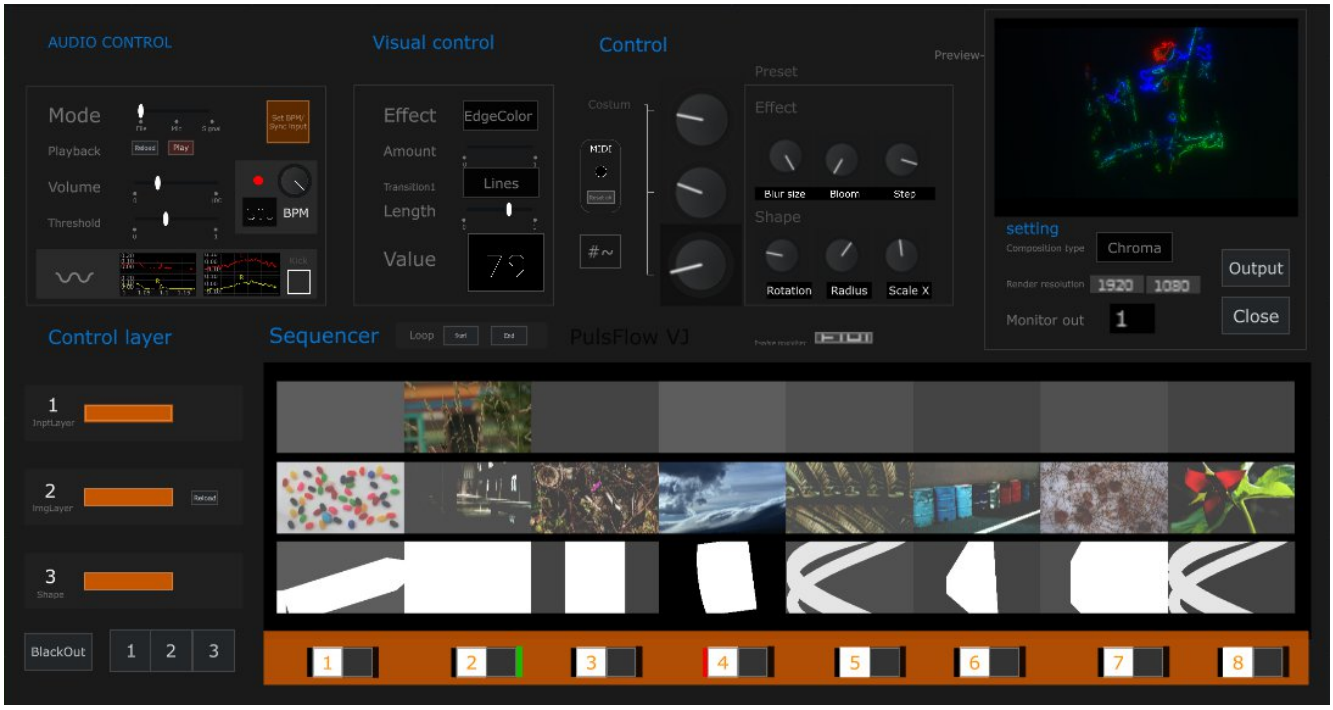
PulsFlow

VJ tool
user guide
V 1.0

Introduction

Pulsflow let's you turn simple different type input into a stunning audiovisual performance. This instruction shows the different parts of Pulsflow and prepares you for a live performance. This is a step by step guide. The Development documents are provided in the last section (as is in .tox file).

Overall UI overview



1.Audio control

Audio input controls

Mode – select audio input type: file, microphone and signal (The main node has two signal input)

Playback – controls the output audiovisual

Threshold – the signal sensitivity

~ - There are 3 displays. The left one shows the audio spectrum. The second one shows the audio signal. The white rectangle shows the triggered signal.

2.Visual control

The visual options

Effect – select between effects

Amount – the strength of the effect

Transition – select the transition type

Length – the length of the transition

Value – shows the current value of the knob controllers

3.Control

Visual controllers

Custom – free knobs. These do nothing by default. To assign on your input patches

MIDI – Midi controller mode indicator

#~ - Opens shape generator

Preset – these are preset controllers. The first row controls parameters of the selected effect. The second row controls the third layer shapes.

4.Control layer

Control the output of each layer opacity

Layer one – it meant to show your connected patches.

Layer two – input images

Layer three – Shapes

5.Sequencer

The main module that shows the input content

Layers 2 and 3 triggers with an input signal. The first layer can be controlled with the buttons at the bottom.

There is also a loop function that creates a loop on specific steps for layers 2 and 3

5.Setting

The output visual setting

Composition type – select the type of the layers composition

Render resolution – set the output visual resolution

Monitor out – select the monitor to open output. 0 is your main monitor.

Open, Close – Opens and closes a fullscreen viewer

2.Prepare an audiovisual performance

2.1.Audio

Decide what audio input you will have. Put the mode on “file” if you have an audio file. It will analyses the audio and detects the kicks(Low frequency peaks) as the signal. Microphone also analyses the input default microphone and detects the incoming kicks. If you have your custom signal (like OSC input etc.) put the mode on “signal” and then connect your input signal into the two last inputs of the ‘baseCore’

Or instead of signals, you can click on “set BMP/sync input”. A red light turns on under it and you can set a specific BPM to trigger the sequences.

If you are getting wrong signals, play with the threshold slider. When you set the threshold to 1, it means it ignores 100% of low frequencies. Find proper value based on your input.

2.2.Visual

2.2.1.Layers

The three layers have their own way to get your content.

The first layer is meant to show your custom patches. It allows you connect up to 8 custom patch. Other steps but the selected one would be disabled to avoid parallel renders. You can connect any kind of input into this layer. To do that, bring your patches and connect its output to the 8 inputs of the ‘baseCore’ node. To navigate, there are buttons beside the step numbers at the bottom. The green light indicates the selected step for the first layer.

The second layer shows images. To select images, go to the parameters, Visual tab, image folder. In the image folder you can place up to 8 images. Name them (01.jpg, 02.jpg,…, 08.jpg) and then select the folder.

The third layer shows shapes. There are two types of shape. You can swutch between them by clicking on the step number at the bottom. By default, each step has its own particular shape. By switching, each step can be switched to the “generator mode” individually. Set them as you desire. To work with with the shape generator, click on “#~” button.

“Blackout” button mutes the visual, “1,2,3” buttons, mute each layer.

2.2.2.Shape generator

This module creates a pattern based on two waves. Open the panel. You will see two wave displays and their parameters. The first slider is to choose the wave type(Sine, Gaussian, triangle, ramp, square, pulse). And also you can control the frequency and amplitude. The generated shapes also follow the shape controllers.

2.2.3. Visuals effects

it's possible to select between preset effects and transition. You can only select one effect at this version.

The compoisition, composits the three layers. shows all types of compositions. So you may need to consider what works with your specific visuals.

3.Controls

by default you will control with the virtual knob.

Effect buttons are preset to some parameters of the selected effect.

The shape controllers make you able to control the speed and size of the shapes in the third layer

To use the custom controllers, go to the node parameters, Controllers tab and there are the values of the custom ones. Reference then in your custom input patches.

3.2.MIDI mode

to use midi controller instead of the virtual knob, at first make sure you are receiving MIDI signals through your software. As soon as you send a MIDI signal, an indicator red light turns on and enters MIDI mode. To to map your controller, you need to send signals one by one. For example I have a 8 knob MIDI controller. If I move them one by one, the two first will be assigned on the first and second free controller. 3, 4 and 5 will control the effects and 6,7 and 8 will control the shapes.

4.Troubleshooting & Advanced Tips

Audio module detects wrong kick signal: if you are receiving too many signals, increase the threshold or if you get fewer signals that expected, decrease the threshold.

The output is black: make sure you have selected a suitable composition type, and not muted layers.

The first layer shows black: it's not a problem. The sequencer preview hides the non selected to avoid heavy calculations.

The third layer shows black: make sure you have proper parameters (especially the scale parameter).