# **SALOME**

## MPE Audio Sampler

#### INTRODUCTION

This project started as a utility for my own use. I wanted a tool to quickly grab a piece of audio and play it melodically. Specifically, I needed it to be super easy to make seamless loops and pads out of anything, without the need for tinkering with an audio editor.

The result is Salome. Her strength does not lie in an overwhelming feature list but in a lightning fast workflow. Just fire her up, record or import a sound snippet and go to town!

#### OVERVIEW

Salome lets you play a sample or recording over 4 octaves, using expressive MPE pads on the screen, external MPE controllers, and even using regular MIDI apps or controllers.

There are two ways to get samples into the app: record them (using the plugin as an audio effect to send sound through it) or by importing WAV/AIFF files. Obviously, you can save your recording (and its accompanying settings) into a patch for instant access later on.

Once you have a sound ready to be played, you can specify which modulations are applied (and how strongly) when you use the MPE "gesture" controls. Some modulations can be applied to movements on the Y-axis (which corresponds with velocity and pressure on a hardware controller) and others to the X-axis (usually reserved for pitch bends).

However, you are free to disable velocity and pitchbend and use the MPE controls for e.g. Filter LFO-rate and pan respectively.

Finally, you can switch the onscreen keypads to latch mode, transforming them essentially into a set of sliders for fading layers of sounds in and out gradually. Especially useful for soundscapes and ambient performances.

All the movements you make on the keypads are sent out of the plugin as MPE MIDI messages, so you can record them and replay them using your host (as long as the host supports MPE data, obviously).

## **RECORDING SOUND**

- Make sure Salome is loaded in an effect slot of your plugin host. This way you can send sound through it like you would with any effect plugin.
- Use the input gain knob (next to the record button) to adjust the level so no clipping/ overloading happens. The three level-LEDs serve as guidance for this; try to keep the level as much as possible in the "yellow" range.
- · Hit the record button to start recording, and once more the stop recording
- The entire recording will be automatically normalized to ensure consistent levels
- $\cdot$  You can now drag the loop-start and loop-end markers to indicate the part of the recording you want to use for your patch

#### IMPORTING SOUND

- You can import any soundfile recognized by and accessible to the iOS system (WAV, AIFF, MP3, etc.)
- · Press the WAV-button and navigate to the file you wish to import
- If the imported file is not in the key of C, you can press the TUNE button to adjust tuning and set the root-key. E.g. if the imported sound was an F-note, set the root to F to make sure the MIDI-mapping is corrected accordingly.
- The COARSE TUNE and FINE TUNE knobs adjust the tuning of the sample.. COARSE TUNE makes changes in semitone increments (+/-1 octave). FINE TUNE ranges +/-1 semitone.





### SAMPLE SECTION

This section lets you set some basic properties of how the sample is played when triggered. Any changes you make in this section will be effective in the next played notes. Any currently playing notes will remain unchanged.

LOOP MODE - there are three playback modes for your sample or recording:

- LOOP this loops playback in the selected area between the loopstart and loop-end sections. Looping continues until the note is released
- START > LOOP this starts playback at the beginning of the recording (or the end, if reverse is selected). Once the play pointer reaches the loop area, it will loop here in the same way as LOOP mode would
- ONE-SHOT play the selected area between the loop-start and loop-end points once, then stop playback

RUN FREE - this is only effective when in LOOP mode. When RUN FREE is disabled, every note will trigger from the start of the loop area, and all LFOs will retrigger. When enabled, both the playback position and all LFOs will pick up where the last note left them, adding unpredicability to the loop.

REVERSE - when enabled all sound will be played back in reverse. Additionally, it will also set the start position of the playback pointer to the end of the recording or the end of the loop area (depending on the LOOP MODE).

X-FADE - this determines how seamless the looping will be. It uses a crossfade between the end portion of the loop area and the beginning. The higher the X-FADE value, the smoother the crossfade sounds, but it will also blur out any details in the beginning of the recording.

 ${\tt LEVEL-the\ level\ of\ each\ individual\ note.\ Decrease\ this\ if\ the\ clip\ LED\ lights\ up.}$ 

#### FILTER

Each voice has its own multimode filter, so the cutoff frequency and LFO speeds can be modulated for each indivual note playing simultaneously.

MODE - selects the filter mode for all voices. Choose between traditional lowpass and bandpass modes and more exotic modes which use the four filter poles for e.g. phasing or dynamic notch filtering. BYPASS disables the filter for all voices

LFO - these settings let you set the depth, speed and shape of the filter LFO. The speed (rate) of the LFO can also be modulated in realtime using the keypads. In this case the LFO RATE setting is used as the center-value for the modulation which can then be sped up and slowed down using the MPE pads.

## ENVELOPE

 $\mbox{\sc ATTACK}\,/\,\mbox{\sc ReLEASE}$  - set the fade in and fade out times when triggering and releasing a note.

FILTER MOD - determines how strongly (if at all) the envelope slope is also applied to the filter. In effect, this lets you filter sounds in and out when triggering and releasing a note using the selected filter mode.

## OUTPUT

CHORUS - thickens the sound for a more "woolly" and spacious effect

 $\label{eq:AMBIENCE-a} AMBIENCE - a combination of reverb and delay effects to put the sound in a virtual space. The higher the setting of AMBIENCE, the bigger the virtual space.$ 

 $\label{thm:condition} \mbox{VOLUME - the overall output gain. Decrease this if the clip LED lights up}$ 

PANIC - press this button if there is a stuck note (e.g. when a note-off message gets lost). This should release all currently sounding notes.

#### **VELOCITY / Y-AXIS**

Here you specify which parameters are controlled by the combination of velocity and Y-axis movements (typically linked to pressure on hardware controllers)

VOLUME - typically velocity is mapped to volume, meaning that sound is played back louder if a key is pressed harder. However, you can also choose to disable this effect (all notes are equally loud; set the knob to 0) or choose an inbetween value

LFO RATE - this maps the rate (speed) of the filter LFO to the Y-axis. Meaning the filter LFO will speed up the further you crank up the slider. The effect is relative to the rate that is set in the FILTER section of the UI.

TREMOLO - this maps a volume LFO to the Y-AXIS. The knob sets a combination of rate and depth for the LFO.

If all knobs are set to 0, velocity and and Y-AXIS movements will not have any effect on the sound that is being played back.

## PITCHBEND / X-AXIS

Here you can set the effect of X-AXIS movements, which are equivalent to pitchbend changes on hardware controllers.

PITCHBEND - by default, pitch bend is mapped to these controls. You can set the range of bending up/down in semitones. This assumes that controllers use the standard MPE bend range of +/-48 semitones. If you controller uses different settings, you may need to play with the pitchbend knob to adjust the range.

If you want to use pitchbend and you're unsure about which setting to choose, I recommend leaving the range set to 48 semitones.

FILTER CUTOFF - this lets you control the cutoff frequency for each individual voice using left and rightward gestures. It uses the cutoff setting in the FILTER section as the center frequency.

PAN - this lets you change the panning by moving left and right. Use the maximum setting if you want to be able to pan hard-left and hard-right.

## MIDI & MPE CONTROL

When the plugin is loaded as an instrument you can control Salome using MPE and MIDI controllers, but also record any interaction with the keypads on the screen. The latter is output as MPE controller data, so it requires your host to be compatible with MPE.

You can also control the sounds using 'normal' MIDI, but it will only receive regular MIDI on MIDI Channel 1. Obviously, per-voice expression and modulations are not possible using regular MIDI, this requires MPE.

