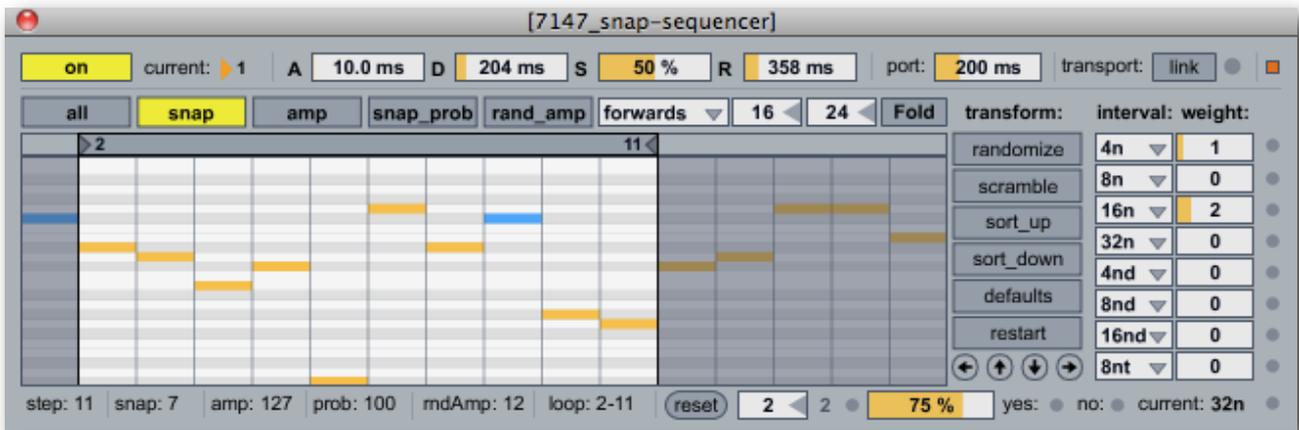


**Pulsaret.m4l v. 2**  
 {Ableton Live Integration Granular Synthesis}  
[www.densitygs.com](http://www.densitygs.com)  
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[Pulsaret.m4l](#) is a new interactive real-time tool for asynchronous/synchronous prototypes granular synthesis. [Pulsaret.m4l](#) implements a wide range of time-domain varieties of granular synthesis: glisson, grainlet, trainlet pulsar etc... Sound disintegration, pulverizer, sampled envelope “convolution”, dynamic draw envelope/ shape, interpolation-transitions and Hyper Vectorial pads they simplify the creation of incredible sound objects. Matrix & LFO provide a powerful way to connect one parameter with a dependent parameter/s, implementing all grainlets kind.



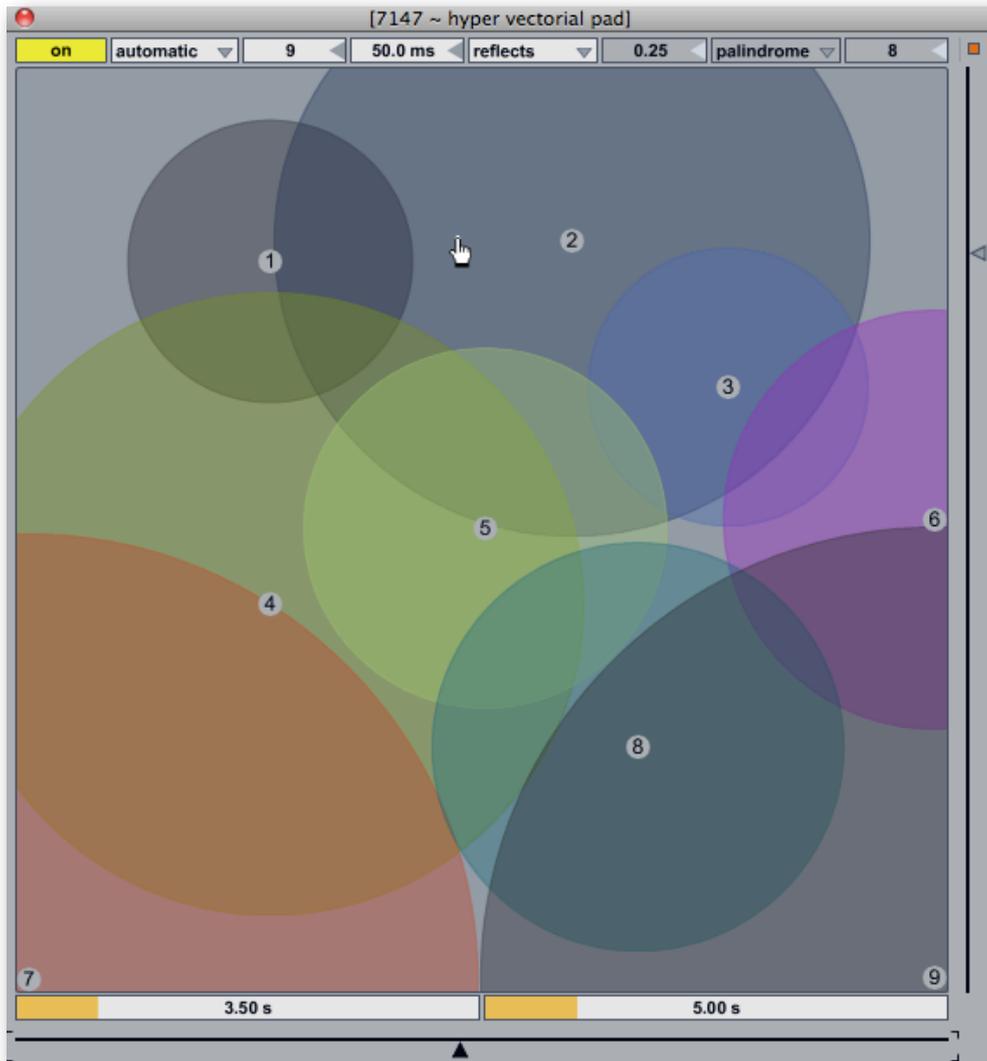
**Snapshots sequencer**



**ape.Filter Equalizer**



## Hyper Vectorial Pad (2D nodes)



ver. 1.0.0

- instrument Ableton Live devices integration
- dynamic windowing pad: crop, normalize draw, grid quantize, zero-crossing, bpm, phase and samples
- envelope/windowing manage up to 16 pre-generated shape (prototypes)
- envelope/windowing loading and manage six sound-files (aiff,wav, mp3)
- instrument save sound files loaded in device preset
- snapshots (presets) memory: up to 24
- fast buttons snapshots store/recall
- clients manage: include/exclude widgets from transitions
- micro-pad interpolating between four snapshots
- HV\_pad (i.e. hyper vectorial pad), 9 snapshots pad (4 pad near), and auto-explorer (spiral, dunk, reflects) engine
- snapshots sequencer rhythms improviser unit
- snapshots list, consecutive rename
- Ableton Tempo synchronize
- triggers shorts key,
- fully managing save/load/hot-swap as a normal Ableton Device
- panning rotation: manual, cycle, random
- cascaded series of biquad filters
- matrix parameter linkage, rescale and LFO modulation range in Grainlet Synthesis
- pulsaret length/cps and vice versa dependency

- windowing envelope (attack/decay) deforms parameters

ver. 1.0.2

- save/reload correctly the windowing shape
- reseal, now does not clear all snapshots

ver. 2.0.6 (april 2011)

- polyphonic granulation, now you can play Pulsaret.m4l from master keyboard polyphonically
- polyphonic keyboard triggers
- keyboard octave transposition
- ADSR (Attack Decay Sustain Release) note envelope
- add limiter amplitude signal
- transport link bug fix when Hot-Swap device
- HV\_pad save last X Y position in device
- Snap\_sequencer save last step count in device
- new OSC I/O support
- new ape.Filter independent device
- FILTER now is an independent device
- FILTER improved and refined
- FILTER enabled for transitions
- new micropad 2D-nodes
- Snap\_sequencer save last step count in device
- new **OSC** I/O support
- transport link bug fix when Hot-Swap device
- HV\_pad save last X Y position in device
- new GUI look
- new dialog-box windows, does not stop audio
- new tool bar quick functions access
- new HV\_pad 2D nodes parameters interpolation
- add HV\_pad jitter exploration
- add HV\_pad in "reflects", "jitter" and "drunk" now you can interact with the pad
- HV\_pad on/off monitor bar in main HV\_Pad window
- new Parameters rescale, multiply/divide (/4 /2 x2 x3 x4)
- panning now update correctly value when you select manual
- panning removed auto update knob when automatic or random
- snap-seq add global transport enable/disable trigger
- FILTER add filters types select
- FILTER add cutoff, gain and Q/S fine controller
- FILTER dry/wet knob
- FILTER dynamic filter allocation, until 24
- FILTER auto generate filter bands: Harmonic, Geometric, Scalar and Fibonacci
- FILTER frequency zoom in/out
- New detailed user manual online
- SNAP-SEQ step jump bug fixed
- SNAP-SEQ add portamento transition
- SNAP-SEQ some gui adjustments
- add windowing multi files samples support (until 6)
- add additive multislidiers (csound gen10 like)
- additive mutisliders transitions, save presets in the device
- snapshots clear when init device, bug fixed
- windowing "draw defaults all", now reset shape correctly
- windowing "draw", refined gui

- save/reload correctly the windowing shape
- reseall, now does not clear all snapshots
- some bugs fixed

==== Requirements ====

IMPORTANT: PulsaretM4L requires Live 8.1 (better 8.2.2 or higher) and Max For Live. Details about Max For Live can be found at [Ableton.com](http://Ableton.com). DensityM4L plugins will only work in Ableton (not in the MaxMSP application).

Mac OS X, Microsoft Windows XP/7

QuickTime for the MPEG support