

# microgliss

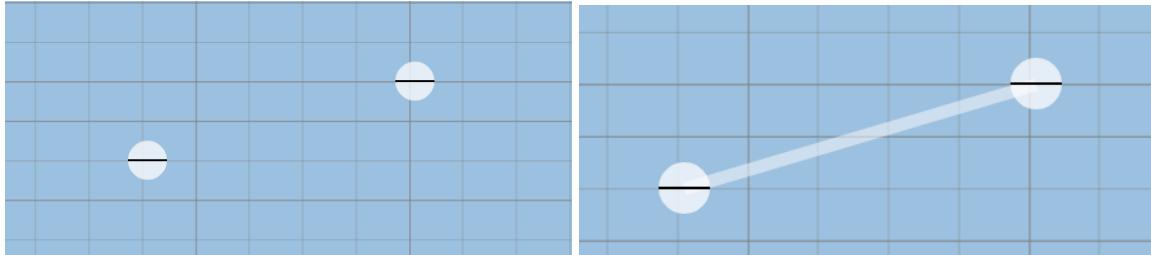
## user manual

## Contents

Introduction .....	3
Common Items.....	3
Top Bar .....	3
Dropdown menu.....	4
Interface Selector.....	4
Bottom Bar .....	4
Playback Control Buttons.....	4
Copy/Paste buttons.....	4
Beat & Cent Locks .....	5
Master gain.....	5
The Note Editor.....	5
Outer frame .....	6
The Grid .....	7
Synthesizer .....	9
Common Controllers:.....	10
Filter .....	11

## Introduction

Microgliss is a digital synthesizer with unique note editing capabilities. It includes an **editor screen** which you can control what will be played, and a **synthesizer screen** that you control how it will sound like. In the editor, there is an area with a grid which you can add circles which represents notes and connect these circles using lines.



Lines get played continuously, so by having two circles at different positions and connecting them with a line causing the frequency of the note to change seamlessly. This type of note editing is the core difference of microgliss. After this point these circles will be referred to as **nodes**, and lines will be referred to as **edges**. This terminology comes from graph theory in computer science. Also during the manual edges and nodes will be referred to as **nodges** if any functionality is common.

*This manual focuses on microgliss. You might need to check other sources to understand not microgliss specific information such as what frequency, amplitude, ADSR etc. is.*

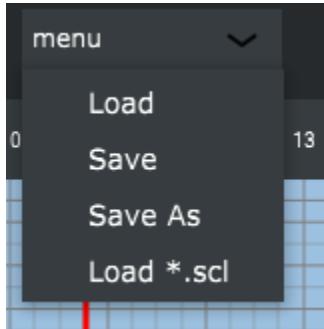
## Common Items

### Top Bar



Top bar contains a **dropdown menu** and an **interface selector** which consist of two buttons for switching between the editor and synthesizer interface of microgliss.

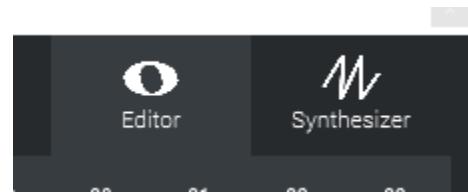
## Dropdown menu



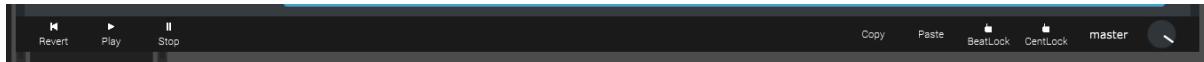
**Load** : Loads composition in \*.midi or \*.mglc form. Mglc is the form microgliss use for saving data. **Ctrl + L**  
**Save** : Save your composition as \*.mglc type. You will select a file name when you save a file for the first time. After that, saving with this button. **Ctrl + S**  
**Save as** : Save your composition as \*.mglc type. You will select a file name every time you save a file.  
**Load \*.scl** : Loads a scale file which changes the grid lines according to the tuning format specified in the scale file.

## Interface Selector

With the interface selector buttons you can switch between note editor and synthesizer screens. Enabled button will light up and indicate that button is clicked.

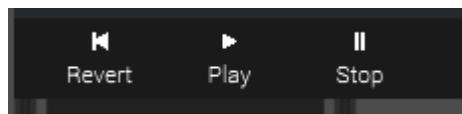


## Bottom Bar



Bottom bar consists of a group of playback control buttons, copy/paste buttons, beat and cent locks to snap the nodes to the horizontal or vertical axis and a master knob which can control the overall volume.

## Playback Control Buttons



**Revert:** Sets the playback bar position to zero (The leftmost position on the grid).

**Play:** Starts the playback. If microgliss lives in a host, bpm settings will be the host's bpm.

**Stop:** Stops the playback bar and any sound that microgliss was playing at the time.

## Copy/Paste buttons

**Copy:** Copies the currently selected node(s).

**Paste:** Pastes the currently copied node(s).

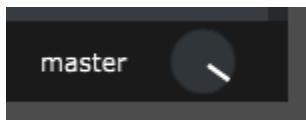
Copy and Paste can be done together at once by holding Ctrl while dragging a node.

## Beat & Cent Locks

- Beat Lock: A toggle button. While toggled on, the picture on it will become a locked lock, and the program will attempt to create or drag nodes exactly to the closest beat start grid line.
- Cent Lock: A toggle button. While toggled on, the picture on it will become a locked lock, and the program will attempt to create or drag nodes exactly to the closest pitch grid line.

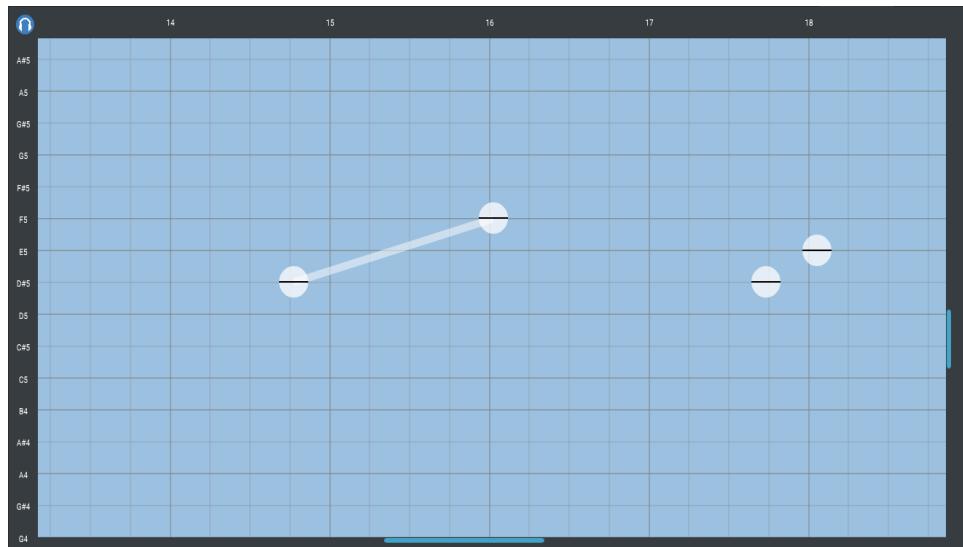
If any of the locks are enabled and nodes are being dragged, nodes will be snapped to the related closest line.

## Master gain



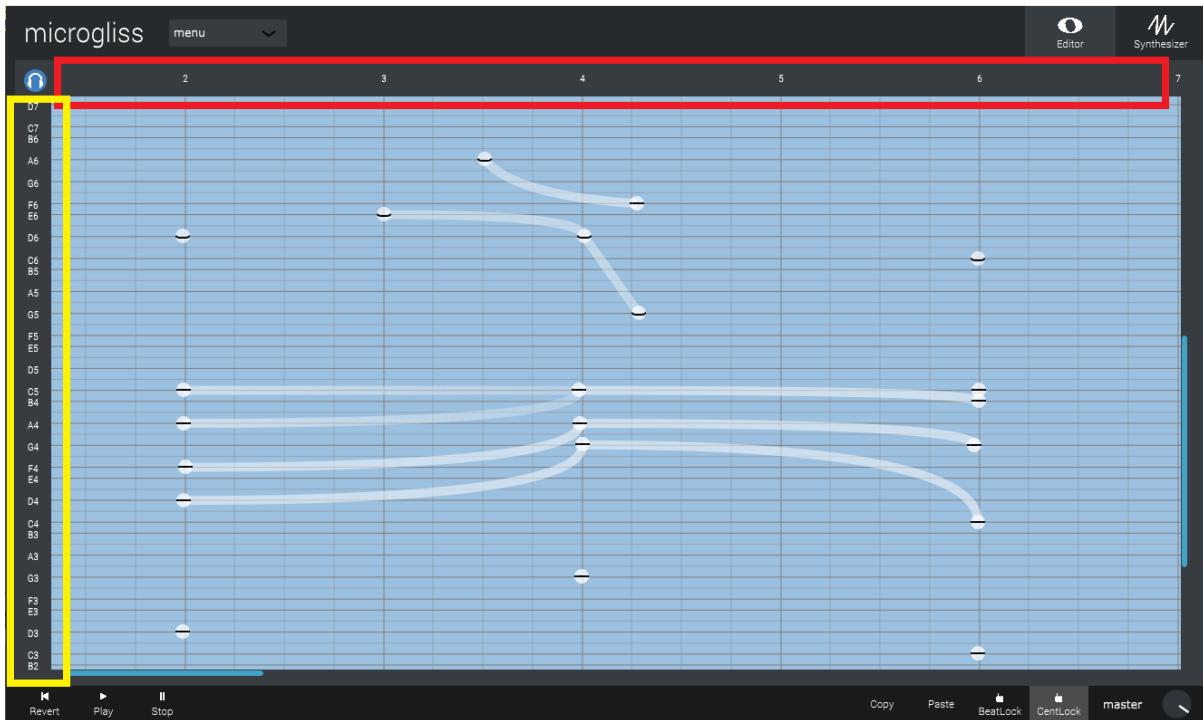
Controls the overall audio output of the plugin.

## The Note Editor



The note editor consists of an outer frame and a grid area. In the whole note editor, the vertical axis represents the pitch of the notes, and the horizontal axis represents the time.

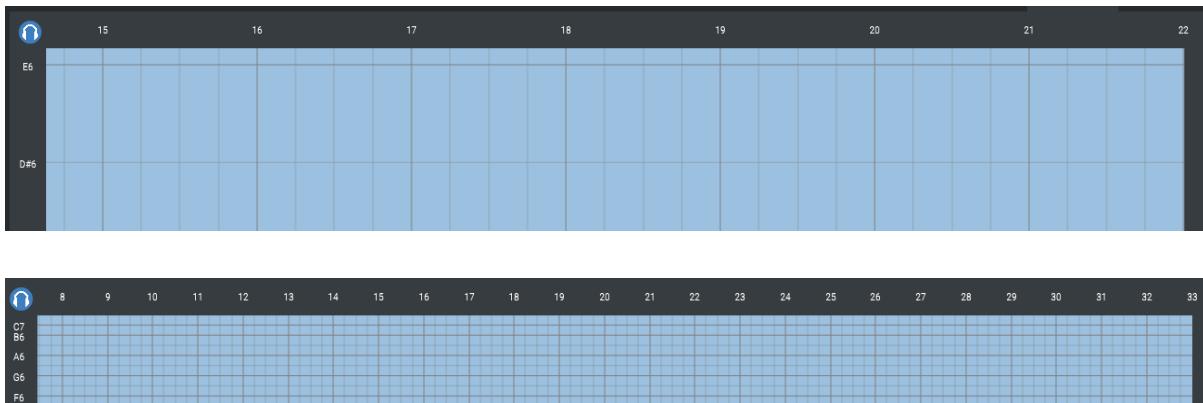
## Outer frame



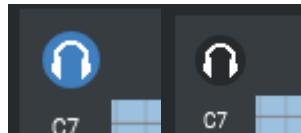
On the left hand side of the frame (yellow) you can see the details of the pitch information, and the upper part (red) contains information about time data, in beats. And in the middle there exists the grid. To make changes in the grid:

- Scroll to move up/down vertically
- Alt + scroll to move left/right horizontally
- Ctrl + mousewheel to zoom in/out vertically
- Alt + mousewheel to zoom in/out horizontally

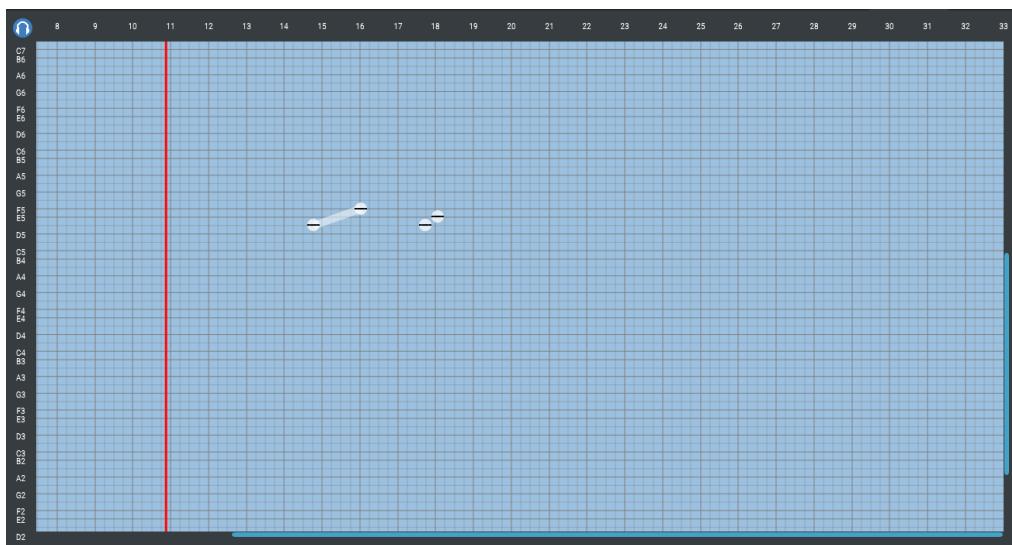
Outer frame gets updated according to the changes in the grid.



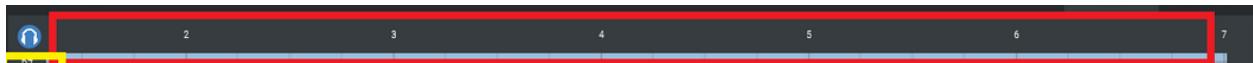
Also, the headphone button on the top left portion of the outer frame indicates that aural feedback is on, and notes will be played back instantly on input. This might be distracting sometimes, so you can disable the feedback by clicking on the headphone button.



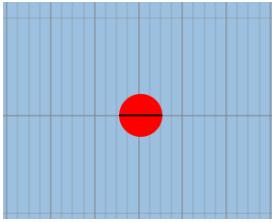
## The Grid



The grid has horizontal lines indicating the pitch information and vertical lines that indicates time information. Pitch information lines of the grid can be changed by selecting a different \*.scl for grid from the menu in the upper bar as indicated in the **Dropdown Menu** section.

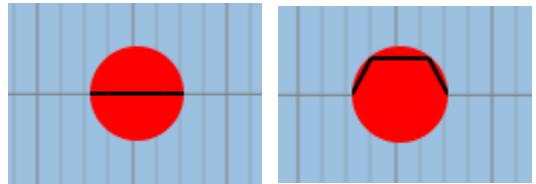


The grid has a vertical red bar indicating playback position on it. You can change the position of the playback bar by left-clicking on any time value on the horizontal axis on the outer frame. DAW playback always has priority over the plugin's inner playback.

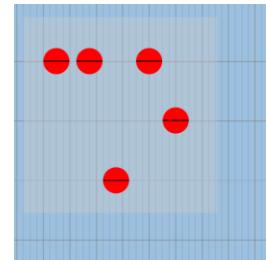


You can place nodes on the grid by left-clicking on an empty area, and a node will be created with middle level velocity at the location you clicked.

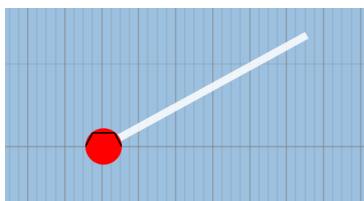
Node velocity can be edited by dragging the horizontal black line along the node up or down to raise or lower it, respectively. It is possible to edit the velocities of multiple nodes at once.



You can select multiple nodes by right-clicking to a point and drag their mouse while holding down. This will create a transparent rectangle that indicates the selection area.

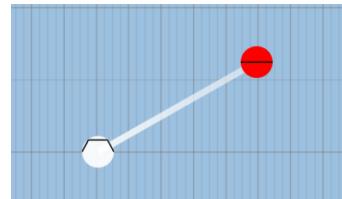


Holding `Ctrl` keeps selected nodes selected, even though the mouse is released. This lets you select multiple nodes without letting any node go.



Once you left-click an existing node or create a new node, that node will be selected and colored red. Then, you can hold `Left-Shift` to attempt to create an edge. While holding `Left-Shift`, if you left-click anywhere on the grid, If there is a node in the newly clicked position form an edge between the newly clicked

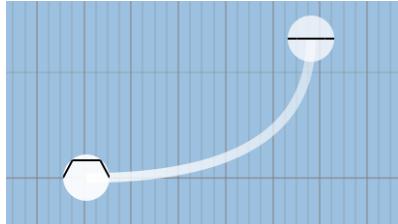
node and the previously selected node. If there isn't a node in the clicked position, Microgliss will create a new node at the clicked position and form an edge between the previously selected node and the newly created node. It is also possible to select multiple nodes and create multiple edges starting from them and ending in a position at once.



You may also select all nodes by pressing `Ctrl + A`.

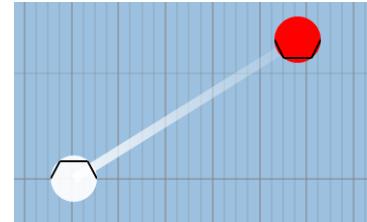
You can delete all selected nodes by pressing `Delete`.

You can delete a single node with a double click.

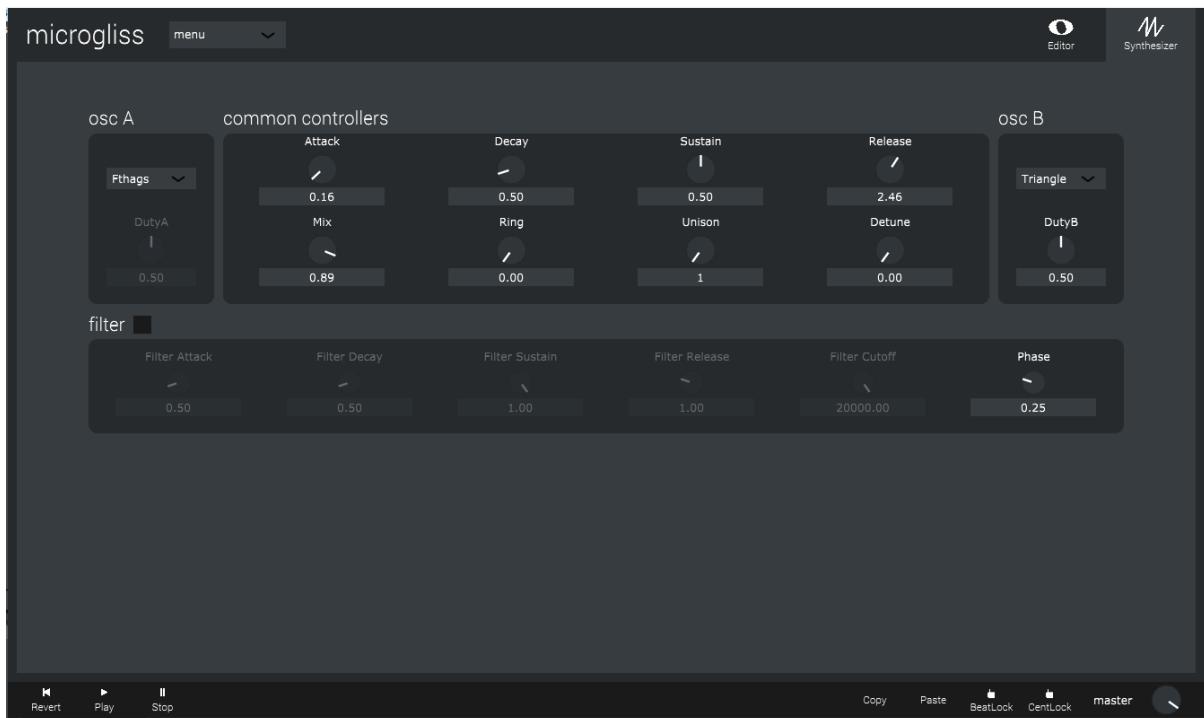


You can click on an edge to select it, then drag up or down to give a curvature to the edge. The way that frequency change follows the curvature of the edge. It is possible to edit multiple edges at once.

Edge velocities are represented by the gradient of their coloring, with fading colors indicating lower velocity, and brighter colors indicating higher velocity. Edge velocity depends on the velocities of the two nodes it is connected to.



## Synthesizer



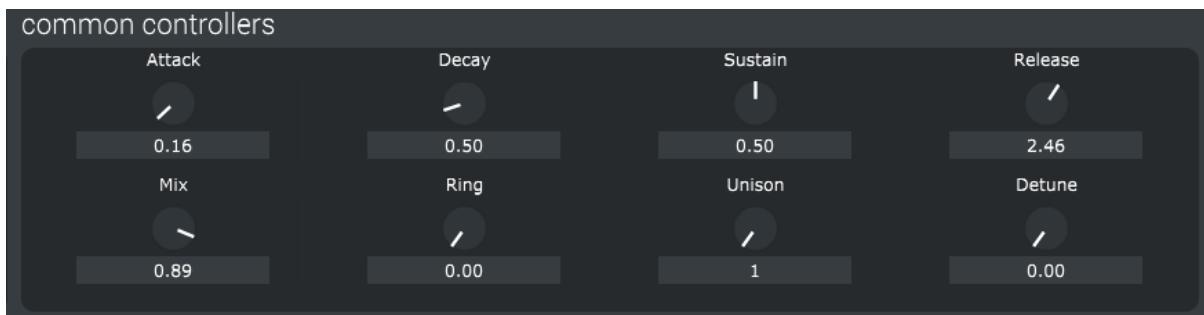
This is the synthesizer for microgliss. It is minimal in design and features but you can create many sounds with it. Ranging from small and cute to majestic and noisy.



### osc A & B

Oscillator A & Oscillator B both have A waveform selection box and a duty knob. Waveform selection box provides 5 basic wave options: Sine, Square, Triangle, Noise and Fthags. Duty only affects triangle and square waveforms, and changes their timbre. (Technical details: Depending on the slider value, duty of the square wave ranges from 0 to 0.5. And at 1.00 triangle becomes a sawtooth wave).

## Common Synth Controllers:



**Attack, Decay, Sustain and Release:** Use it to edit the ADSR envelope of the volume. This determines how loud a note will be at the start, middle and end of its lifetime.

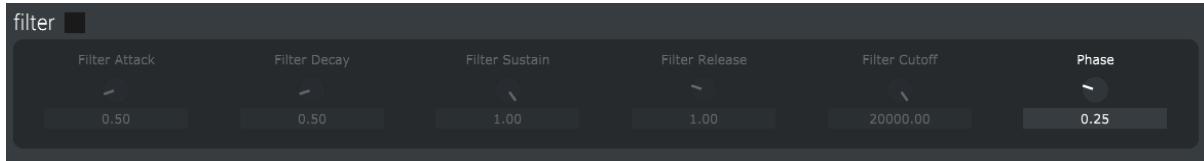
**Mix:** Mixes osc A & osc B (At 0.00 it's %100 oscA, at 1.00 it's %100 oscB).

**Ring:** Applies ring modulation (multiplies the signals instead of adding them).

**Unison:** Changes number of voices for a nodge. Up to 16 voices are allowed. (Using too many voices might reduce the performance).

**Detune:** Detunes the unison voices, creating a rich phasing sound.

## Filter



Filter can be enabled/disabled with the button provided right next to the filter.

**Filter Attack, Filter Decay, Filter Sustain, Filter Release:** Use it to edit the ADSR envelope of the filter, determining how much the filter will be applied over the lifetime of the note.

**Filter Cutoff:** This value controls the maximum cutoff frequency of the filter. Lowering this will cause the sound to get softer, darker, and/or more muffled.

**Phase:** Controls the phase of the two waveforms. Leaving it at 0.25 should be fine for the most of the time and it makes minimal effects to the sound. Be careful, if the value is 0.50 (or 0.00 with ring modulation) waveforms can eat each other resulting in silence.

\*Phase doesn't have anything to do with filters. (We couldn't find any place to put it for now :P)