



 **KFLUX** *sy*

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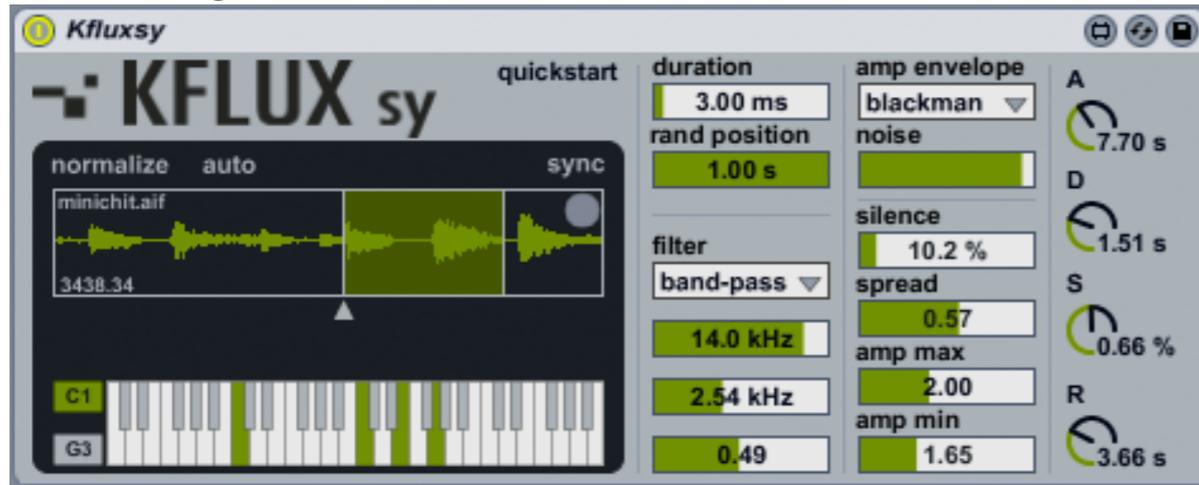
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1 This is Kfluxsy

Thank you for choosing Kfluxsy!

Kfluxsy is one of the three MaxForLive devices we produce for sound granulation.



Kfluxsy contains in addition to the software, 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.

Ableton Live 8 and the MaxForLive add-on are required (refer to our website to know which are the Live versions supported for every released version): Kfluxsy is a MaxForLive instrument and works both on Mac OS® X and Windows®.

Kfluxsy is currently available as a single product and contained in the Kflux Bundle, with Kflux and Kfluxin.

Kfluxsy comes unlocked: it means that you can easily unlock

it and take a look on the inside.

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

Please refer to our [website](#) for any update.

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2 Notes About Sound Granulation

Sound granulation is the process of slice audio in very small parts, so called grains, and re-compose them in a new defined order and space.

The granulation of sound is very useful to generate complex organic textures, noises, time-stretch effects, and many others usual and unusual sound design techniques.

If you want go deep on this subject, we suggest to take a look to the fundamental text *Microsound*, written by Curtis Roads, edited by MIT Press.

3 Notes About Unlocked

This software comes unlocked: it means that you can open the device and explore it. This is very helpful for learning Max/MSP via the reverse engineering. At the same time the device or its parts cannot be re-used or recycled in other devices or patches.

You are free to modify it for your self only.

K-Devices does not offer support for modified devices.

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 this software.

4 Installation

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

Kfluxsy device and presets will be installed in the Ableton Live Library:

Instruments / Max Instrument / Kfluxsy by K-Devices

To see the Kfluxsy Live Lesson please go to:

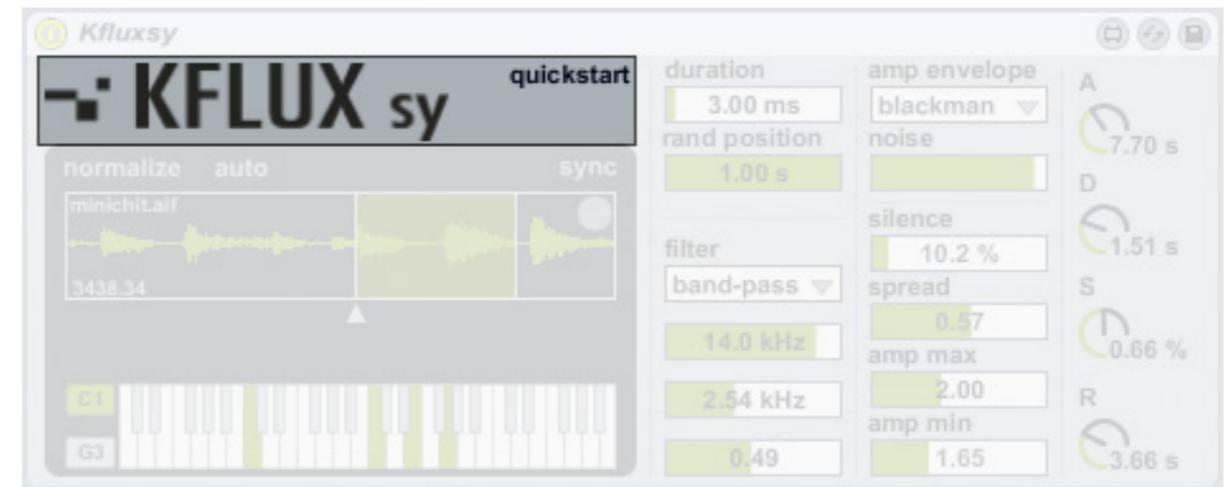
View / Help View / Lessons / Show all add-on Lessons / Kfluxsy by K-Devices

5 Interface Overview

The interface is divided in 4 main areas:

- Info Area
- Generation Area
- Filter
- Amplification Area

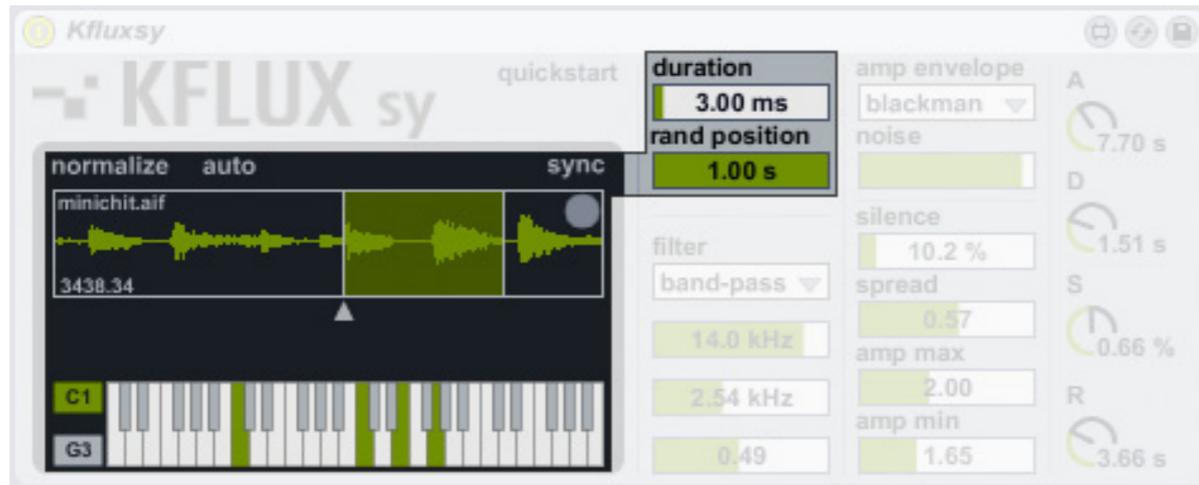
5.1 Info Area



Kfluxsy button shows the about window, wich includes the software version and the link to K-Devices website and social networks.

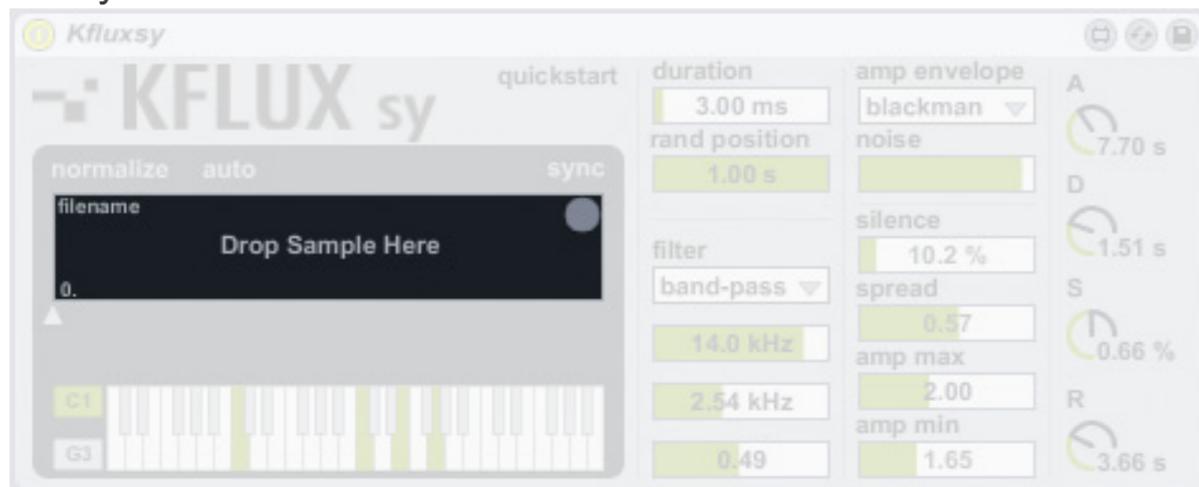
Quickstart shows the quickstart built-in guide.

5.2 Generation Area



This is the core of Kfluxsy. The parameters on its inside are used to control the way grains are generated.

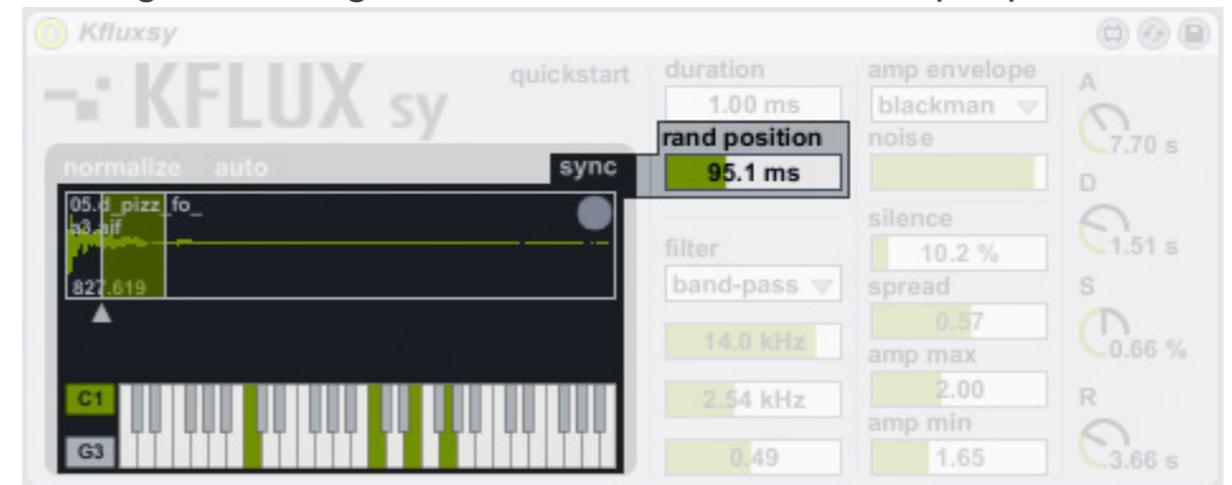
To generate grains Kfluxsy needs to load a sample: just drag and drop the sample in the **sample area** and the engine is ready!



The **normalize** button above the sample area normalizes the loaded sample manually, while the **auto** button on its right normalizes every sample loaded automatically.

Two different modes of generation are available: **in-sync** and **off-sync**.

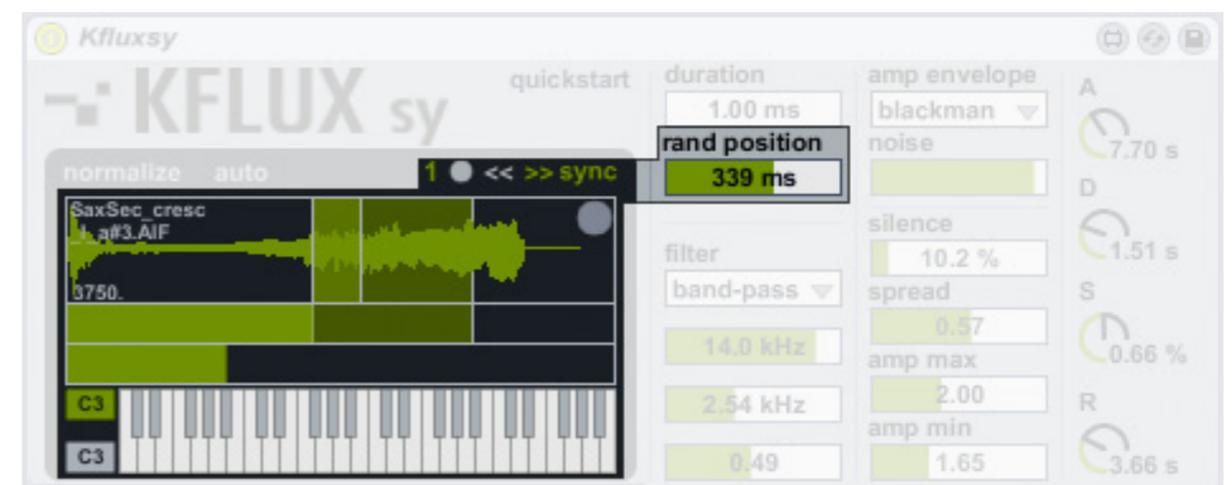
In **off-sync** mode (gray sync button), Kfluxsy uses a fixed **playhead** position using the small **triangle** under the **sample area**: grains are generated from the same sample position.



Rand position increases the range of grains that can be generated: setting it to 0, Kfluxsy always generates the same grain. Increasing that value, Kfluxsy generates grains randomly, basing on a bigger part of the sample. The affected part of the sample is highlighted with a green bar over the sample area, as shown in previous picture.

Sync mode (green sync button) uses a dynamic beat-synchronized grains generation.

It means that playhead is constantly moving back or forth (it



depends by the **sync direction** switch, situated on the left of the green sync button, << or >>).

Playhead moves inside the sync area, which can be easily defined with the two new sliders under the **sample area**. As you can see in this mode, the **playhead position triangle** is no longer available. By the way, two new controls appeared: the **sync area** and **sync offset** sliders.

Sync area is the lower one and sets percentage of sample used by the sync: it works in conjunction with the **sync offset**, the one between the **sync area** slider and the **sample area**, which lets you move the synced area in the desired position around the sample.

You can reset the synced area from a small section to the entire sample length via the **sync reset** button, the gray button located at the left of the **sync direction** switch).

The playhead moves inside the selected sample area back or forth in sync with Live's transport. With the **sync duration** you can select how many beats the playhead takes to "read" the entire sample area. Selecting 1, means that in one beat the playhead completes the movement and restarts from the begin. Selecting for example 32 it will requires 32 beats to complete the movement. Even there the **random position** slider is available, and adds a random section (from 0 to 1000 milliseconds) to the playhead position.

Grains length is defined by the **duration** slider.

The lower part of the generation area contains a virtual keyboard (not clickable): it displays the current played notes.

On its left side you can see two MIDI boxes. The green one, the higher, is clickable and lets you choose Kfluxsy's root note: tune it.

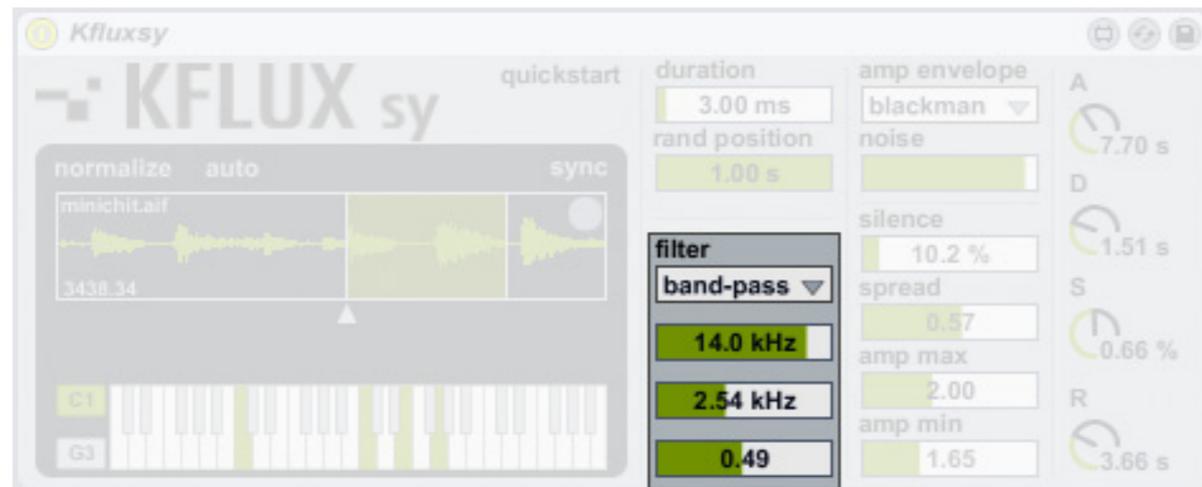
The other one, the lower, displays the last played note.

5.3 Filter

After the generation area all the grains are processed by a multi-mode filter.

It has four filter modes:

- low-pass
- high-pass
- band-pass
- notch



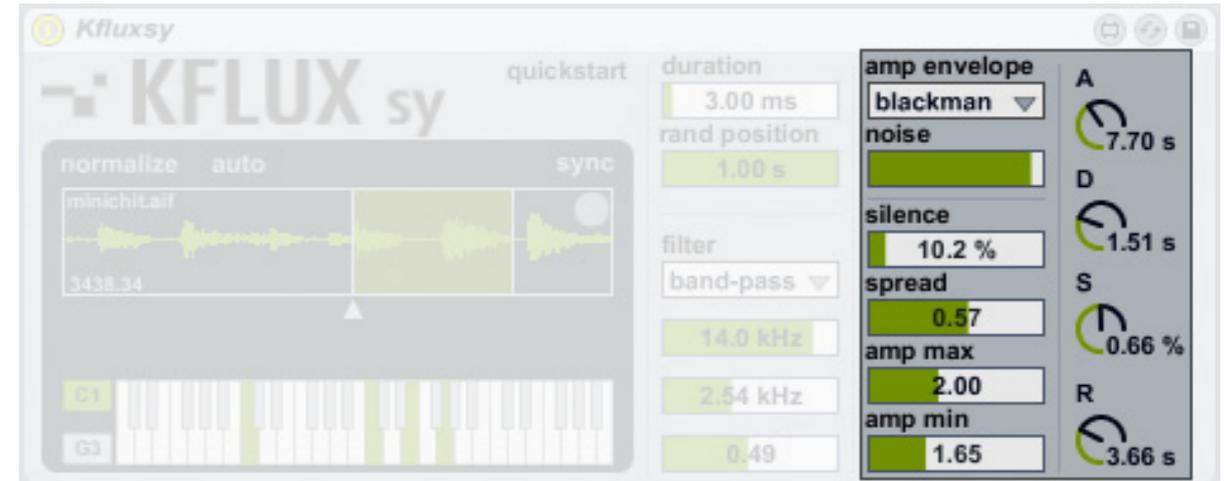
This filter works very similar to other Kfluxsy parameters. There are two frequencies, **freq min** and **freq max**. Together these values creates a defined range. The filter will be setted with a random frequency value between this range for each grane.

The slider under the frequencies is the **Q factor**, and it is used to set the filter shape.

5.4 Amplification Area

Kfluxsy has eight different amplification algorithms, called **amp shapes**. Each one provides a different way to amplificate grains:

- gaussian
- hamming
- blackman
- three stage linear
- triangle
- expodec
- repodec
- noise



A noise generator is also available: with the **noise** slider you can blend the amount of grains to the amplification algorithm (as noise oscillator which modulates the selected amplitude algorithm).

Silence lets you “insert” pauses in the grain stream: with this slider you can set the percentage of grains with amplitude

equal to nil in relation to the grain stream.

Spread controls the opening of the grain-stream in the stereo panorama.

The amplification can be randomized inside a defined range, defined by **Amp min** and **amp max**. Each grain will be amplified with a different value within that range.

5.4.1 ADSR

Kfluxsy is designed to act as a synthesizer (the suffix “sy” derives from synthesizer): that is why we included an ADSR.

It acts like a normal amplitude envelope that works on all the grain-stream.

Attack is the time taken for initial run-up of level from nil to peak, its range is from 2 milliseconds up to 60 seconds.

Decay is the time taken for the subsequent run down from the attack level to the designated sustain level. Its range is from 2 milliseconds up to 30 seconds.

Sustain is the level during the main sequence of the sound’s duration, until the key is released. This value is expressed as a percentage of the peak level.

Release is the time taken for the level to decay from the sustain level to zero after the key is released. Its range is from 2 milliseconds up to 60 seconds.