



 **MOOVMI**

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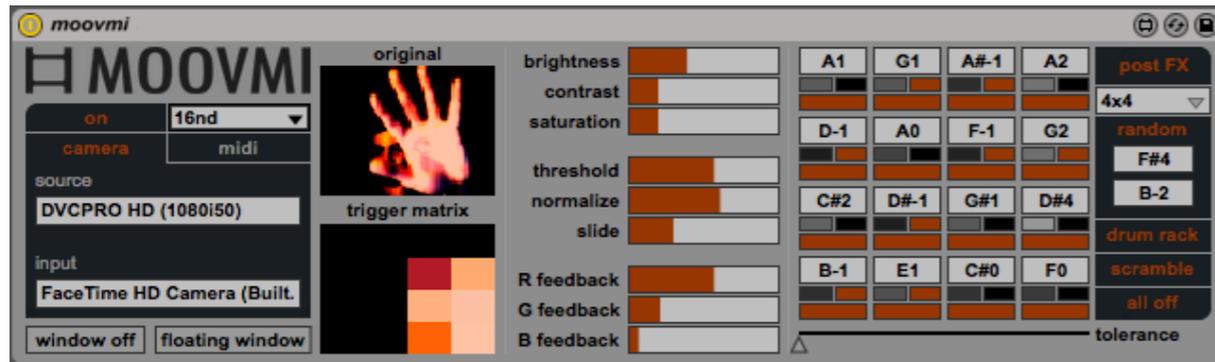
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1. This is Moovmi

Thank you for choosing Moovmi!

Moovmi is a Max For Live device that produces MIDI note sequences from video data analysis.



A movie is reduced to a lo-res grid where the luminance value of each cell is equal to a MIDI note velocity message:

- luminance value = 0 then noteoff message
- luminance value \neq 0 then velocity value

Important note

The performance of this device is highly influenced by the type of movie file (dimension, resolution, video codec).

The pack downloaded contains, in addition to Moovmi device, a copy of this manual, which can help you to better understand this software and its potential.

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.

Quicktime, Ableton Live 8 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): Moovmi is a Max For Live MIDI device and works both on Mac OS® X and Windows®.

Moovmi is currently available as single product.

Thanks to the Max For Live total integration, you will find a description for each Moovmi parameter in the Live Info View, and you can easily automate each parameter inside Live.

We suggest to follow K-Devices via [Facebook](#), [Twitter](#), [Google +](#), or sign up our [Newsletter](#), in order to keep you updated about future updates.

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2. License

Installing the device on your computer means that you have read and agree K-Devices End-User License Agreement. You have a copy of it downloaded with the downloaded Moovmi pack.

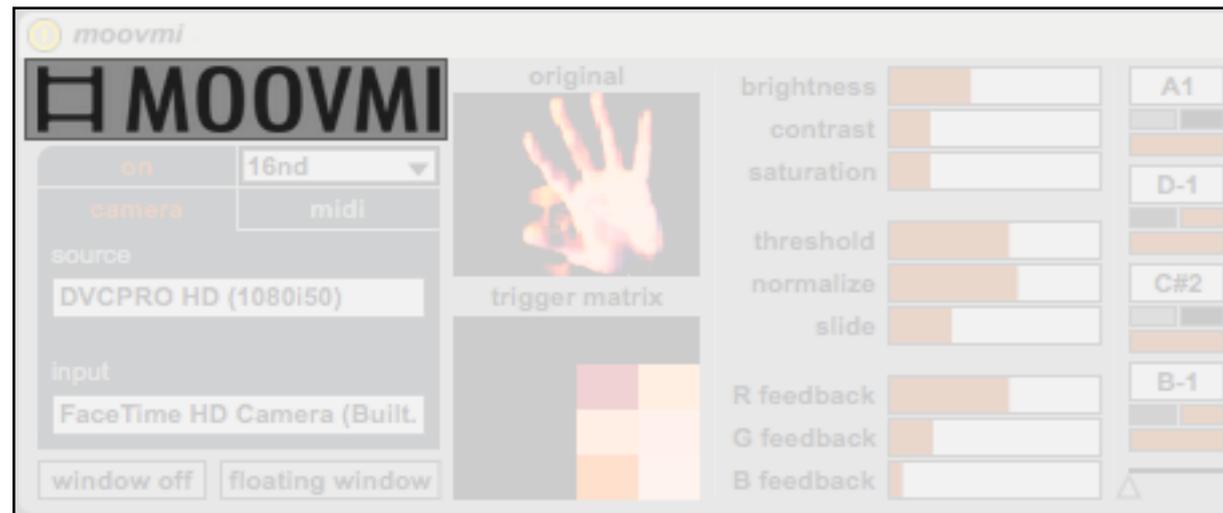
3. Installation

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

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

4. Interface Overview

Moovmi button shows the about window, which includes software version and links to K-Devices website and social networks.

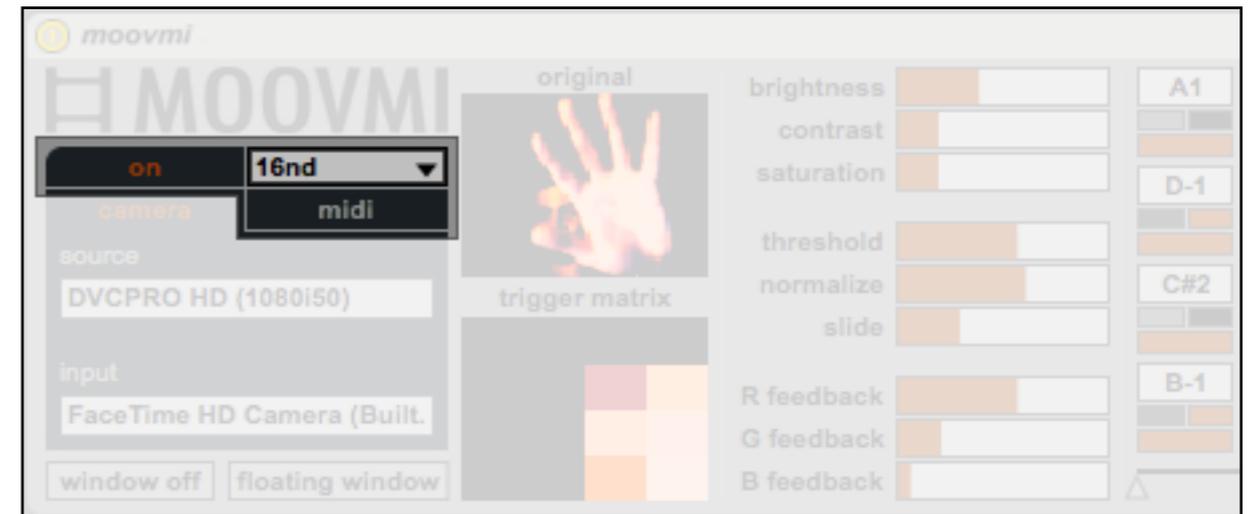


The interface is composed by 3 main areas:

- Sources Area
- Video FX Area
- Grid Area

4.1. Sources Area

In order to use moovmi, you need to choose a video source: **movie** or **camera**. The first needs you to drop a movie file on the **original video display**, the second needs at least a connected camera. You can use one camera at a time.



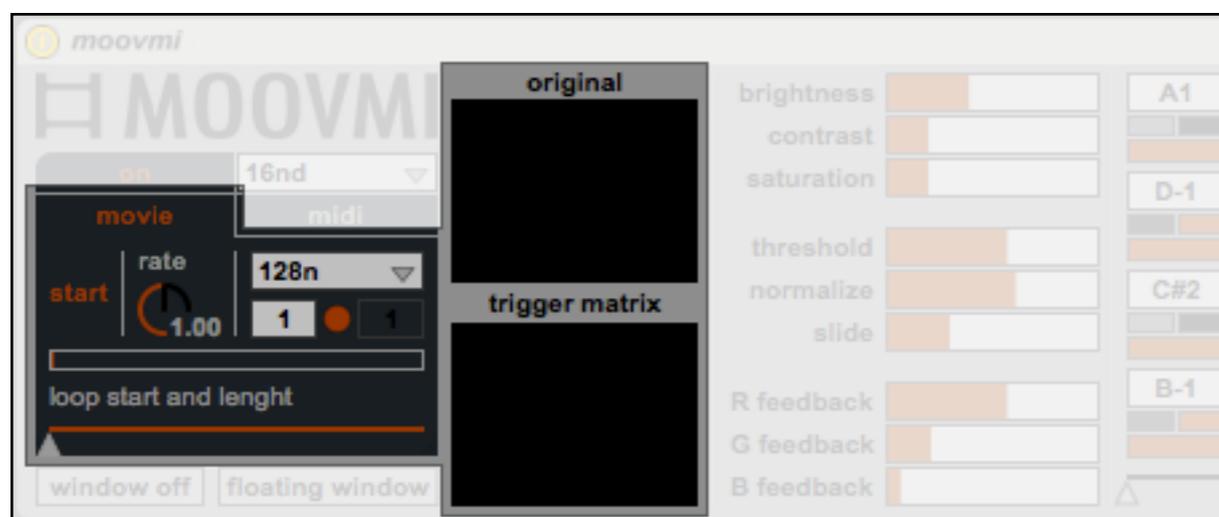
MIDI notes generation will begin immediately, based on default settings.

In this area you find three other global functions:

- **on/off** switch starts/stops device's clock;
- **time resolution** menu sets the time resolution for two consecutive frames;
- **MIDI** button allows you to play MIDI note messages in addition of moovmi video-based triggering work. In MIDI off position, incoming MIDI note messages will be filtered off.

4.1.1.Movie

To load a **movie** just drop the file in the **original video display**.



At this point, you dispose of several parameters:

- **start** button starts/stops reading movie;
- **rate** sets the reading speed;
- the **horizontal slider** sets a start reading point or a start loop point;
- **loop menu**: loop off or loop length.

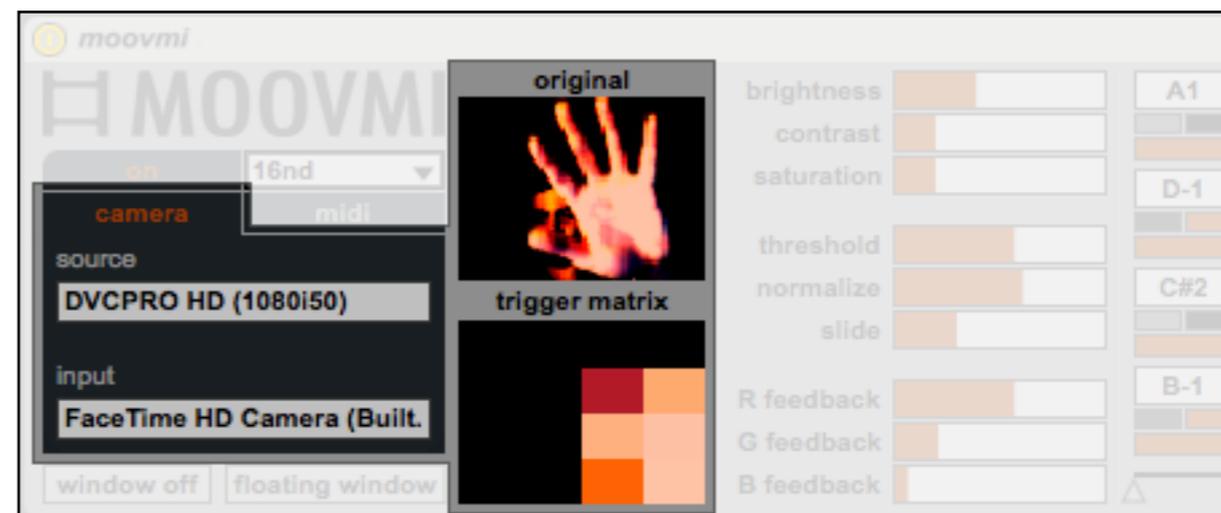
4.1.2.Camera

Select **camera** to use a webcam (or an external one) as source.

Then use **source** and **input** menus to select the desired one.

4.1.3.Generation

In both movie or camera selections, your video source is always reduced to a 8x8 video grid.



You'll see two displays: **original video display**, and **trigger matrix display**.

Each **trigger matrix** cell creates a velocity value equal to luminance value, from 0 to 127. For this reason black cell sends 0 velocity MIDI messages, or note off MIDI message.

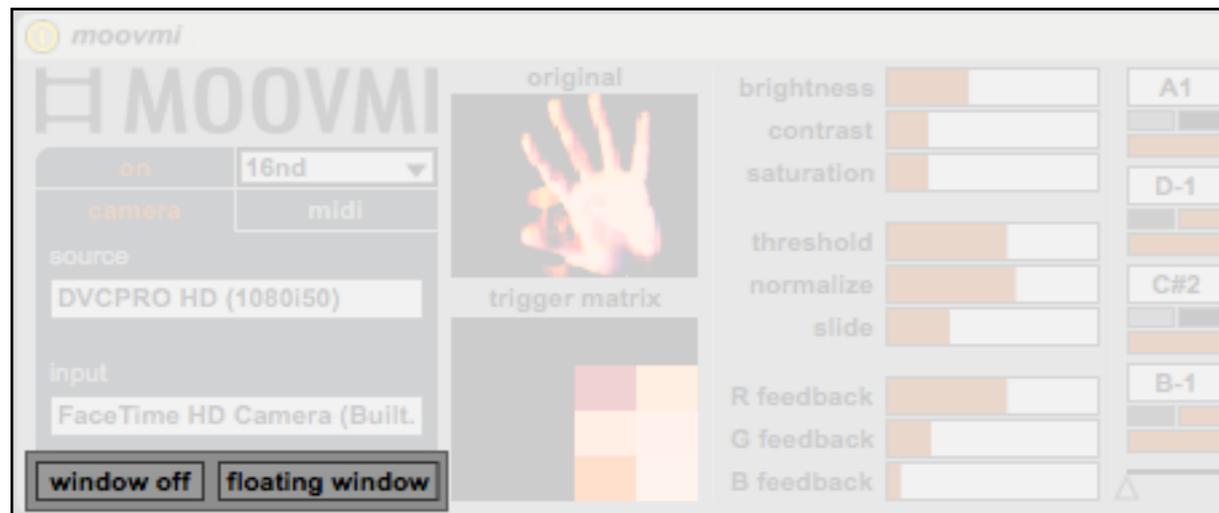
Processing the **trigger matrix** (see Video FX Area below) will affects the MIDI notes velocity.

4.1.4.External Window

You can also create an external window for the video and put it in fullscreen mode. This can be very helpful for installation or projections. To use full screen mode, just click on the external window and press Esc keyboard key.

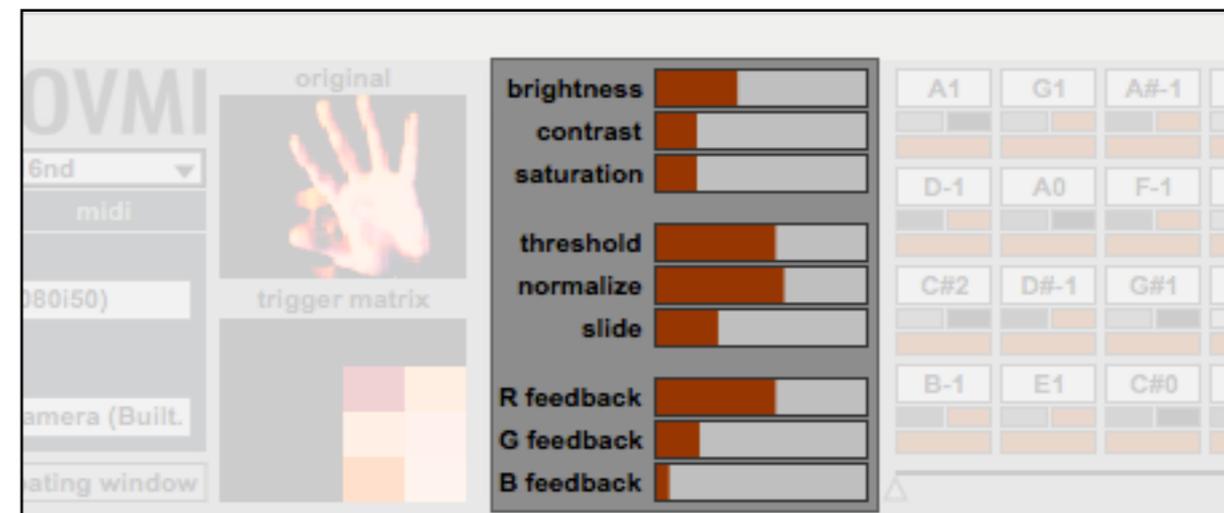
Two buttons lets you create this window:

- **window off/on** switch creates or destroys the external window
- **floating windows** keeps the window on front



4.2. Video FX Area

In this area you can process your video source, influencing the MIDI notes generation.

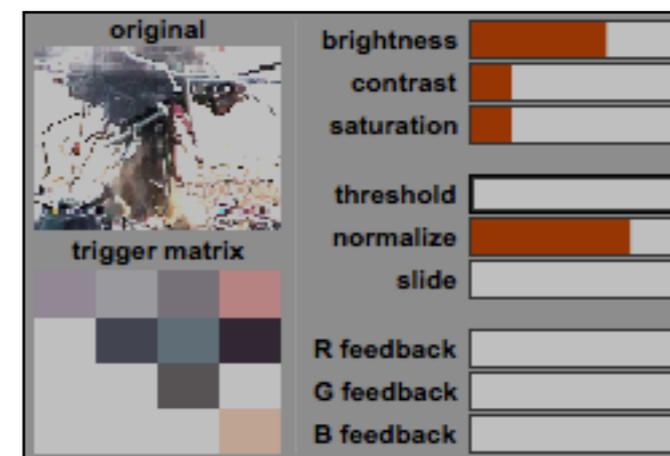


Important note

When window is enabled, the video player reads the movie in native resolution. This may affect the CPU performance.

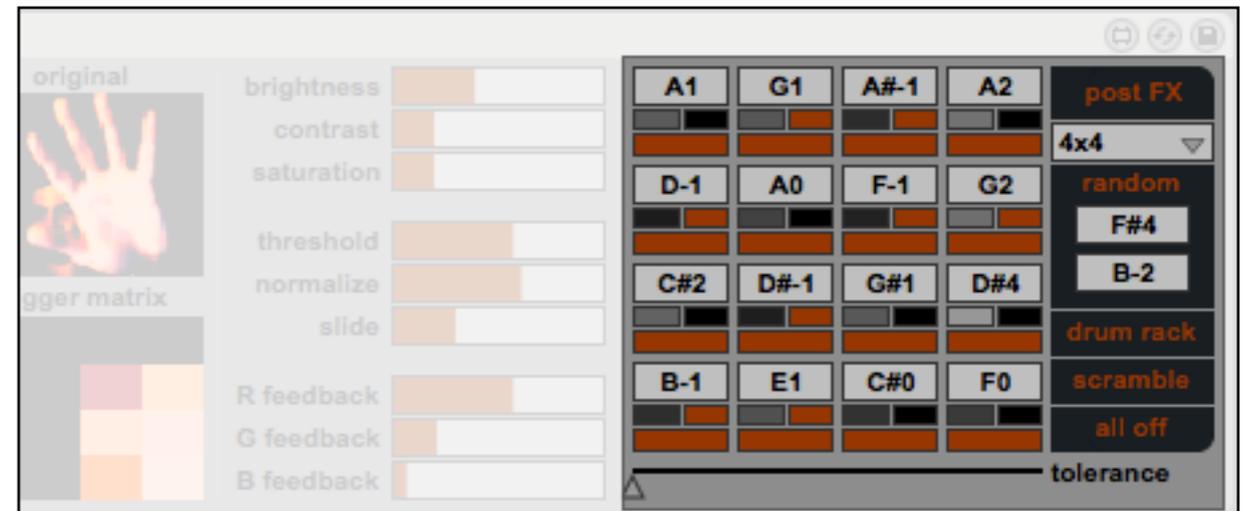
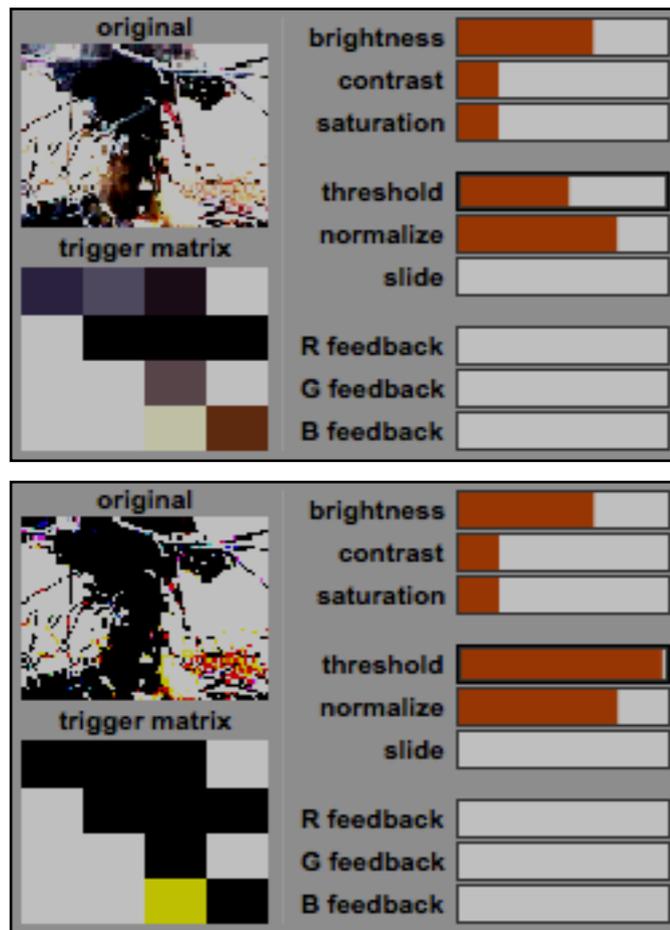
You dispose of several classic movie effects:

- **brightness** adjusts the image brightness;
- **contrast** adjusts the image contrast;
- **saturation** adjusts the image saturation;
- **threshold** subtracts a value from each cell, so only lighter cells will be displayed;



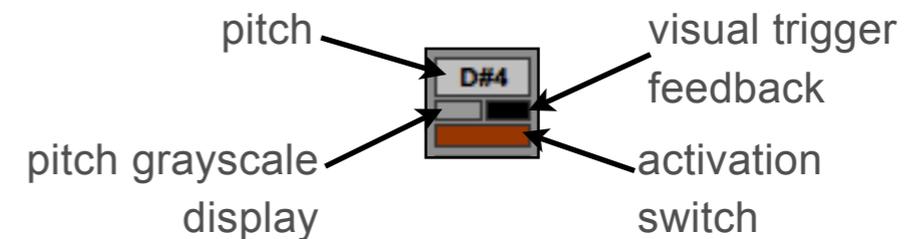
4.3. Grid Area

In this area you can control pitch and other parameters for each grid cell.



Each cell sends two values, that are the necessary values used to create a MIDI note message: **velocity** and **pitch**.

Velocity values are based on cell luminance (depending on



settings Video FX Area).

You can set the pitch in the **MIDI note box**: the chosen value will be automatically sent also to a **gray scale range**, for improved visual feedback. Lower MIDI note value sets a darker/black color, while lighter/white color are set up by a higher MIDI note value.

- **normalize** sets max luminance value, affecting global velocity. If resolution menu (see below) is = 1x1, then this parameter will become inactive;
- **slide** adds a time interpolation between consecutive frames.

There are also color feedbacks parameters:

- **R feedback** adds feedback on red video channel;
- **G feedback** adds feedback on green video channel;
- **B feedback** adds feedback on blue video channel;

For each parameter, select and press backspace to restore default value.

You dispose of an **activation switch** to enable/disable each single cell/note.

On the right you find several functions to edit the grid:

- **pre/post FX** switch applies effects on original video too (useful if you need to display it to an audience via external window);
- **grid menu** changes the grid resolution (see the result in “trigger matrix” display);
- **random + 2 pitch boxes** fills the grid with random values, depending on higher and lower values (default C-2 G8);
- **drum rack** does a mapping for work with Ableton Live's Drum Rack device;
- **scramble** scrambles the pitch values on the grid;
- **all off** sends a note off message to all cells (this could be useful when you change a note value by hand before the cell has received a note off messages);
- **tolerance** is a very important parameter. It avoids new MIDI note messages for each no-black cell.

A lower **tolerance** means that each new frame trigs a new note.

With higher **tolerance** is very hard to re-trig a note (needs a very hard luminance value change!).

If a cell become black, don't care the tolerance value, a note off message will be sent.