volume control.

1. SAMPLING AREA

HERSE stores incoming audio in a temporary buffer, allowing the real time slicing.

2 bars ▼

Choose the length of the sampling buffer using this value: you can choose between 1, 2 and 4 bars. Keep in mind that these lengths will change in relation to the time signature in use (4/4, 3/4, 6/8, 9/8, and so on). As soon as the last sample is written in the buffer, the recording goes back to the beginning, overwriting the previous signal sample by sample.



You can avoid to overwrite the sampled audio locking the buffer with the padlock icon. This can be very helpful in order to use only a defined loop for HERSE, and change the dry signal source. The lock is not quantized, so it locks or unlocks exactly when you press it. Furthermore, activating the “X” icon, you can empty the buffer automatically, each time you unlock it.

The waveform box previews the audio stored in the buffer.



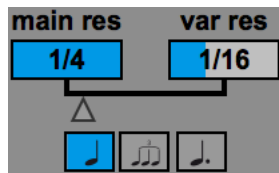
The blue bar on the bottom highlights the sample area which is playing. Usually, it appears differently than other highlights in the slicer grid or in the sequencers. This because the length of the waveform (1, 2 or 4 bars according to the time signature in use) can be really different from the length of a cycle of the grid or of the sequencers (let's call it “cycle” from now).

Here's a brief example: you can use 16 steps with a length of 1/4, obtaining a “cycle” length of 16/4. If the time signature is 4/4 and the buffer length is 1 bar, the blue bar will cycle 4 times. The fact that you can use triplets, dotted notes, any number of steps between 2 and 16, a time signature of 4/4, 7/4, 12/8, or any value you want, creates a lot possible combinations.

Please note that the buffer is automatically cleared when:

- the device is loaded
- the tempo changes
- the time signature numerator or denominator changes
- the transport is in stop and the padlock is disabled

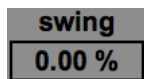
2. TIME RESOLUTION



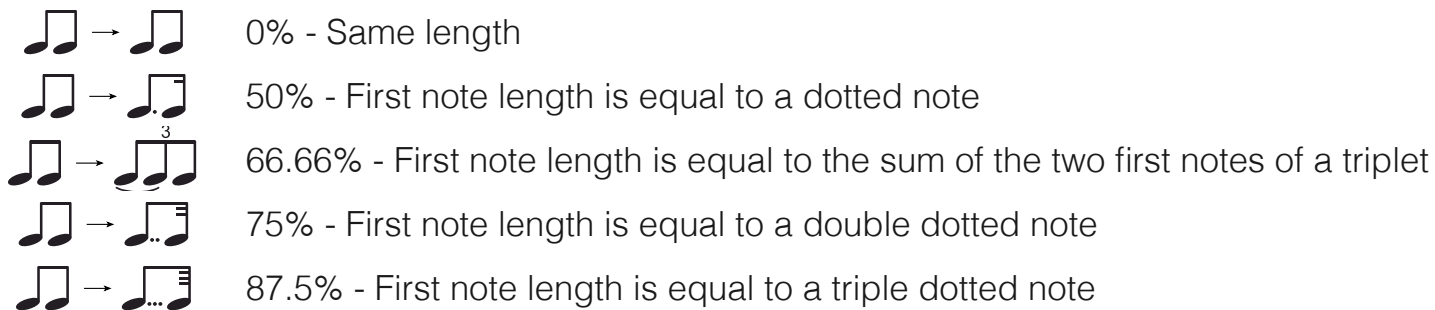
Both slicer and sequenced effects are based on a time resolution: this means that each column in the slicer grid and each step in the effects sequencers are triggered at a defined time, and obviously they have a defined length. HERSE can use two different time resolution: the main or the var (variation) resolution, or a combination of both, obtaining a dynamic time variation. The main resolution is designed to be the longer, and the var the smaller, like 1/4 for the main and 1/8 for the var.



You can do this using this slider, that sets which probability has the var res to be used.



When using the main res and normal note length, you can also take advantage of the swing: in a sequence of two note with the same time resolution, the swing sets how much the first note will increase its length. The amount goes from 0% to 87.5%:

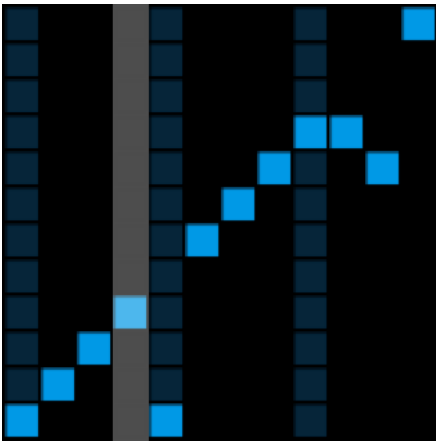


The steps number sets how many steps and rows/columns will be used in the sequencers and in the slicing grid.

PLEASE NOTE

HERSE transport is always linked to the main transport: this means that if you start playing at the middle of a bar, even HERSE's slicer and sequencers will start from that point. In this way you can be sure that the audio signal is processed in the same way all over the transport.

When the time variation is applied, HERSE will trigger non consecutive grid slices and sequencers steps: this is normal since with a main resolution of 1/4 and the var resolution in 1/8, the variation completes its cycle in the half time than the main, unlinking the result from the ideal transport position.

3. SLICER GRID

The slicer grid can be used to select which audio slice should be played according to the column number / step number.

It plays from left to right: each column can be associated with only one slice per time (slice number starts from the bottom to the top).

Rows and column are always the same number and, as the sequencers steps, they refer to the steps number.



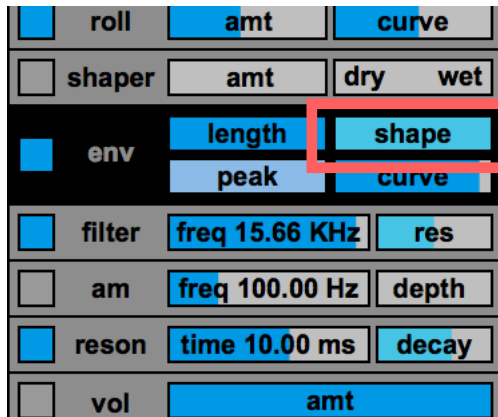
Use these up/down/left/right buttons to move all the grid up, down, left or right, keeping the relation between the selection.



Use the crossfade control to apply an interpolation between the slices. This may be helpful when non consecutive slices are used, decreasing the chance of creating noises in the audio signal.

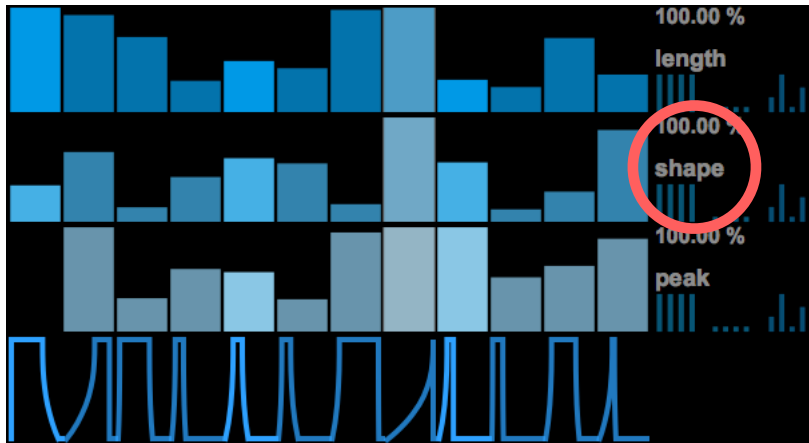
4. SEQUENCER BASED EFFECTS

The output of the slicing grid is sent to the effects section: here all slices are processed in series.



The effects are:

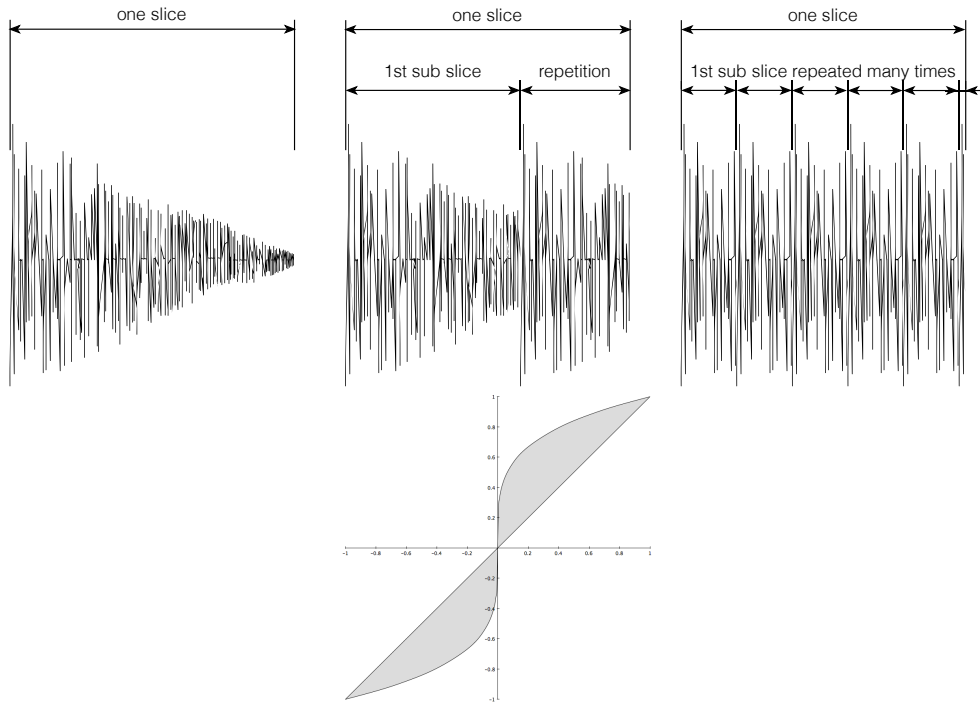
- roll
- waveshaper
- amplitude envelope
- low pass filter
- amplitude modulation
- resonator
- output volume



All effects parameter (excluding the two curve) are based on the combination of a main maximum amount (see the picture above) and on a exclusive step sequencer (see the picture on the side, in this case the envelope sequencers): with the maximum amount you can set a maximum level of effect and refine it using the step sequencer. The effect amounts per each step are always linked across all the 13 sequencers.

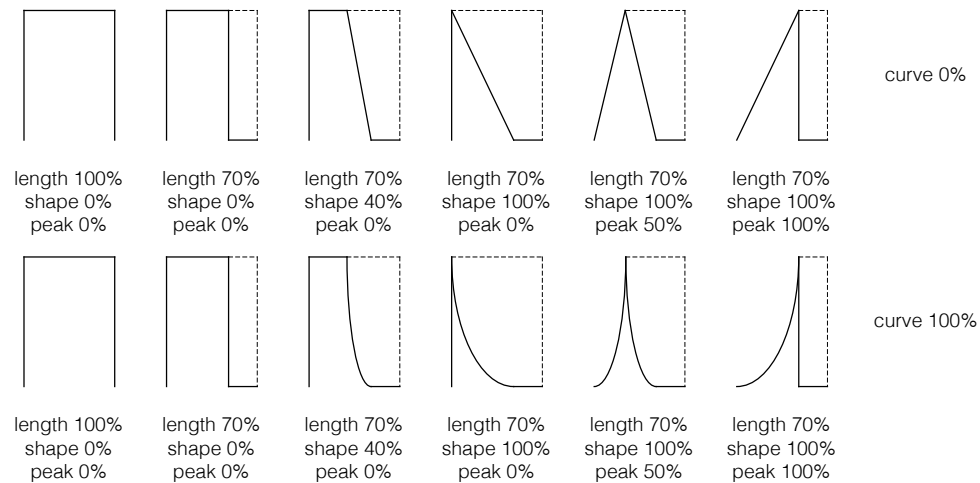
Please note that the maximum amount is always displayed (in percentage) in the top right side of each sequencer, with the parameter name.

You can bypass each effect using their relative bypass switch in the left of the section.



The Roll effect can create very fun “drill” effects, repeating a small portion of audio many times per each slices. The roll amount sets the length of the sub slices: that portion is read at the normal rate, so the pitch is not altered. Since each sub slice is smaller than the slice itself, the playhead will come back to the beginning, re-reading it from the first sample. As much as you increase the roll amount, as much as the sub slice is shorter. In extreme situation, this may result in change of pitch, caused by the sub slice repetition frequency.

The waveshaper is a signal processor that modifies the shape of the incoming audio, basing on a variable function. This effects has two parameters: the amount, modifies the function itself, while the dry/wet defines the balance between the incoming and the processed signal.



With the amplitude envelope you can shape each step differently. All these envelopes are relative to the length of the step itself: this means that you are not working with times in milliseconds but with a percentage shape, for example at 120 bpm each 1/4 note is 500ms, each 1/8 is 250 ms, so setting a length of the 50% you can obtain envelopes of 250 and 125 ms for 1/4 and 1/8.

The length parameter sets the maximum length of the envelope. The shape at the minimum value equals to a straight envelope, while increasing that value you will morph it through a trapezoid, until it reaches its maximum value, obtaining a triangle. With the peak control you can decide where the triangle is “oriented” and adding some curve, you can change the shape used by the envelope to change from the minimum to the maximum value.

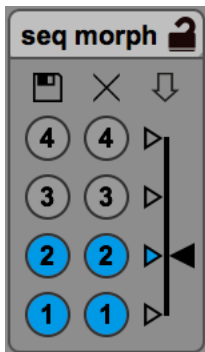
The filter used in HERSE is a two poles low pass filter and works as any other filter: change the cutoff frequency with the freq parameter and the resonance using the res parameter.

The amplitude modulation is obtained multiplying the audio signal with a unipolar sine oscillator. You can set the frequency of this modulator oscillator, and adjust the modulation depth.

The resonator introduces a feedback loop in the audio signal, something like a very short delay. You can adjust the delay with the time and set the amplitude for this delayed signal with the decay.

With the volume you can limit the maximum amplitude of each step: it is very useful when you use certain kind of effects before (like the roll, the filter, if used with a lot of resonance, amplitude modulation or the resonator).

1. MORPHING



You can store and recall up to 4 sequencer configurations per each preset in the sequencer morph area and morph between them linearly.

The first column of buttons is used to store the current multislider configuration in the selected slot, the second is used to delete the stored configuration.

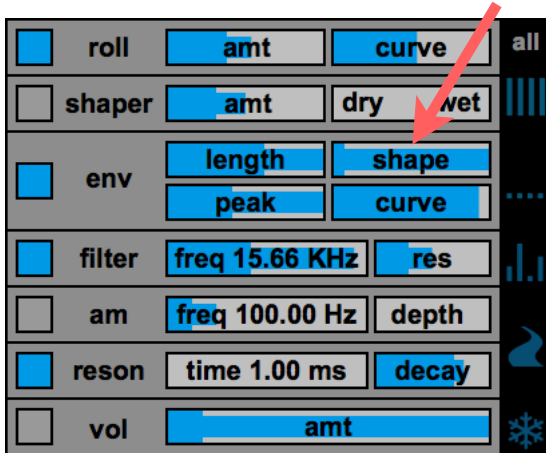
With the slider on the right side you can morph between them: use the small triangles to reach the desired configuration on the fly without morphing.

The padlock item, at the right side of the “seq morph” description is used to disable the store and delete buttons: this may be very useful to avoid any accidental modification of the stored values.

2. FULL OR COMPACT VIEW



HERSE can be used in two different ways: the full view (default) and the compact view. This view hides all the sequencers and is very useful to gain space in Ableton Live's Device View.



All the modulations created by the sequencers are still applied. You can morph between the stored configuration using the morphing section and see how they works step by step in the main effect parameters: the "background sliders" are a bit different in this mode, showing you which is the level reached in that point, instead of being full as in the full view. For sure you can still change the maximum amount or bypass each effect: in this case you will see that the modulations created by the step sequencers will be scaled following the maximum amount.

5. DRY / WET



With the dry-wet dial, you can mix the dry signal that comes into HERSE and the signal processed by the slicing grid and the effects.

6. QUICK PARAMETERS



This button reset all device parameters to the default position.



This button brings the slicing grid to the default position.



This button randomizes the slicing grid.



This button sets all the steps of its step sequencer to the maximum value.



This button sets all the steps of its step sequencer to the minimum value.



This button randomizes all the steps of its step sequencer.

7. ADVANCED PARAMETERS



This button freezes the grid or all the step sequencers to the current step, looping their slice, value or envelope.

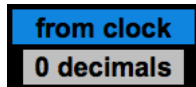
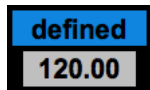
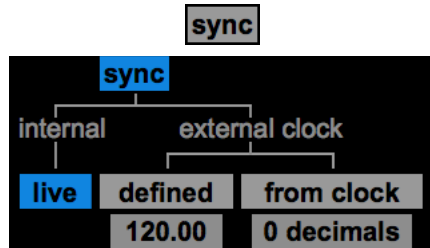


This buttons activates the drunkwalk mode: in this mode the steps or the slices will be triggered randomly.

Please note that HERSE is linked to the transport: this means that as soon as you switch off the drunkwalk mode it will go back triggering the step that it should trigger in that moment.

5. EXTERNAL MIDI SYNC

HERSE can work even when Live is used in sync with an External MIDI source.



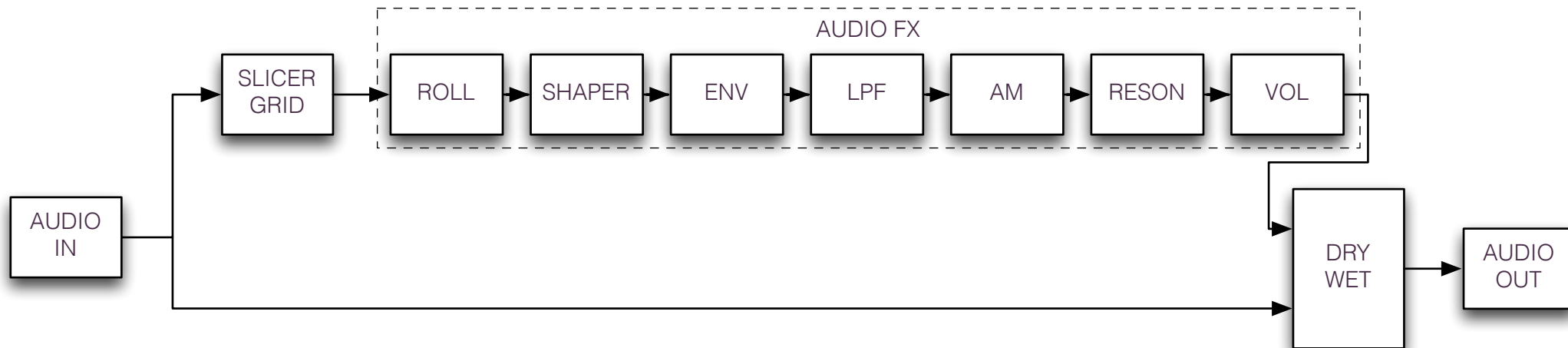
First click on the sync settings button.

Then you can choose between two different modes for the external MIDI synchronization.

The first one, with the better performance, is called “defined” and allow you to define a BPM. You can automate it in the Live Set in order to use with different BPM on the same project. (please note that the buffer is cleared each time the tempo changes).

The second one, is called “from clock”: it detects the BPM of the incoming MIDI clock, so from a sort of “variable sync signal”. In this mode, you can define the amount of decimals numbers of the BPM, like 0, 1 or 2, increasing or reducing its sensibility. Please note that if you increase the sensibility , you would even increase the chance to clear the buffer and as a consequence, also the audio signal that you already have recorded: that’s why we can say that the main useful settings are 0 and 1.

6. SIGNAL FLOW



7. OPEN SOUND CONTROL IMPLEMENTATION

OSC address (add /herse/ as prefix)	parameter name	data type	range		interp. exp.	out in		description
			min	max				
bars	Buffer Length	int	0	2	-	O	O	Sets the buffer length in bars, depending on the time signature.
current_grid						O	X	The current grid slice.
current_step						O	X	The current step in the step sequencers
grid_def	Grid Default	anything	-	-	-	X	O	Sets the grid slices to the default position.
grid_drunk	Grid Drunkwalk	int	0	1	-	O	O	Reproduces grid slices randomly.
grid_freeze	Grid Freeze	int	0	1	-	O	O	Freezes the grid on the current slice.
grid_left	Grid Scroll Left	anything	-	-	-	X	O	Scrolls left the slices in the grid.
grid_rand	Grid Random	anything	-	-	-	X	O	Randomizes the grid slices position.
grid_right	Grid Scroll Right	anything	-	-	-	X	O	Scrolls right the slices in the grid.
grid_up	Grid Scroll Down	anything	-	-	-	X	O	Scrolls down the slices in the grid.
grid_down	Grid Scroll Up	anything	-	-	-	X	O	Scrolls up the slices in the grid.
hide_seq	Hide Sequencers	int	0	1	-	O	O	Hides the sequencers area reducing the size of the device.
lock_buff	Lock Buffer	int	0	1	-	O	O	Prevents the buffer to be overwritten with incoming audio.
steps	Steps Number	int	2	16	-	O	O	Sets the steps number for all the sequencers and the column and row number for the slicer grid.
swing	Swing	float	0.	87.5	1	O	O	Sets the swing amount for the main time resolution. This adds length to the first notes, shorting the second. The first note can reach these values: 50% equals the value of a dotted note, 66.6% equals the value of two triplet notes, 75% equals the value of a double dotted note, 87.5% equals the value of a triple dotted note.
time_res_kind	Time Resolution Kind	int	0	2	-	O	O	Sets the time resolution kind for both main and variation time resolutions. Normal, Triplets, Dotted.
time_res_main	Time Resolution Main	int	0	3	-	O	O	Sets the main time resolution Length. 1/4 - 1/8 - 1/16 - 1/32
time_res_var	Time Resolution Variation	int	0	3	-	O	O	Sets the variation time resolution Length. 1/4 - 1/8 - 1/16 - 1/32

OSC address (add /herse/ as prefix)	parameter name	data type	range		interp. exp.	out	in	description
			min	max				
time_var	Time Variation	float	0.	1.	1	O	O	Sets the probability to use the main or the variation time resolution. As more as the value is increased, as chances to use the variation time resolution increase.
xfade	X-Fade	int	0	20	-	O	O	Creates an interpolation between two consecutive slices (in milliseconds).
slicer	Grid Slicer	int list x16	0	15	-	O	O	Choose which slice is going to be played for each position.
steps_am_depth	AM Depth Sequencer	int list x16	0	100	-	O	O	Set an amplitude modulation depth for each step, according to its maximum level.
steps_am_freq	AM Frequency Sequencer	int list x16	0	100	-	O	O	Set an amplitude modulation frequency for each step, according to its maximum level.
steps_env_length	Envelope Lenght Sequencer	int list x16	0	100	-	O	O	Set an envelope length for each step, according to its maximum level.
steps_env_peak	Envelope Peak Sequencer	int list x16	0	100	-	O	O	Set an envelope peak for each step, according to its maximum level.
steps_env_shape	Envelope Shape Sequencer	int list x16	0	100	-	O	O	Set an envelope shape for each step, according to its maximum level.
steps_filt_freq	Filter Frequency Sequencer	int list x16	0	100	-	O	O	Set a filter cutoff frequency modulation for each step, according to its maximum level.
steps_filt_res	Filter Resonance Sequencer	int list x16	0	100	-	O	O	Set a filter resonance for each step, according to its maximum level.
steps_res_time	Resonator Decay Sequencer	int list x16	0	100	-	O	O	Set a resonator decay for each step, according to its maximum level.
steps_res_decay	Resonator Time Sequencer	int list x16	0	100	-	O	O	Set a resonator time for each step, according to its maximum level.
steps_roll_amt	Roll Amount Sequencer	int list x16	0	100	-	O	O	Set a roll amount for each step, according to its maximum level.
steps_shaper_amt	Shaper Amount Sequencer	int list x16	0	100	-	O	O	Set a shaper amount for each step, according to its maximum level.
steps_shaper_dw	Shaper Dry / Wet Sequencer	int list x16	0	100	-	O	O	Sets a maximum amount of mix between the not wave-shaped signal with the wave-shaped one, according to its maximum level.
steps_vol_amt	Volume Amount Sequencer	int list x16	0	100	-	O	O	Set a volume amount for each step, according to its maximum level.
handle/am_bypass	AM Bypass	int	0	1	-	O	O	Bypass the Amplitude Modulation.
handle/am_depth	AM Depth	float	0.	100.	1	O	O	Sets the maximum amplitude modulation depth. The result depends on the step value.
handle/exxtra/am_depth_empty	AM Depth Empty	anything	-	-	-	X	O	Sets all the steps of the AM depth sequencer to the minimum values.
handle/exxtra/am_depth_full	AM Depth Full	anything	-	-	-	X	O	Sets all the steps of the AM depth sequencer to the maximum values.
handle/exxtra/am_depth_rand	AM Depth Random	anything	-	-	-	X	O	Sets all the steps of the AM depth sequencer to random values.
handle/am_freq	AM Frequency	float	0.	10'000.	3.333333	O	O	Sets the maximum amplitude modulation frequency. The result depends on the step value.

OSC address (add /herse/ as prefix)	parameter name	data type	range		interp. exp.	out	in	description
			min	max				
handle/extra/am_freq_empty	AM Frequency Empty	anything	-	-	-	X	O	Sets all the steps of the AM frequency sequencer to the minimum values.
handle/extra/am_freq_full	AM Frequency Full	anything	-	-	-	X	O	Sets all the steps of the AM frequency sequencer to the maximum values.
handle/extra/am_freq_rand	AM Frequency Random	anything	-	-	-	X	O	Sets all the steps of the AM frequency sequencer to random values.
handle/fx_selector	Effect Selector	int	0	6	-	O	O	Display the sequencer of the selected effect.
handle/env_bypass	Envelope Bypass	int	0	1	-	O	O	Bypass the Envelope.
handle/env_curve	Envelope Curve	float	1.	10.	1	O	O	Morph the envelope curve between linear and exp/log.
handle/env_length	Envelope Length	float	0.	100.	1	O	O	Sets the maximum length of the envelope. The result depends on the step value.
handle/extra/env_length_empty	Envelope Length Empty	anything	-	-	-	X	O	Sets all the steps of the envelope length sequencer to the minimum values.
handle/extra/env_length_full	Envelope Length Full	anything	-	-	-	X	O	Sets all the steps of the envelope length sequencer to the maximum values.
handle/extra/env_length_rand	Envelope Length Random	anything	-	-	-	X	O	Sets all the steps of the envelope length sequencer to random values.
handle/env_peak	Envelope Peak	float	0.	100.	1	O	O	Sets the maximum Peak direction of the envelope. The result depends on the step value.
handle/extra/env_peak_empty	Envelope Peak Empty	anything	-	-	-	X	O	Sets all the steps of the envelope peak sequencer to the minimum values.
handle/extra/env_peak_full	Envelope Peak Full	anything	-	-	-	X	O	Sets all the steps of the envelope peak sequencer to the maximum values.
handle/extra/env_peak_rand	Envelope Peak Random	anything	-	-	-	X	O	Sets all the steps of the envelope peak sequencer to random values.
handle/env_shape	Envelope Shape	float	0.	100.	1	O	O	Sets the maximum Shape of the envelope. The result depends on the step value.
handle/extra/env_shape_empty	Envelope Shape Empty	anything	-	-	-	X	O	Sets all the steps of the envelope shape sequencer to the minimum values.
handle/extra/env_shape_full	Envelope Shape Full	anything	-	-	-	X	O	Sets all the steps of the envelope shape sequencer to the maximum values.
handle/extra/env_shape_rand	Envelope Shape Random	anything	-	-	-	X	O	Sets all the steps of the envelope shape sequencer to random values.
handle/filter_bypass	Filter Bypass	int	0	1	-	O	O	Bypass the Filter.
handle/filter_freq	Filter Frequency	float	50.	20'000.	3.333333	O	O	Sets the maximum cutoff frequency for the low pass filter. The result depends on the step value.
handle/extra/filter_freq_empty	Filter Frequency Empty	anything	-	-	-	X	O	Sets all the steps of the filter frequency sequencer to the minimum values.
handle/extra/filter_freq_full	Filter Frequency Full	anything	-	-	-	X	O	Sets all the steps of the filter frequency sequencer to the maximum values.
handle/extra/filter_freq_rand	Filter Frequency Random	anything	-	-	-	X	O	Sets all the steps of the filter frequency sequencer to random values.

OSC address (add /herse/ as prefix)	parameter name	data type	range		interp. exp.	out in		description
			min	max				
handle/filter_res	Filter Resonance	float	0.1	10.	1	O	O	Sets the maximum resonance for the low pass filter. The result depends on the step value.
handle/extra/filter_res_empty	Filter Resonance Empty	anything	-	-	-	X	O	Sets all the steps of the filter resonance sequencer to the minimum values.
handle/extra/filter_res_full	Filter Resonance Full	anything	-	-	-	X	O	Sets all the steps of the filter resonance sequencer to the maximum values.
handle/extra/filter_res_rand	Filter Resonance Random	anything	-	-	-	X	O	Sets all the steps of the filter resonance sequencer to random values.
handle/rsn_bypass	Resonator Bypass	int	0	1	-	O	O	Bypass the Resonator effect.
handle/rsn_decay	Resonator Decay	float	0.	100.	1	O	O	Sets the maximum decay applied to the resonated signal. The result depends on the step value.
handle/extra/rsn_decay_empty	Resonator Decay Empty	anything	-	-	-	X	O	Sets all the steps of the resonator decay sequencer to the minimum values.
handle/extra/rsn_decay_full	Resonator Decay Full	anything	-	-	-	X	O	Sets all the steps of the resonator decay sequencer to the maximum values.
handle/extra/rsn_decay_rand	Resonator Decay Random	anything	-	-	-	X	O	Sets all the steps of the resonator decay sequencer to random values.
handle/rsn_time	Resonator Time					O	O	Sets the maximum time for the resonator. The result depends on the step value.
handle/extra/rsn_time_empty	Resonator Time Empty	anything	-	-	-	X	O	Sets all the steps of the resonator time sequencer to the minimum values.
handle/extra/rsn_time_full	Resonator Time Full	anything	-	-	-	X	O	Sets all the steps of the resonator time sequencer to the maximum values.
handle/extra/rsn_time_rand	Resonator Time Random	anything	-	-	-	X	O	Sets all the steps of the resonator time sequencer to random values.
handle/roll_amt	Roll Amount	float	0.	100.	1	O	O	Sets the maximum amount of roll effect. The resulting effect depends on the step value.
handle/extra/roll_amt_empty	Roll Amount Empty	anything	-	-	-	X	O	Sets all the steps of the roll sequencer to the minimum values.
handle/extra/roll_amt_full	Roll Amount Full	anything	-	-	-	X	O	Sets all the steps of the roll sequencer to the maximum values.
handle/extra/roll_amt_rand	Roll Amount Random	anything	-	-	-	X	O	Sets all the steps of the roll sequencer to random values.
handle/roll_bypass	Roll Bypass	int	0	1	-	O	O	Bypass the Roll effect.
handle/roll_curve	Roll Curve	float	1.	5.	2.22	O	O	Morph between linear and exp/log interpolation for roll amount.
handle/shap_amt	Shaper Amount	float	0.	100.	1	O	O	Sets the maximum amount of shaper effect. The resulting effect depends on the step value.
handle/extra/shap_amt_empty	Shaper Amount Empty	anything	-	-	-	X	O	Sets all the steps of the shaper amount sequencer to the minimum values.
handle/extra/shap_amt_full	Shaper Amount Full	anything	-	-	-	X	O	Sets all the steps of the shaper amount sequencer to the maximum values.

OSC address (add /herse/ as prefix)	parameter name	data type	range		interp. exp.	out in		description
			min	max				
handle/extra/shap_amt_rand	Shaper Amount Random	anything	-	-	-	X	O	Sets all the steps of the shaper amount sequencer to random values.
handle/shap_bypass	Shaper Bypass	int	0	1	-	O	O	Bypass the Shaper effect.
handle/shap_dw	Shaper Dry / Wet	float	0.	100.	1	O	O	Sets the maximum amount of mix between the not wave-shaped signal with the wave-shaped one. The resulting effect depends on the step value.
handle/extra/shap_dw_empty	Shaper Dry / Wet Empty	anything	-	-	-	X	O	Sets all the steps of the shaper dry / wet sequencer to the minimum values.
handle/extra/shap_dw_full	Shaper Dry / Wet Full	anything	-	-	-	X	O	Sets all the steps of the shaper dry / wet sequencer to the maximum values.
handle/extra/shap_dw_rand	Shaper Dry / Wet Random	anything	-	-	-	X	O	Sets all the steps of the shaper dry / wet sequencer to random values.
handle/vol_amt	Volume Amount	float	0.	100.	1	O	O	Sets the maximum volume. The result depends on the step value.
handle/extra/vol_amt_empty	Volume Amount Empty	anything	-	-	-	X	O	Sets all the steps of the volume amount sequencer to the minimum values.
handle/extra/vol_amt_full	Volume Amount Full	anything	-	-	-	X	O	Sets all the steps of the volume amount sequencer to the maximum values.
handle/extra/vol_amt_rand	Volume Amount Random	anything	-	-	-	X	O	Sets all the steps of the volume amount sequencer to random values.
handle/vol_bypass	Volume Bypass	int	0	1	-	O	O	Bypass the Volume modulation.
last/delete1	Delete 1	anything	-	-	-	X	O	Delete snapshot 1.
last/delete2	Delete 2	anything	-	-	-	X	O	Delete snapshot 2.
last/delete3	Delete 3	anything	-	-	-	X	O	Delete snapshot 3.
last/delete4	Delete 4	anything	-	-	-	X	O	Delete snapshot 4.
last/drywet	Dry / Wet	float	0.	100.	1	O	O	Balance incoming audio signal with the processed one.
last/lock_morph	Lock Morph	int	0	1	-	O	O	Disable Delete and Store buttons avoiding any accidental change of the snapshots.
last/morph	Step Sequencers Morph	float	1.	4.	1	O	O	Morph between 4 step sequencer's snapshot.
last/seq_drunk	Sequencers Drunkwalk	int	0	1	-	O	O	Reproduces all sequencers steps randomly, keeping them linked between each step sequencer.
last/seq_full	Sequencers Empty	anything	-	-	-	X	O	Sets all the steps of all the sequencers to the minimum values.
last/seq_freeze	Sequencers Freeze	int	0	1	-	O	O	Freezes all the sequencers on the current slice.
last/seq_full	Sequencers Full	anything	-	-	-	X	O	Sets all the steps of all the sequencers to the maximum values.

OSC address (add /herse/ as prefix)	parameter name	data type	range		interp. exp.	out	in	description
			min	max				
last/seq_rand	Sequencers Random	anything	-	-	-	X	O	Sets all the steps of all the sequencers to random values.
last/store1	Store 1	anything	-	-	-	X	O	Store snapshot 1.
last/store2	Store 2	anything	-	-	-	X	O	Store snapshot 2.
last/store3	Store 3	anything	-	-	-	X	O	Store snapshot 3.
last/store4	Store 4	anything	-	-	-	X	O	Store snapshot 4.

8. PUSH IMPLEMENTATION

HERSE MANUAL - ENG

1st page	1	2	3	4	5	6	7	8
	Steps N	Main Res	Var Res	Res Kind	Time Var	Swing	Morph	Dry Wet
2nd page	9	10	11	12	13	14	15	16
	Length	Lock Buf	Grid Def	Grid Rand			Grid Freeze	Grid Drunk
3rd page	17	18	19	20	21	22	23	24
	Roll Amt	Roll Curve	Shap Amt	Shap D-W	Env Length	Env Shape	Env Peak	Env Curve
4th page	25	26	27	28	29	30	31	32
	Flt Freq	Flt Res	AM Freq	AM Depth	Rsn Time	Rsn Decay	Vol Amt	X-Fade
5th page	33	34	35	36	37	38	39	40
	FX Select	Roll Byp	Shap Byp	Env Byp	Flt Byp	AM Byp	Rsn Byp	Vol Byp
6th page	41	42	43	44	45	46	47	48
	Seq Full	Seq Empty	Seq Rand		Hide Seq		Seq Freeze	Seq Drunk
7th page	49	50	51	52	53	54	55	56
	Roll Amt Full	Roll Amt Empty	Roll Amt Rand			Vol Amt Full	Vol Amt Empty	Vol Amt Rand
8th page	57	58	59	60	61	62	63	64
	Shap Amt Full	Shap Amt Empty	Shap Amt Rand			Shap D-W Full	Shap D-W Empty	Shap D-W Rand
9th page	65	66	67	68	69	70	71	72
	Env Length Full	Env Length Empty	Env Length Rand			Env Peak Full	Env Peak Empty	Env Peak Rand
10th page	73	74	75	76	77	78	79	80
	Env Shape Full	Env Shape Empty	Env Shape Rand					
11th page	81	82	83	84	85	86	87	88

11th page	Flt Freq Full	Flt Freq Empty	Flt Freq Rand			Flt Res Full	Flt Res Empty	Flt Res Rand
	89	90	91	92	93	94	95	96
12th page	AM Depth Full	AM Depth Empty	AM Depth Rand			AM Freq Full	AM Freq Empty	AM Freq Rand
13th page	97	98	99	100	101	102	103	104
	Rsn Time Full	Rsn Time Empty	Rsn Time Rand			Rsn Decay Full	Rsn Decay Empty	Rsn Decay Rand
14th page	105	106	107	108	109	110	111	112
	Empty Buf		Ext Clock BPM		Grid Up	Grid Down	Grid Left	Grid Right