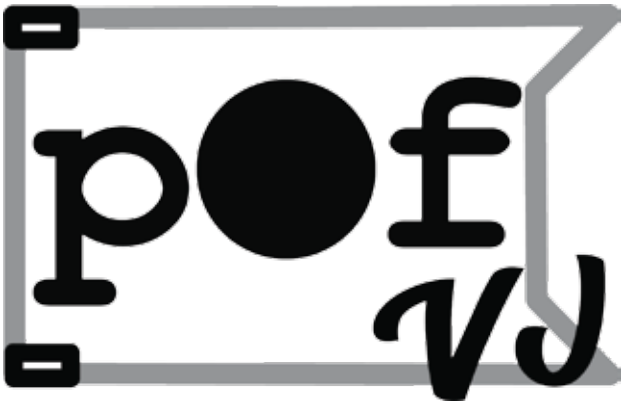


PofVJ is a Puredata patch written by Al1 & Ant1 for an audiovisual performance during a concert. PofVJ mixes video controls tools to allow you to write dynamic presets and scenes, set a projection mapping surface and interact with your medias in real time.

Written for a precise installation, we needed to project moving images onto a background while mapping 22 white umbrellas. This way, we made an interactive set for a concert, images reacting to the sound and the beat.
We needed 3 projectors with corner pins and 22 independent surfaces but you can modify this patch as needed for your own project.

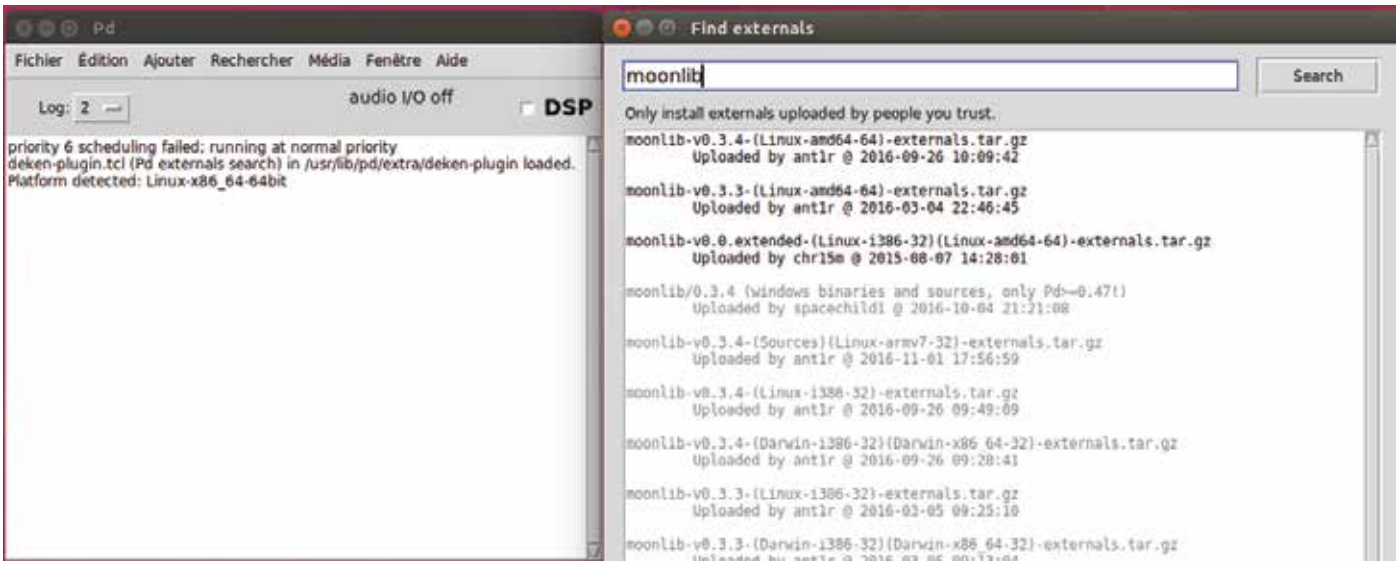
Called PofVJ, this soft was supposed to work with Pof but we did not have enough time to correct some insufficiencies so we integrated Gem to our workflow. We hope that we would be able to fix these conflicts soon and use Pof for PofVJ.

Feel free to use this soft as you want and modify it as needed for your projects.

metalu.net

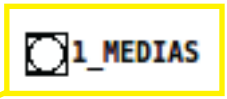
1. Introduction

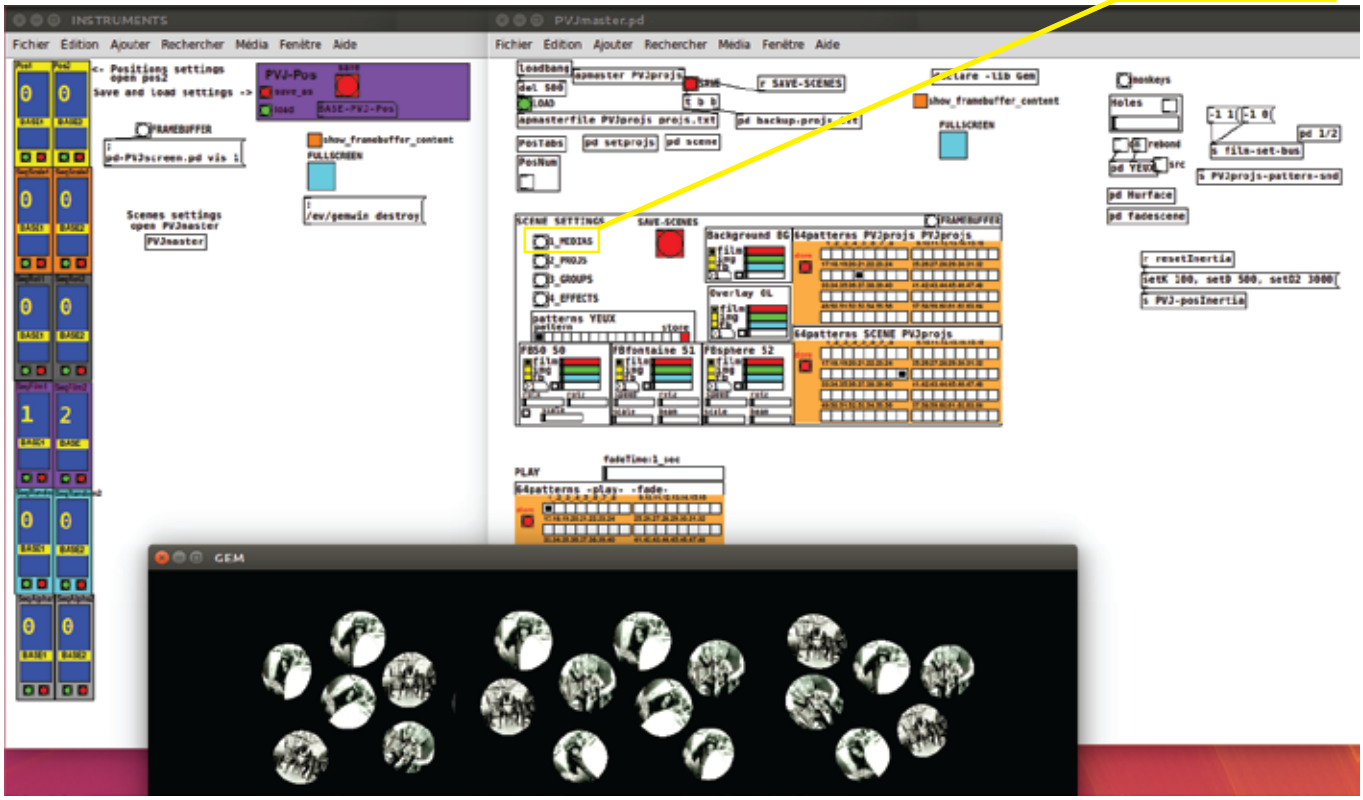
First, be sure to have installed Puredata on your computer. You can find a version for your system on pure-data.info.
Then you have to install some externals for PofVJ to work. You can download them by opening Puredata help and click on «find externals».
Install the following externals: moonlib, iemlib, cyclone, ggee, zexy, unauthorized, maxlib, motex, hcs, creb, moocow, readdir, flatgui, arraysize, comport, cxc, Gem, pmpd, mrpeach.



Now that PofVJ is ready, you have to give it some medias to work on. Put them in your HOME folder/DATAS/PVJ.

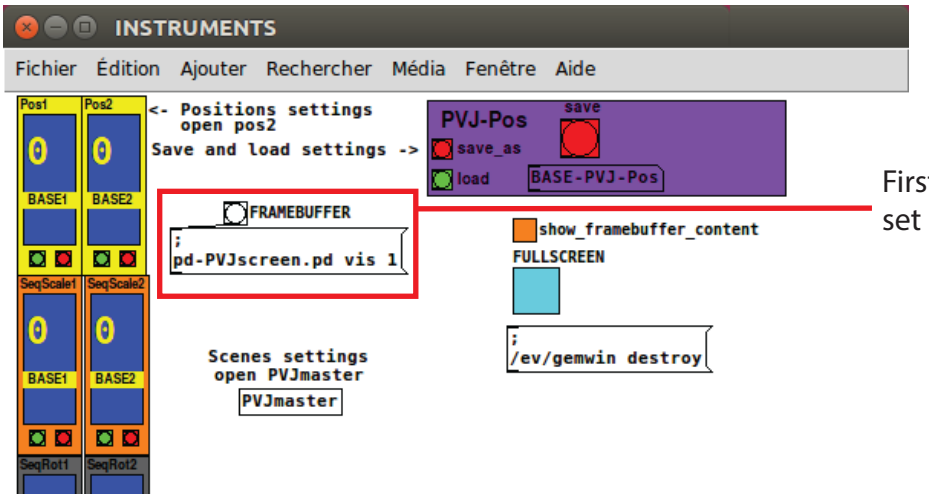
You can now open PofVJ that should look like this. Here are the 3 main windows: «INSTRUMENTS», «PVJ-MASTER» and the GEM window you can create and destroy as you please.
To play with PofVJ, you first need to declare your medias paths in the media window.





2. Projection mapping tools

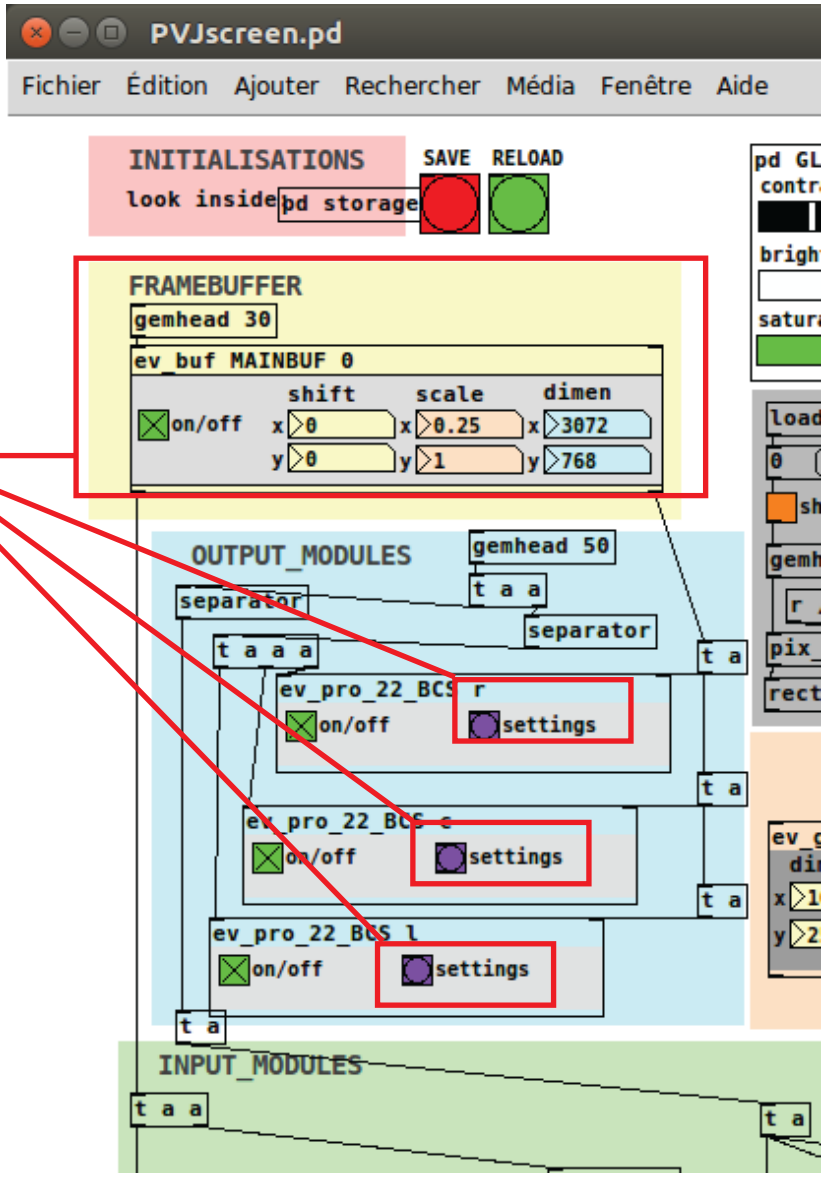
2. 1 Framebuffer

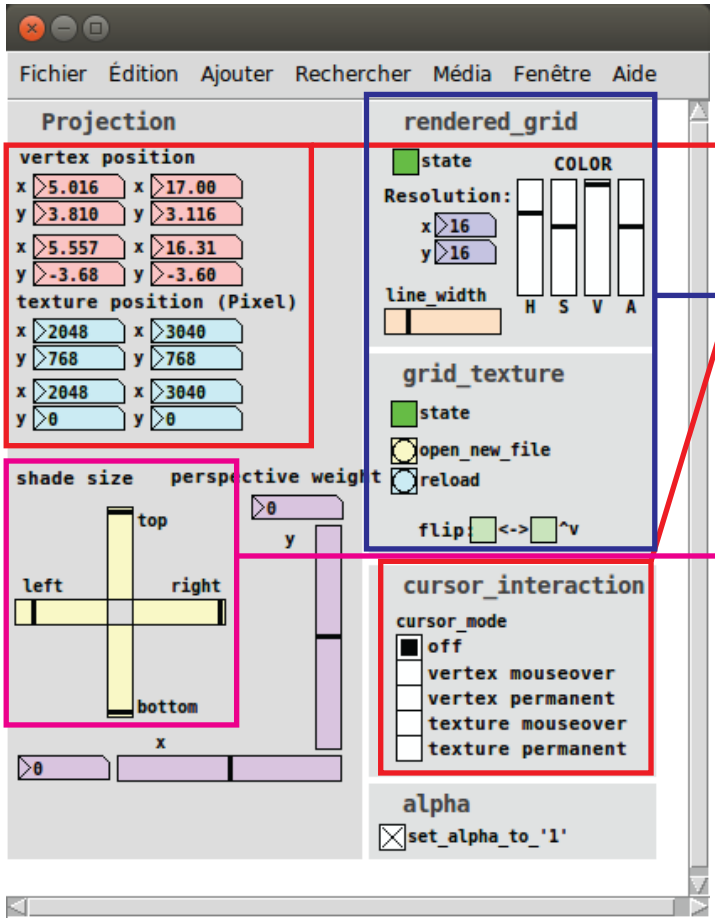


First open the framebuffer to set it as needed.

We integrated here the Extended View Toolkit, allowing us to set soft edges and corner pins.
Extended View Toolkit was originally created at the "Institute for Electronic Music and Acoustics"/Graz within the CO-ME-DI-A project, lead by Winfried Ritsch for the art installation "Extended View" by Peter Venus.

Set the dimension of the screen and open «settings» to adjust each projector individually.

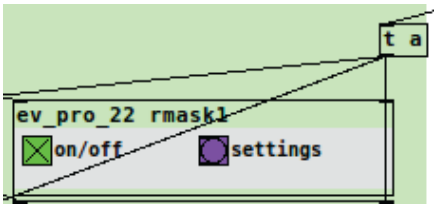


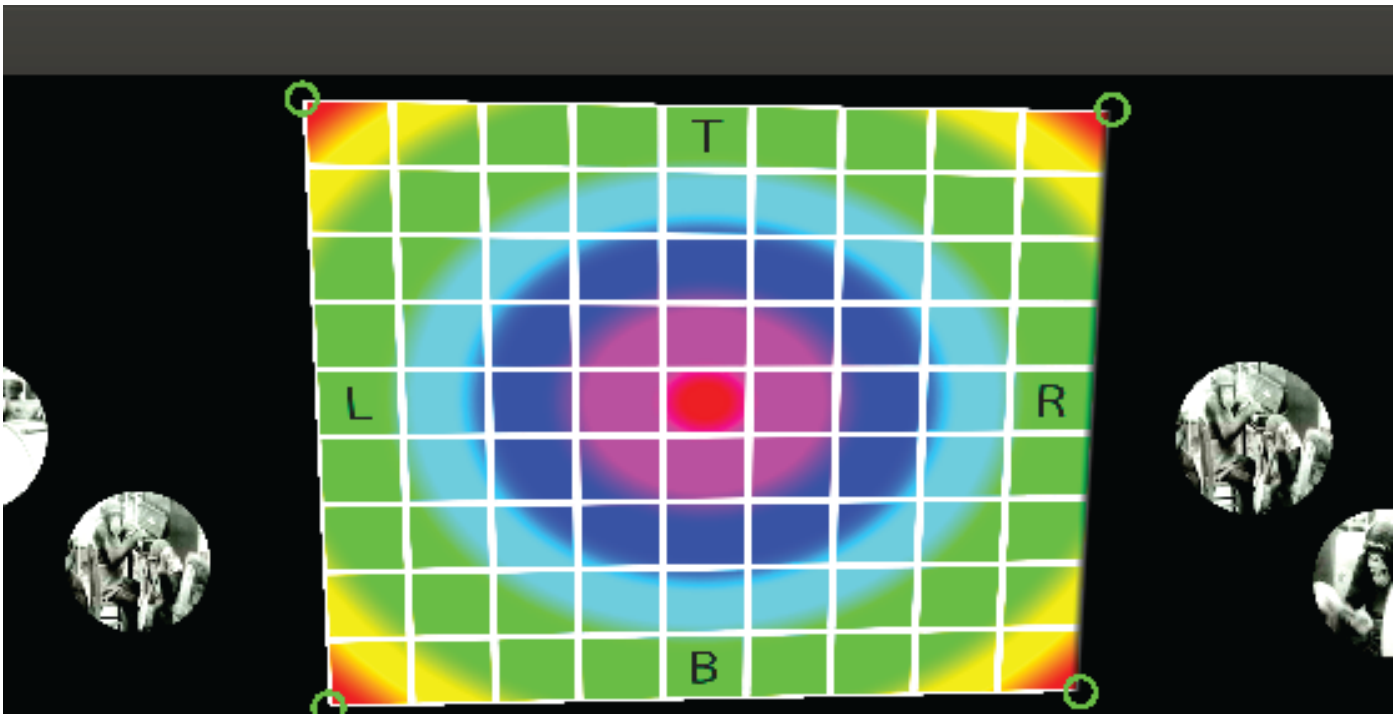


You can move the pins around manually on the gem window or precisely with coordinates numbers.

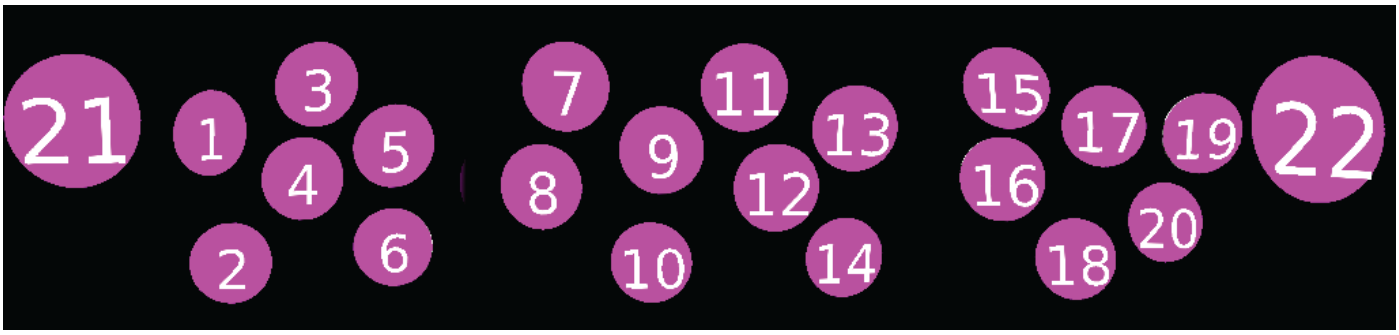
Grids will help you on the projection mapping tasks, here you can activate and adjust them.

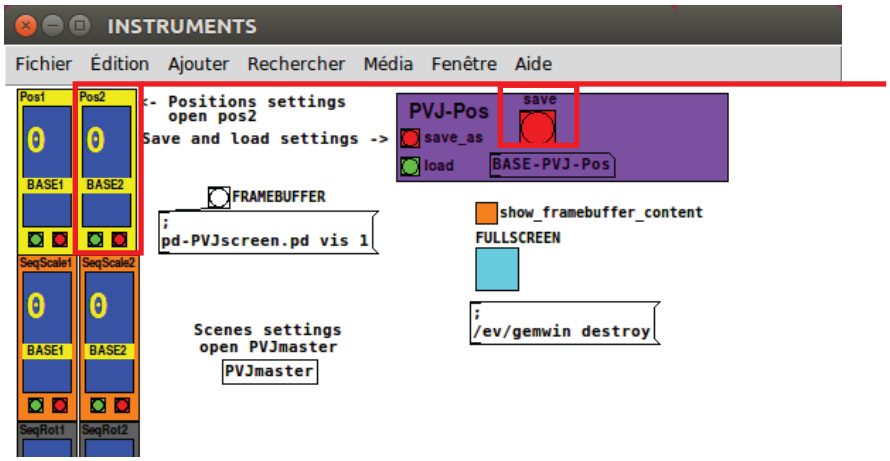
Integrated soft edges can be useful but you can also create masks on the previous window.





2. 2 Projectors

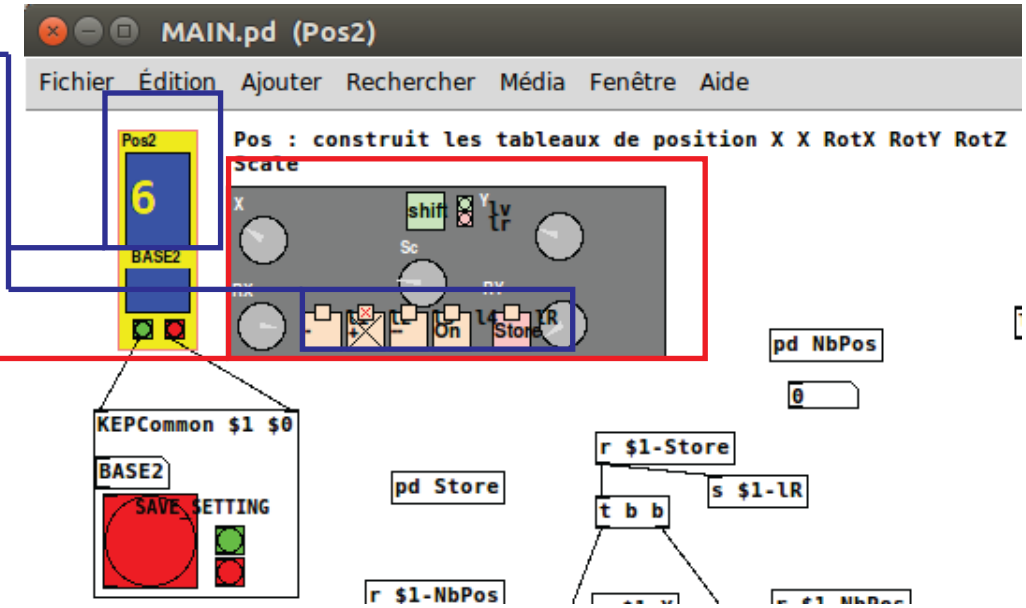




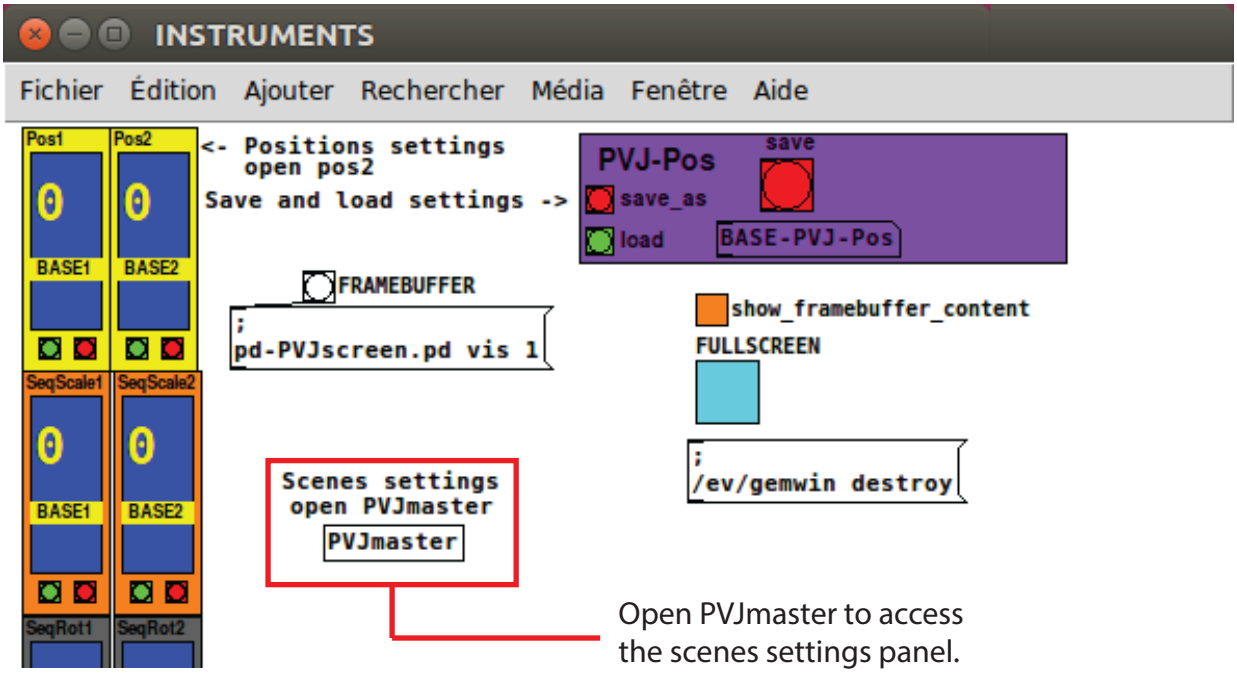
First, right click and open the Pos object. When all the settings are done, don't forget to save for further utilisation of the patch.

The number in the box shows which position you are setting. You can switch between them with + and -. When the position is right, click on store to save settings.

Apply manually x,y and scale transformation, then adjust your shape with x and y rotation.



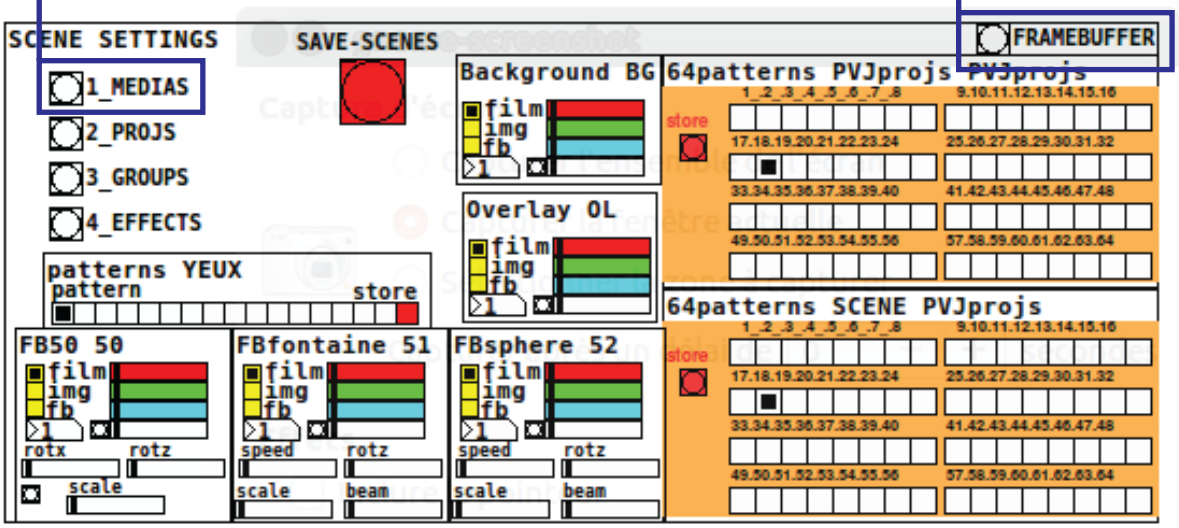
3. Scenes settings



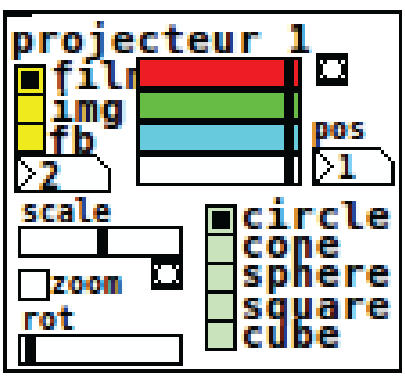
Open PVJmaster to access the scenes settings panel.

First import your media files by signaling pd their path. By default, they should be placed in «[YOUR HOME]/DATAS/PVJ» folder.

Shortlink to the framebuffer settings.



Open the 2_PROJS panel and set the projectors as needed. By default they are 22 but you can switch them on and off.



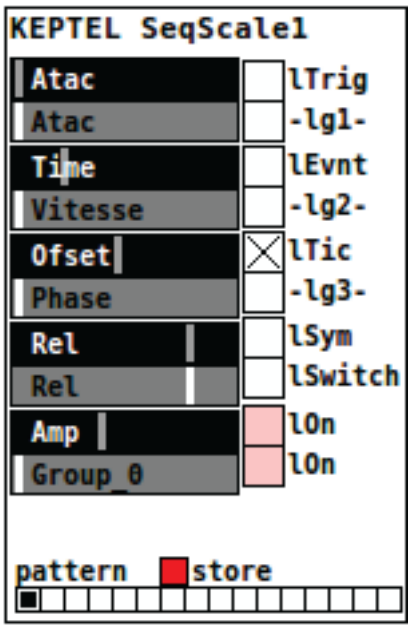
Set the type of media: film, image or framebuffer on the yellow selector and type the media corresponding number you need on the screen.
R,V,B and alpha sliders allow you to adjust media color individually.

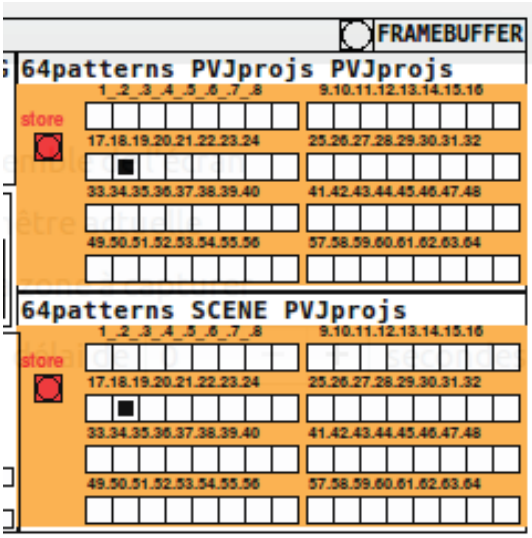
Then, adjust the scale and rotation if needed and select the buffer shape between circle, cone, sphere, square and cube.

Open the 4_EFFECTS panel to activate motors for predetermined effects. You can play with the position, alpha, scale or framerate of the projectors individually or by determined groups you can create in the 3_GROUPS panel.

Then you can save each motor pattern to reuse them.

We needed these motors to listen to the tempo of the live music and react at rythm. As Puredata sound treatment and Gem were in conflict, we wrote a script «LancePVJ.sh» to launch a second pd instance capable of treating the sound while PofVJ is opened.
This worked just fine on Linux but we don't know about other systems.

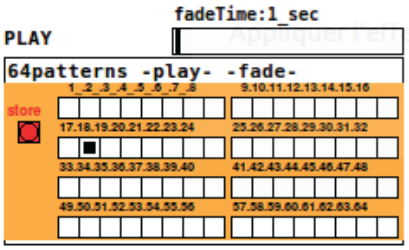




On this first 64 panel, you can store your desired patterns of backgrounds and projectors.
Because we needed them to show separately, proj21 and 22 are stored in «YEUX» selector.

Here are the final patterns, working with the previous 64 panel but also storing effects motors and YEUX patterns.

When everything is stored as wanted, don't forget to save!



To play live, we advise you to use this last 64 panel, allowing you to fade between scenes.

Métalu à Chahuter:
http://metaluachahuter.com/

Métalu.net:
http://metalu.net/
https://github.com/MetaluNet

Puredata:
http://puredata.info/

Gem:
http://gem.iem.at/

Extended View Toolkit:
http://extendedview.mur.at/
https://github.com/extendedview/

Pof:
https://github.com/Ant1r/ofxPof