K-DEVICES

COLORIZE
YOUR
SOUND

AUTOBEAT

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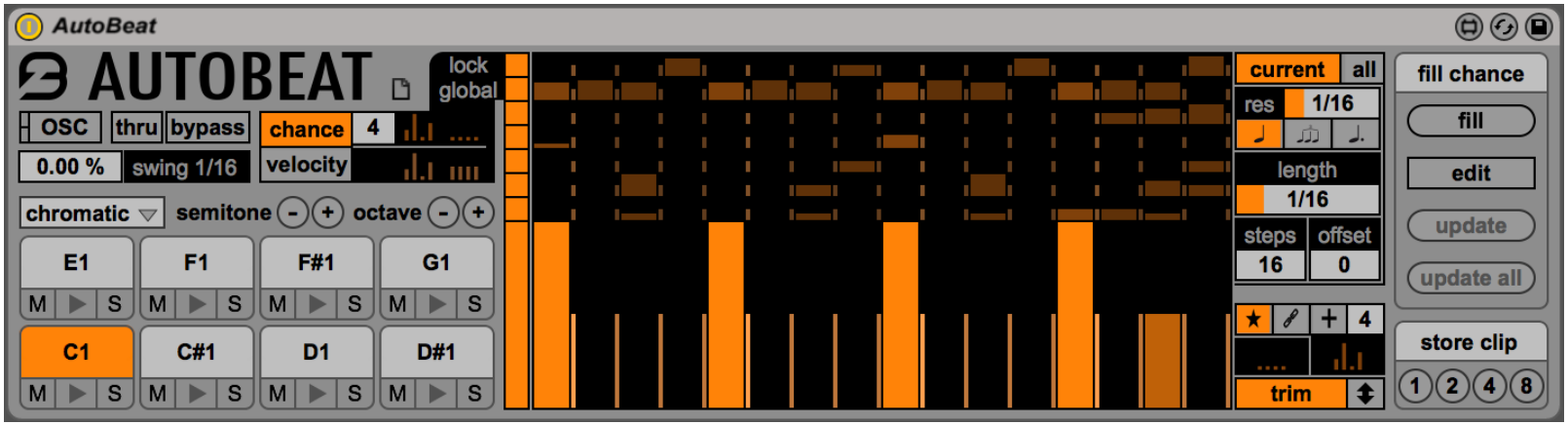
INDEX

1. THIS IS AUTOBEAT

Thank you for choosing AutoBeat!
AutoBeat is a Max For Live MIDI device designed to easily create rhythmic beats of MIDI notes with variations, playing based on probabilities you will define.



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 entirely.
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): AutoBeat is a Max For Live device and works both on Mac OS® X and Windows®.
AutoBeat is currently available as single product.
Thanks to the Max For Live total integration, each AutoBeat 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 AutoBeat future updates.

2. INSTALLATION

To install the device double click on the .alp file contained in the downloaded package. Device, presets, Instrument Racks, Drum Racks and Ableton Live Lessons will be automatically installed.
AutoBeat 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, the AutoBeat pack contains:

- 15 presets;
- 40 Instrument Racks;
- 9 Drum Racks.

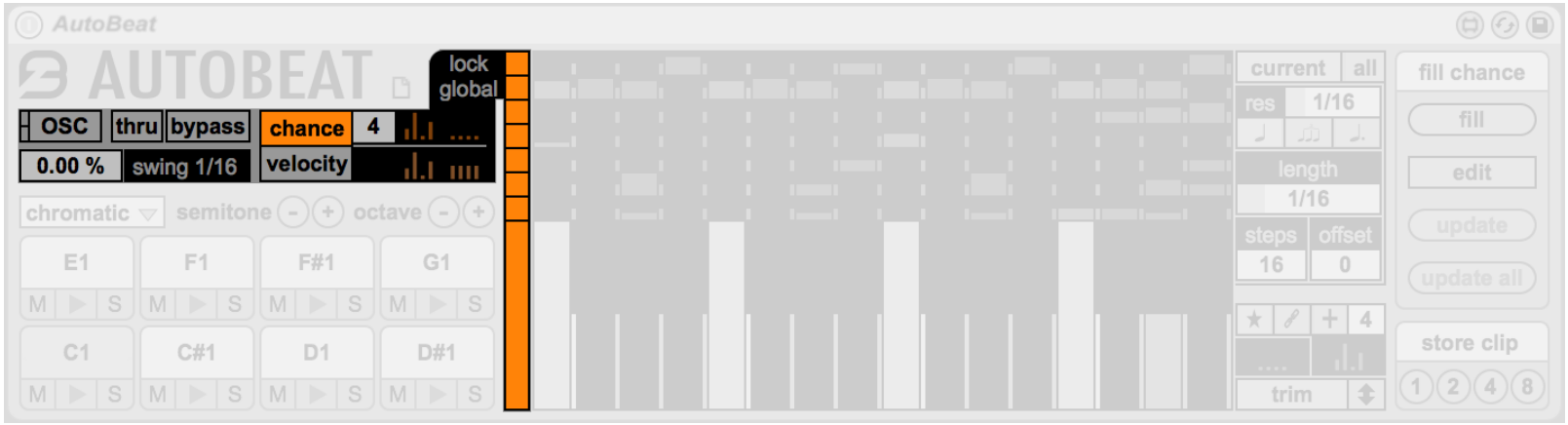
4. INTERFACE OVERVIEW

AutoBeat button shows the software version.
The small newfile icon, similar to a small paper sheet, sets all device parameter at their default value.
The interface is composed by five main areas:

- Global Functions Area;
- Pad Area;
- Edit Area;
- Fill Area;
- Store Area.

1. GLOBAL FUNCTIONS AREA

Parameters that affect all 8 voices are placed in the Global Functions Area.



Swing slider sets the swing amount applied to the pattern. Swing is based on the lower resolution in use by the 8 voices: its resolution is displayed as a description beside the swing parameter name. To modify this value just change the lower resolution in the 8 voices (see Edit Area Macro). Swing works and consider the normal note ♩ resolution only , excluding triplets ♫ and dotted notes ♩. .

Chance/velocity switch defines on which mode you want to act: it allows you to modify current steps. Depending on the selected mode, its steps increase width to allow editing and to improve visual feedback.

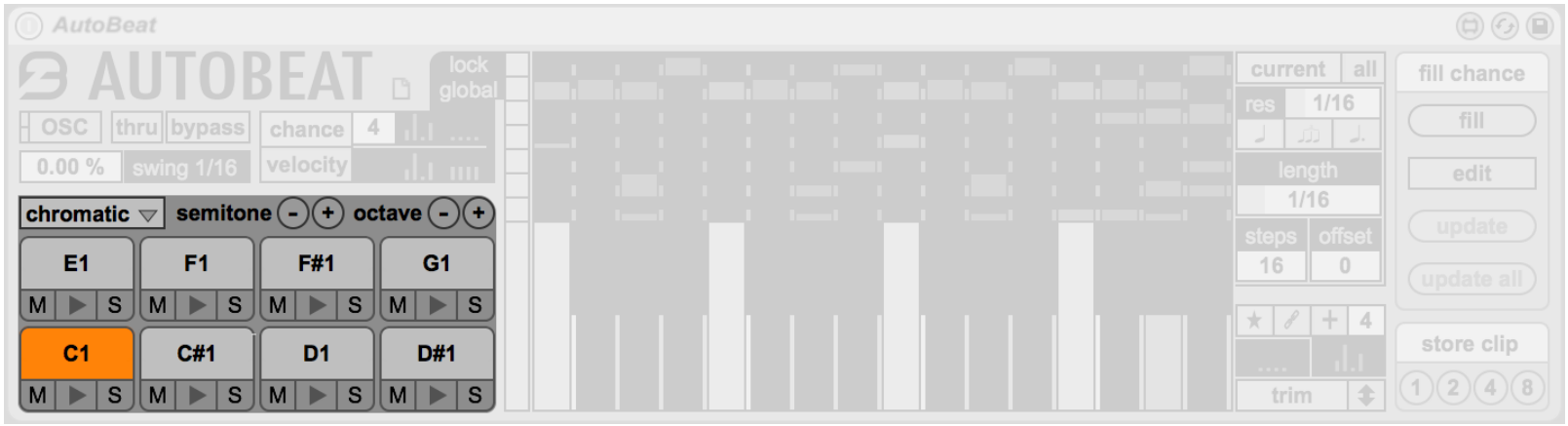
Random icon buttons assign random values to all steps. **Reset** icon buttons .... set all chance steps to 0, and all velocity steps to 64. There are exclusive random buttons for chance and velocity steps.

The reset and random buttons work on all the step sequencers, except the one that have the **allow global edit** toggle deactivated (see the column of toggles in the right of this area).

Thru and bypass work as follow:

- thru: if active, allows incoming MIDI messages to pass thru the device;
- bypass: AutoBeat does not send generated MIDI notes.

2. PAD AREA



In this area you can manage MIDI notes created by AutoBeat.

To change the notes in use, just click on the **note pad** then click and drag on the MIDI note name. You can even use the **quick note setup** menu, which sets all the note pads with default setups scales, based on the root note selected (the note pad in the bottom left).

Octave and **semitone** + and - are useful to transpose all the eight note pad of one octave or of a semitone with just a click.

Each note pad is provided with **mute** and **solo** buttons: activating mute for one or more voices, you can block the output of these MIDI notes. Solo is exclusive by default. To solo more than one voice at a time just hold down cmd key (OsX) or ctrl (Win).

Between mute and solo, there is the **play** button: this is helpful as preview (create a MIDI note just clicking on it) or as a visual feedback: each time a MIDI note on is generated the button lights e and it turns off when the relative MIDI note off message is sent.

1. INTEGRATION WITH DRUM RACK

AutoBeat works great with any live instrument or third party plugin: it can work with synthesizers or sampler but it has been designed for beat oriented instruments. That's why we added some special features if used with Ableton Live Drum Rack, in order to improve your experience with it!

Just place a Drum Rack in the same track with AutoBeat and:

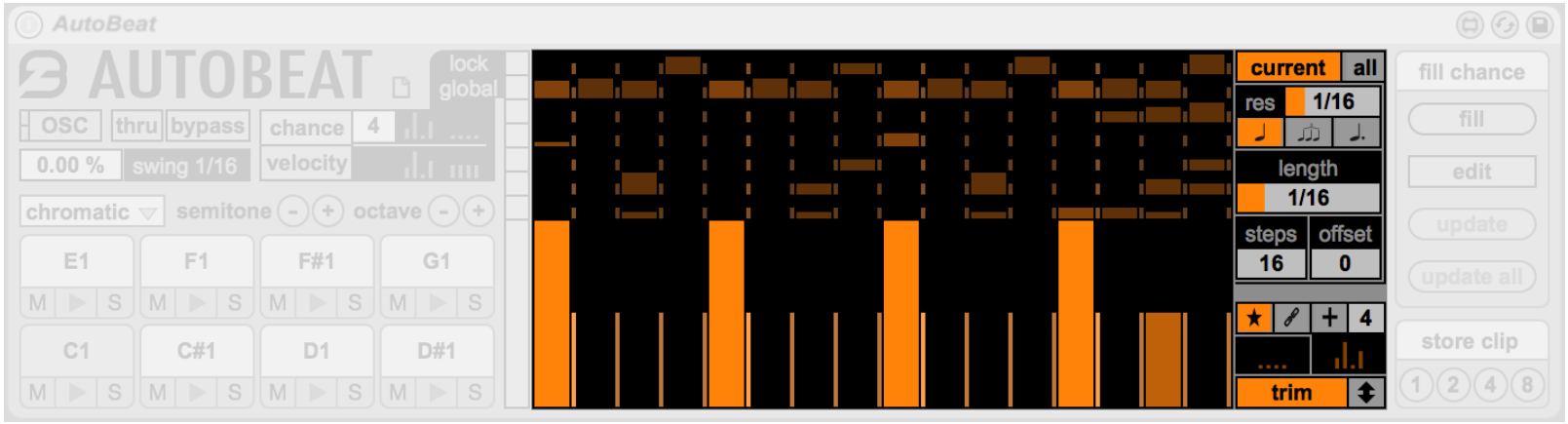
- note pads will be updated displaying the name of the sample used in the relative MIDI note;

- even Drum Rack can select note pads in AutoBeat; this is really helpful since when editing a drum pad in the drum rack, AutoBeat will updated displaying all the settings for that drum pad.

If a Drum Rack is placed in an Instrument Rack, we suggest to move AutoBeat in it.

3. EDIT AREA

In this area you will find all the parameters needed to modify each single voice (chance or velocity step sequencers, and several functions). It can be split in two sub parts: macro hosts all the parameters on the right, and steps, with its step sequencers on the left.

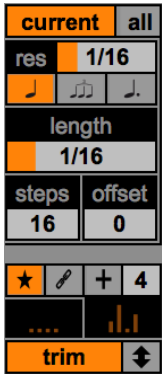


To select a voice (and to edit it) just click on a note pad or on a step sequencer (inactive step sequencers are darker than the active one, in order to improve the visual feedback).

1. MACRO

Macro parameters refer to the selected voice and acts on it only when the mode **current** is selected. Otherwise, if **all** is selected, it acts on all the 8 voices.

Two parameters are placed in the resolution panel: these define the time resolution. You can choose it using the slider (1/32 - 1/1), and then define its mode via the triple switch (normal notes , triplets , dotted).



Length defines the length of the MIDI notes generated: this parameter is really helpful if AutoBeat is used with non percussive instruments (bass lines, arpeggiators and so on).

Clear e **random** buttons, acts on the steps of the mode defined in the chance/velocity switch only. Clear sets to a 0 all the steps.

Random (in chance mode) has different modes, defined by the three way switch in the bottom:

- **new** randomizes the steps number set in the numbox and sets the other to 0;
- **chain** observes the steps with value different from 0 and randomizes their value;
- **add** adds to the current configurations random steps (according to the steps number set in the numbox), replacing only the steps with value equal to 0 (it is obviously irrelevant if all the steps have value different from 0).

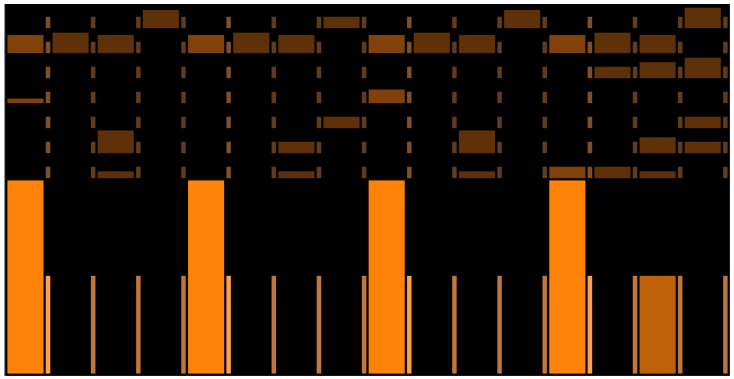
Random (in velocity mode) uses two values to define the randomized **range**. The left one is the minimum, while the right one is the maximum.

Steps and **offset** define which and how many steps are active (playing).

Trim/continued sets the mode for the global step modification, dragging up or down the up/down button:

- trim: each time a step reaches the minimum or maximum edge, AutoBeat keeps their original difference value. In this way, you can bring back the configuration without “rectifying” the steps values;
- continued: each time a step exceed the minimum or maximum edge, it takes the opposite value, continuing increasing or decreasing its value.

2. STEPS

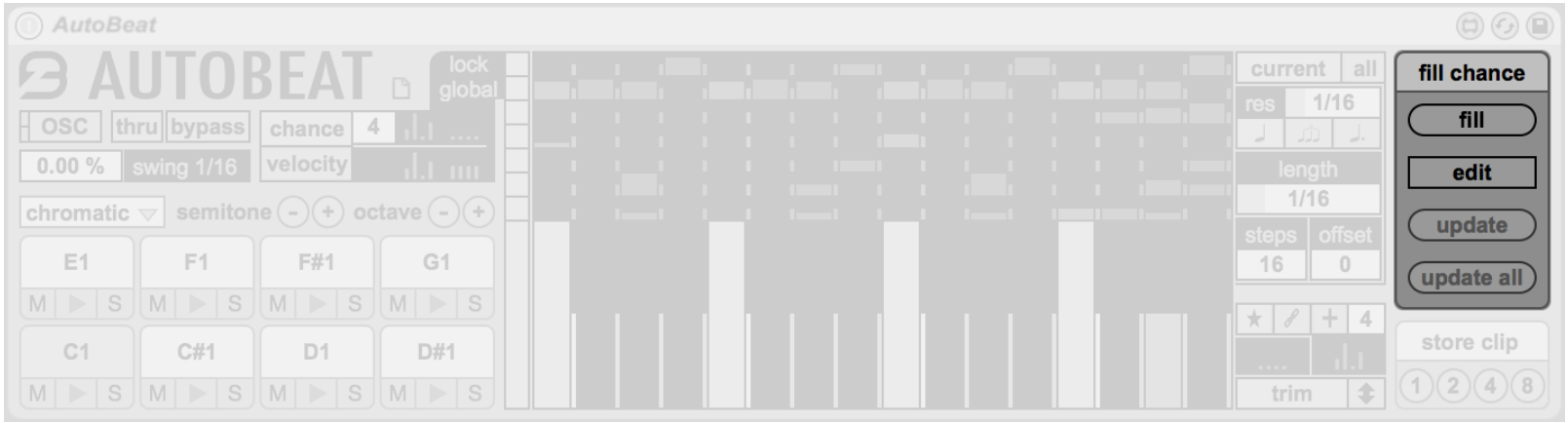


Step sequencers allow to edit each step of the selected voice using the mouse. Modifications acts on the steps of the selected mode (chance/velocity) only; the steps of the selected mode are highlighted with a bigger width, but you always can see in background values of the inactive mode. Velocity steps use a different color than chance steps, and are always placed at their right.

Chance steps defines the amount of chance for the MIDI note messages to be triggered: from 0% (so no chance to trigger the note on that step) until 100% (this step will always trig a MIDI note, with velocity depending on the value of that step in

velocity mode).
Velocity steps defines the velocity of the possible MIDI note. It is important to consider that steps with velocity equal to 0% and chance 100% will never play, because they would create a MIDI note with velocity equal to 0, or a note off.

4. FILL AREA



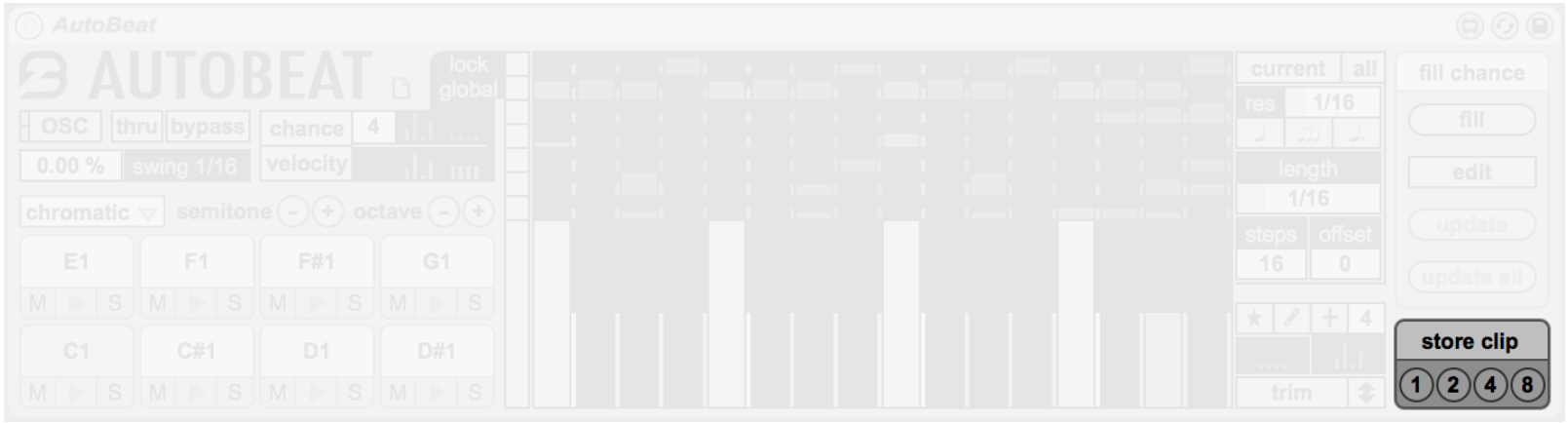
This section is designed to allow creating a variation for chance parameters, recallable with a click. It can be used to create fill to change the main pattern and switch back from it on the fly.
Fill button activates the variation.
Activating **edit**, AutoBeat enters in edit mode: chance steps change color, becoming red, and the playhead disappears, to indicate that AutoBeat is not currently playing the steps you are looking at. We designed the edit mode to allow editing while playing, with no note interruptions. The chance configuration edited in this mode is the one that will be played using fill.
Update buttons are useful to create a fill based on the main pattern:

- **update** copy all the steps of the main pattern in the fill pattern (only on the selected voice);
- **update all** does the same for all the 8 voices.

Clicking update all, you can obtain the same pattern as the main chance: then you can edit it only where it needs attention.

5. STORE AREA

Store Area transforms AutoBeat in a full featured MIDI composition assistant.



As soon as you created a pattern, you can store it clicking on the store buttons to create MIDI clip of 1, 2, 4, or 8 bars. These clips are filled with MIDI notes depending on the AutoBeat setup you used, on probability, velocity, mute status and so on...
Clips are created in the first empty slot in the used track.

5. DRUM RACKS

AutoBeat includes 40 Instrument Rack presets realized with AutoBeat and 9 exclusive Drum Racks.

Concretism	Concretism is a Drum Rack designed for AutoBeat by K-Devices and Federico Ascari. All sounds have been created using metal pieces, woods and objects you can find in a repair shop, including welding tools.
nz_tx	nz_tx is a Drum Rack designed for AutoBeat by Franz Rosati, sound/visual artist, electronic music producer and composer. All sounds have been created on a Yamaha Tx81z FM synth, then edited in Ableton Live.
sydrums	Sydrums is a Drum Rack specially designed for AutoBeat by Giona Vinti, aka Hyena, electronic music producer and Ableton Live Certified Trainer. All sounds were meticulously crafted on a vintage FM synthesizer, the great Yamaha SY99, then recorded in 24 bit format with 4 different layers of velocity to recreate the subtle variations generated by velocity in an FM algorithm and give more dynamic fun. The drum rack was then enriched with Ableton Audio Effects, carefully mapped to macros to twist and mangle your drum patterns in subtle or extreme ways.
Vinyl & Chippy	Vinyl and Chippy are two Drum Racks designed for AutoBeat by AfroDJMac, songwriter, producer, Ableton Certified Trainer. The racks offer control over each individual sound, as well as built in audio effects. All sounds are used with permission from “99 Drum Samples” by Tomislav Zlatic from the site http://99sounds.org .
Cut Kit & Dub Kit	Cut Kit and Dub Kit are two Drum Racks designed for Autobeat by producer, remixer and Certified Ableton Trainer Noah Pred. The analog source material was generated with an Elektron Analog RYTM, recorded at 24 bits and digitally processed for maximum impact. Experiment with the macros for futuristic electro sounds and extra dub adventures.
My Shiny Green Car & Dank Veg	My Shiny Green Car and Dank Veg are two Drum Racks designed for AutoBeat by Luca Mucci, aka Piezo, electronic music producer, dj and Ableton Certified Trainer. Sounds have been created with a DSI Tempest, a Modulus 002, some field recordings and other processed samples: Drum Racks also include some Ableton audio effects. Macros play a fundamental role on the presets: map them to a MIDI controller and have fun.

6. OPEN SOUND CONTROL IMPLEMENTATION

OSC address (add /herse/ as prefix)	data type	range		interp. exp.			description
		min	max		out	in	
bypass	int	0	1	-	O	O	
chance_vel	int	0	1	-	O	O	
clear_chance	int	0	1	-	X	O	works on transition from 0 to 1
default_vel	int	0	1	-	X	O	works on transition from 0 to 1
fill/fill_trigger	int	0	1	-	O	O	
fill/fill_edit	int	0	1	-	O	O	
fill/update	int	0	1	-	O	O	works on transition from 0 to 1
fill/update_all	int	0	1	-	O	O	works on transition from 0 to 1
midi_thru	int	0	1	-	O	O	
notes/note1/mute1	int	0	1	-	O	O	Mute this drum pad.
notes/note1/notepad1	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note1/solo1	int	0	1	-	O	O	Solo this drum pad.
notes/note2/mute2	int	0	1	-	O	O	Mute this drum pad.
notes/note2/notepad2	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note2/solo2	int	0	1	-	O	O	Solo this drum pad.
notes/note3/mute3	int	0	1	-	O	O	Mute this drum pad.
notes/note3/notepad3	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note3/solo3	int	0	1	-	O	O	Solo this drum pad.
notes/note4/mute4	int	0	1	-	O	O	Mute this drum pad.
notes/note4/notepad4	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note4/solo4	int	0	1	-	O	O	Solo this drum pad.
notes/note5/mute5	int	0	1	-	O	O	Mute this drum pad.
notes/note5/notepad5	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note5/solo5	int	0	1	-	O	O	Solo this drum pad.
notes/note6/mute6	int	0	1	-	O	O	Mute this drum pad.

OSC address (add /herse/ as prefix)	data type	range		interp. exp.			description
		min	max		out	in	
notes/note6/notepad6	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note6/solo6	int	0	1	-	O	O	Solo this drum pad.
notes/note7/mute7	int	0	1	-	O	O	Mute this drum pad.
notes/note7/notepad7	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note7/solo7	int	0	1	-	O	O	Solo this drum pad.
notes/note8/mute8	int	0	1	-	O	O	Mute this drum pad.
notes/note8/notepad8	int	0	17	-	O	O	Sets the note used by this drum pad.
notes/note8/solo8	int	0	1	-	O	O	Solo this drum pad.
notes/oct_min	int	0	1	-	X	O	works on transition from 0 to 1
notes/oct_plus	int	0	1	-	X	O	works on transition from 0 to 1
notes/semitone_min	int	0	1	-	X	O	works on transition from 0 to 1
notes/semitone_plus	int	0	1	-	X	O	works on transition from 0 to 1
random_chance	int	0	1	-	X	O	works on transition from 0 to 1
random_n	int	1	16	-	O	O	
random_vel	int	0	1	-	X	O	works on transition from 0 to 1
slide1/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.
slide1/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide1/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide1/offset	int	0	15	-	O	O	
slide1/steps	int	1	16	-	O	O	
slide1/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide1/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide2/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.

OSC address (add /herse/ as prefix)	data type	range		interp. exp.	out	in	description
		min	max				
slide2/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide2/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide2/offset	int	0	15	-	O	O	
slide2/steps	int	1	16	-	O	O	
slide2/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide2/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide3/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.
slide3/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide3/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide3/offset	int	0	15	-	O	O	
slide3/steps	int	1	16	-	O	O	
slide3/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide3/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide4/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.
slide4/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide4/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide4/offset	int	0	15	-	O	O	
slide4/steps	int	1	16	-	O	O	
slide4/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide4/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide5/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.

OSC address (add /herse/ as prefix)	data type	range		interp. exp.			description
		min	max		out	in	
slide5/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide5/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide5/offset	int	0	15	-	O	O	
slide5/steps	int	1	16	-	O	O	
slide5/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide5/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide6/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.
slide6/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide6/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide6/offset	int	0	15	-	O	O	
slide6/steps	int	1	16	-	O	O	
slide6/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide6/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide7/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.
slide7/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide7/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide7/offset	int	0	15	-	O	O	
slide7/steps	int	1	16	-	O	O	
slide7/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide7/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
slide8/chance	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step.

OSC address (add /herse/ as prefix)	data type	range		interp. exp.	out	in	description
		min	max				
slide8/fill	float list (16x)	0.	1.	1	O	O	Modify these steps to modify chance to trigger a note on the step in fill mode.
slide8/length	int	0	5	-	O	O	1/32 1/16 1/8 1/4 1/2 1
slide8/offset	int	0	15	-	O	O	
slide8/steps	int	1	16	-	O	O	
slide8/time_res	int	0	17	-	O	O	32nt 32n 16nt 32nd 16n 8nt 16nd 8n 4nt 8nd 4n 2nt 4nd 2n 1nt 2nd 1n 1nd
slide8/velocity	int list (16x)	0	127	-	O	O	Modify these steps to modify velocity used for a triggered note on the step.
swing	float	0.	100.	1	O	O	
store	int	1	8	-	X	O	Works only with values 1, 2, 4 and 8.

7. PUSH IMPLEMENTATION

	1	2	3	4	5	6	7	8
1st page	swing		clear		random	random n		chance/vel
	9	10	11	12	13	14	15	16
2nd page	oct +	oct -		apply to all	fill	fill edit	update	update all
	17	18	19	20	21	22	23	24
3rd page	midi thru		bypass		store 1 bar	store 2 bars	store 4 bars	store 8 bars
	25	26	27	28	29	30	31	32
4th page	note pad 1	note pad 2	note pad 3	note pad 4	note pad 5	note pad 6	note pad 7	note pad 8
	33	34	35	36	37	38	39	40
5th page	solo 1	solo 2	solo 3	solo 4	solo 5	solo 6	solo 7	solo 8
	41	42	43	44	45	46	47	48
6th page	mute 1	mute 2	mute 3	mute 4	mute 5	mute 6	mute 7	mute 8
	49	50	51	52	53	54	55	56
7th page	allow global edit 1	allow global edit 2	allow global edit 3	allow global edit 4	allow global edit 5	allow global edit 6	allow global edit 7	allow global edit 8