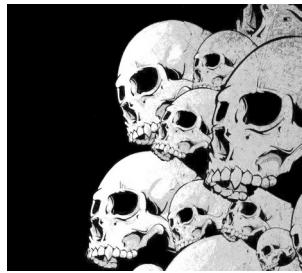


Y. Collette (ycollette.nospam@free.fr)
<https://audinux.github.io>





LMMS

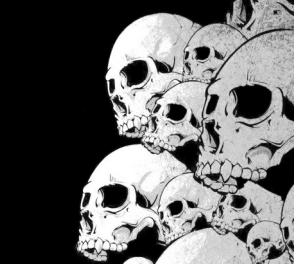


<https://lmms.io>

Demo

The screenshot displays the LMMS 1.0.0 interface with several open windows:

- Song-Editor**: Shows a timeline from 1 to 17 bars. Tracks include: Erroraz (circular icon), E-Guitar (square icon), Matrix Bass (triangle icon), Techno Bass (diamond icon), Sub Bass (wavy line icon), Strings (wavy line icon), and Bells (circle icon). Each track has volume and pan controls.
- Mélangeur d'effets**: An effect rack with 17 slots labeled 0 through 16. The slots contain various effects: Master, E-Guitar, Erroraz, Sub Bass, Techno Bass, Matrix Bass, Bells, Strings, Sweep, FX 9, FX 10, FX 11, FX 12, FX 13, FX 14, FX 15, and FX 16.
- Éditeur de rythme et de ligne de basse**: Shows a drum editor with tracks for Kick, Clap, Hat O, and Hat C. It includes a note editor window titled "Street Race" and "Street Race (Siegel - Speedtrack Remix)".
- Chaine d'effets**: A detailed view of the effect chain for slot 16, which includes a Spectrum Analyzer, Calf Filter LADSPA, and CR Eq2x2.

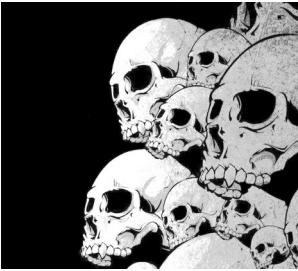


LMMS

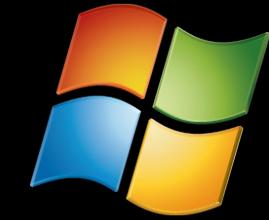
Other tools

Some comparisons between LMMS and:

- * Reason (another well-known tool from Mao);
- * Renoise (a tool with a slightly different interface);
- * Fruity loops (which inspired LMMS)



LMMS Reason



OS

The screenshot displays the LMMS Reason interface. On the left, the Browser shows a folder named "Kong Patches" containing various instrument and effect patches. The central area features the Reason rack, which includes a KONG Drum Designer module (showing a drum kit patch for "Burdus - BL"), a NN-NANO Sampler module (showing a patch for "Tm_Buww_TSB.aff"), and a Synchronous Timed Effect Modulator module. Below the rack is the Sequencer, showing a timeline with multiple tracks: "DTB Rock - Falun (80)", "Guitar", "Triangle", "Filler flute", and "Parsec 1". The bottom of the screen shows the transport controls and a groove quantize section.

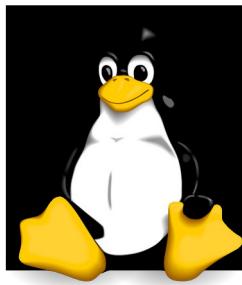
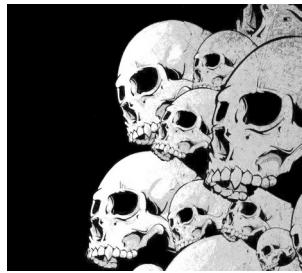
06/09/25

Y. Collette

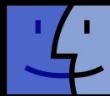
Copyright propellerheads

4



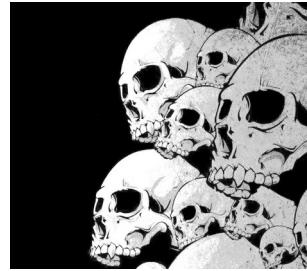


LMMS Renoise

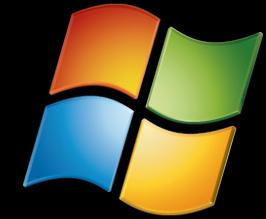


OS

The screenshot displays the interface of two digital audio workstations, LMMS and Renoise, running side-by-side. The top half of the screen shows the LMMS interface, which includes a track browser, master scopes, and a pattern editor. The bottom half shows the Renoise interface, featuring a sample browser, mixer, instrument editor, and sample editor. Both interfaces show multiple tracks with waveforms and various parameters being adjusted.



LMMS Fruity Loops



OS

The screenshot shows the FL Studio 20 interface. The top menu bar includes FILE, EDIT, CHANNELS, VIEW, OPTIONS, TOOLS, and HELP. The title bar says "FL STUDIO The Light". The main workspace displays a step sequencer with tracks for Vocals, Vocoder, Drums, Bass, and Bass LFO Speed. Below the sequencer is a track for Bass Filter envelope. The bottom section shows the Mixer - Insert 31, which contains numerous faders and controls for various audio channels. On the left, the Browser lists various plugins and effects used in the project.

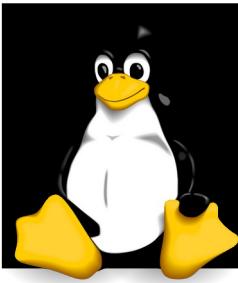
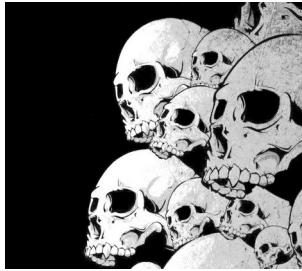
Copyright Image Line

Y. Collette

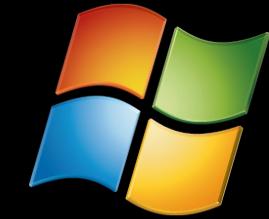
06/09/25

6





LMMS Reaper

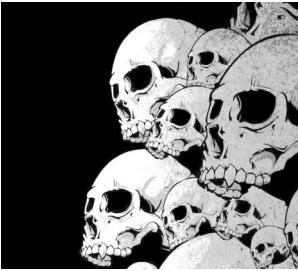


OS

Can run under Linux via Wine

Recently, a Linux version has existed

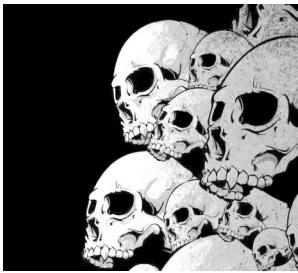




LMMS

Features :

- * A Song-Editor to compose songs
- * A beat+bassline-editor to create rhythmic tracks and bass lines
- * An easy-to-use piano-roll to edit patterns and melodies
- * A special effects mixer with 64 effects. A number of effects to the choice of the user, which allows unlimited mixing possibilities.
- * Several powerful LADSPA instruments and effects, with all those available in the different Linux distributions
- * Automation of completely configurable tracks
- * Support many free VST effects or not.
- * Compatible with several standards such as:
 - * Soundfont2 / soundfont3
 - * VST (I) / VST2 / VST3
 - * LADSPA / LV2
 - * Gus Patches
 - * MIDI
- * Import of MIDI and FLP files (FRUITYLOOPS® Project)



LMMS

The windows

Sample list



Mixer

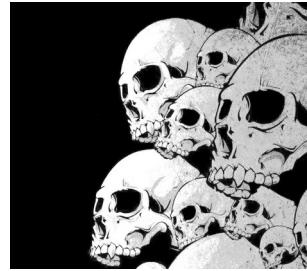


Song editor



Drum editor



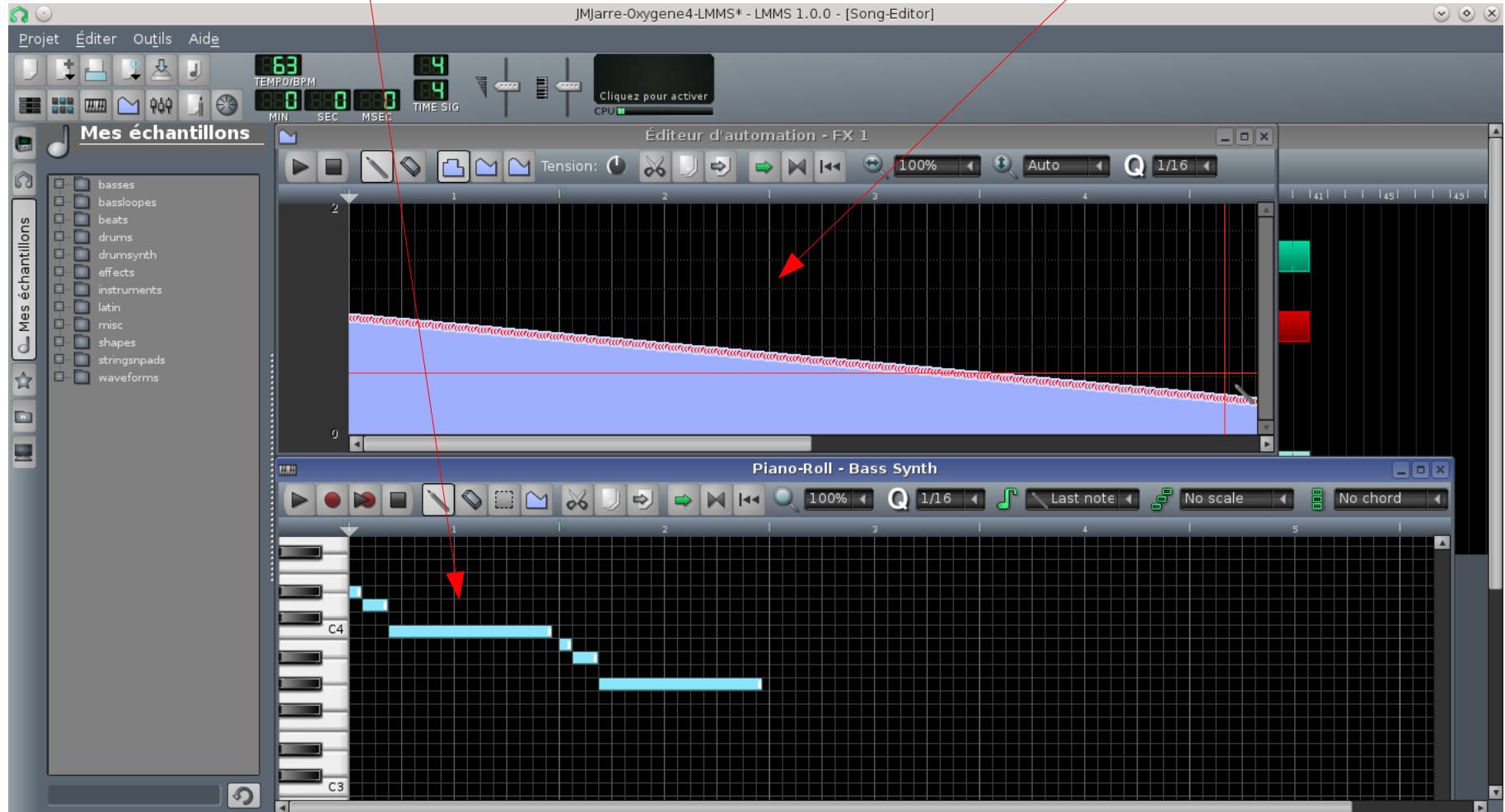


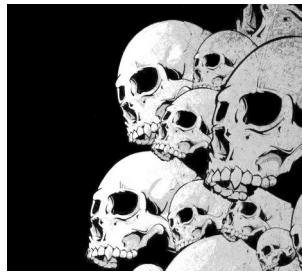
LMMS

Automation and virtual piano

The piano editor

The automation editor of a control





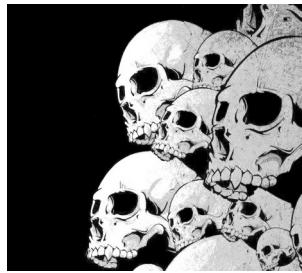
LMMS

Rhythm Editor

Addition / deletion
of measures



We add elements in the rhythm editor by making drag and drop of the elements of the resource bar or by double clicking on given resources (synth, sample).

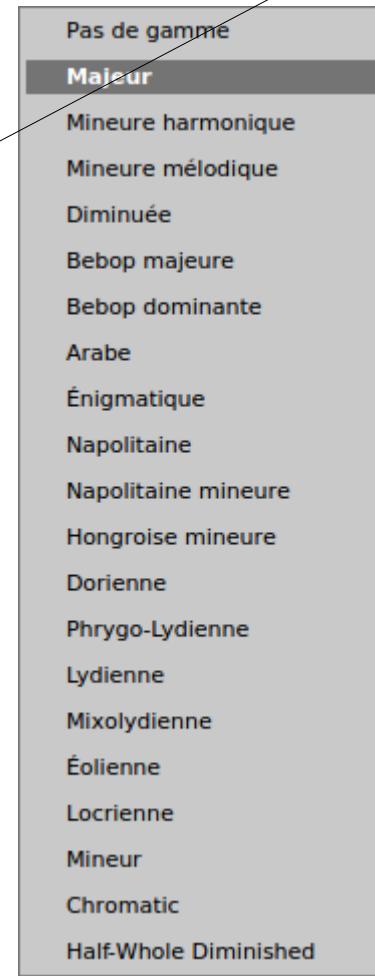


LMMS

The piano roll

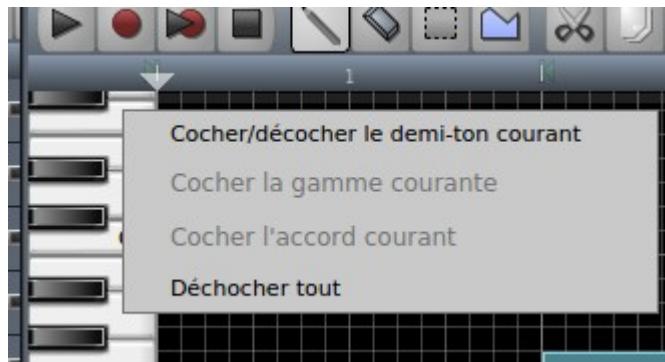
The piano roller has some interesting functions:

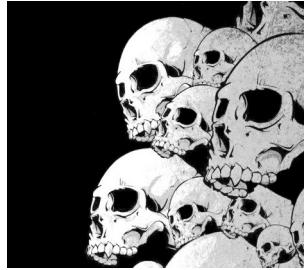
- Scale management
- Chord management



Pas d'accord	m7	m13
octave	m7b5	m-Maj13
Majeur	m7b9	Note complète
Majb5	m7add11	Pentatonique majeur
mineur	m7add13	Pentatonique mineur
minb5	m-Maj7	Japonaise "in sen"
sus2	m-Maj7add11	Blues
sus4	m-Maj7add13	8x {5?}
aug	9	
augsus4	9sus4	
tri	add9	
6	9#5	
6sus4	9b5	
6add9	9#11	
m6	9b13	
m6add9	Maj9	
7	Maj9sus4	
7sus4	Maj9#5	
7#5	Maj9#11	
7b5	m9	
7#9	madd9	
7b9	m9b5	
7#5#9	m9-Maj7	
7#5b9	11	
7add11	11b9	
7add13	Maj11	
7#11	m11	
Maj7	m-Maj11	
Maj7b5	13	
Maj7#5	13#9	
Maj7#11	13b9	
Maj7add13	13b5b9	
	Maj13	

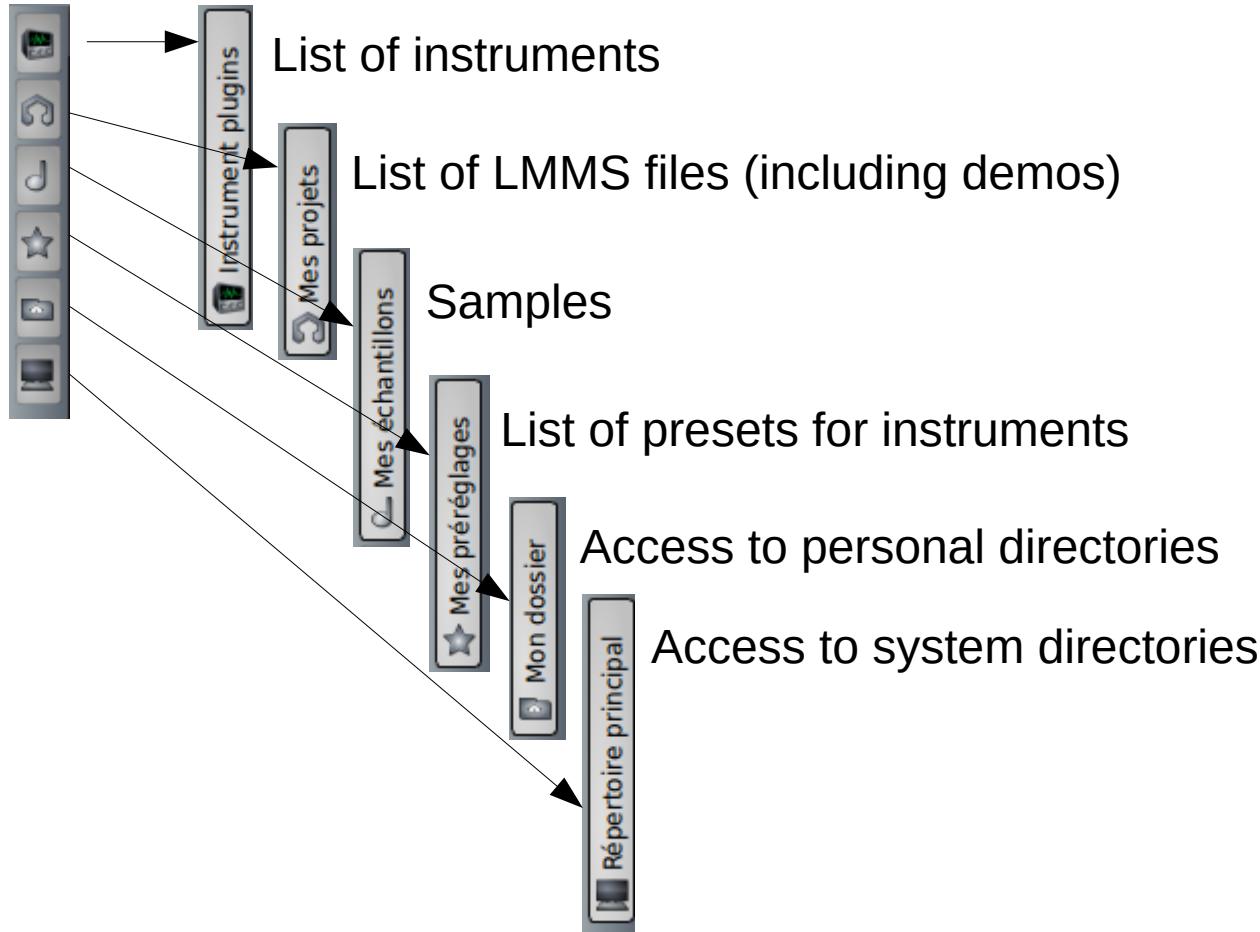
Right click on the keyboard ...

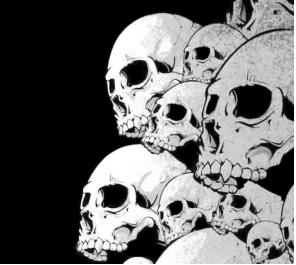




LMMS

The navigation bar





LMMS Directories

Plugins → Ladspa plugins

- Vst
- LV2

Presets → AudiofileProcessor Personal Settings of the Instruments

- Bitinvader
- ...
- ZYNADDSSUBFX

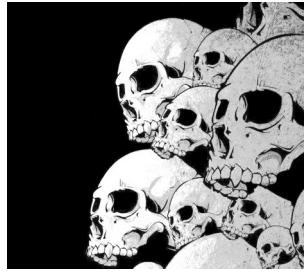
Projects LMMS files of the songs

Samples → SF2 personal samples

- Gig

Templates Song models

It is advisable to adjust the location of the LMMS directory in preferences and store all its elements in this directory. In this way, everything will be well integrated into the different LMMS menus.



LMMS

Synthesizers - ENV/LFO



Sound management

Mixer placement

Preset backup

Envelope management:

DEL: Delay

ATT: Attack

HOLD: maintain

DEC: Decreases

Sustain

REL: Release

AMT: modulation level for LFO

Low Frequency Oscillator management:

DEL: Modulation before modulation

ATT: Modulation before attack

SPD: LFO frequency

AMT: amplitude

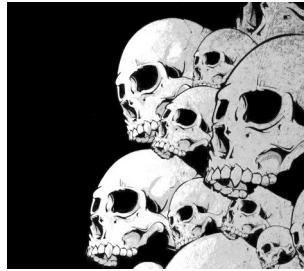
Instrument filter

On what the envelope and the LFO apply:

Volume: volume

Cutoff: the filter filter frequency

RESO: the filter resonance amplitude



LMMS

Synthesizers - Functions



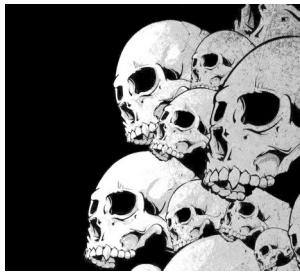
How is sound composed:

- its simple;
- notes stack.

Management of Arpeggio:

- Type of Arpeggio;
- Sense of Arpeggio;
- The scale mode.

Arpeggio speed management



LMMS

Synthesizers - Effects



Adding LADSPA effects on the instrument

Plugins available regardless of the platform:

Calf Calf

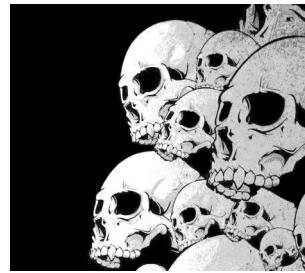
CAPS C* Audio Plugin Suite

CMT Computer Music Toolkit

Swh Steve Harris's

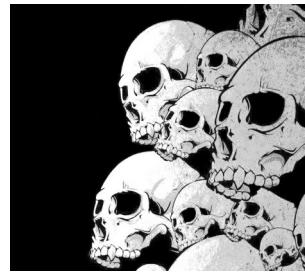
Tap Tom's Audio Processing

Some more LADSPA plugins are available on Linux distributions.



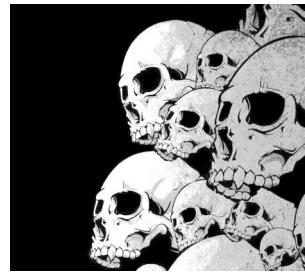
LMMS Synthesizers - List





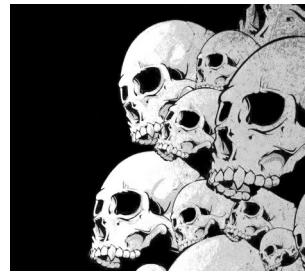
LMMS Synthesizers - List





LMMS Synthesizers - List

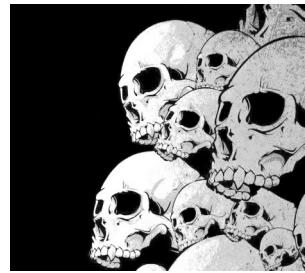




LMMS

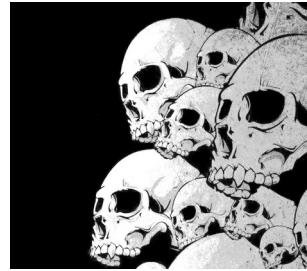
Synthesizers - List





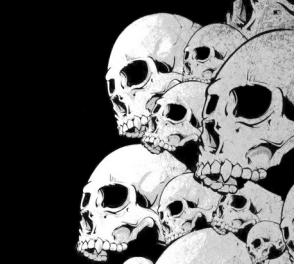
LMMS Synthesizers - List





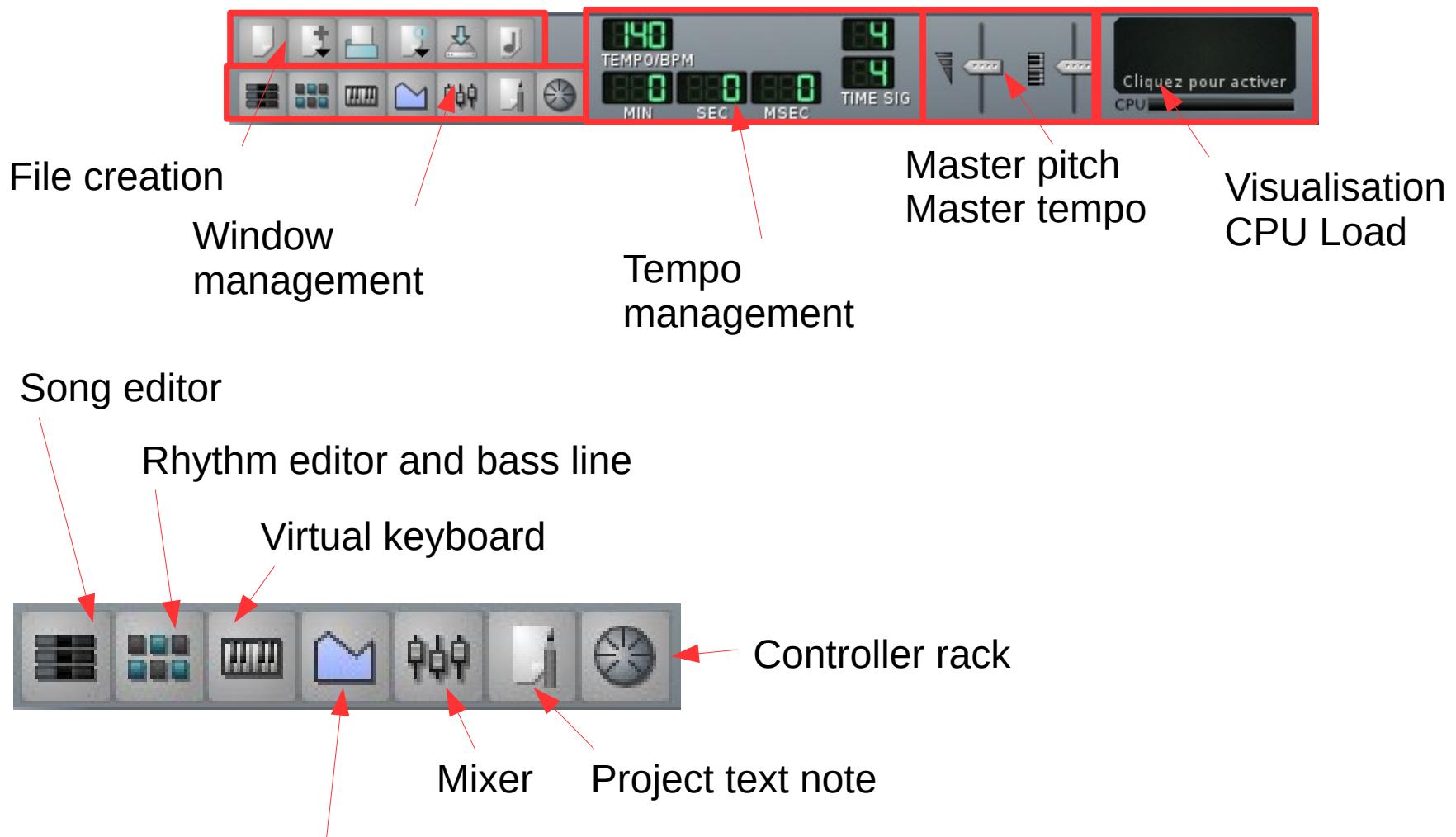
LMMS Synthesizers - List

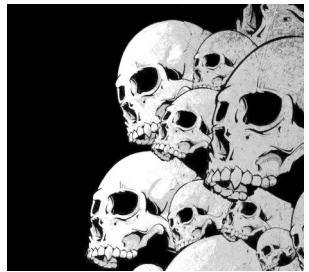




LMMS

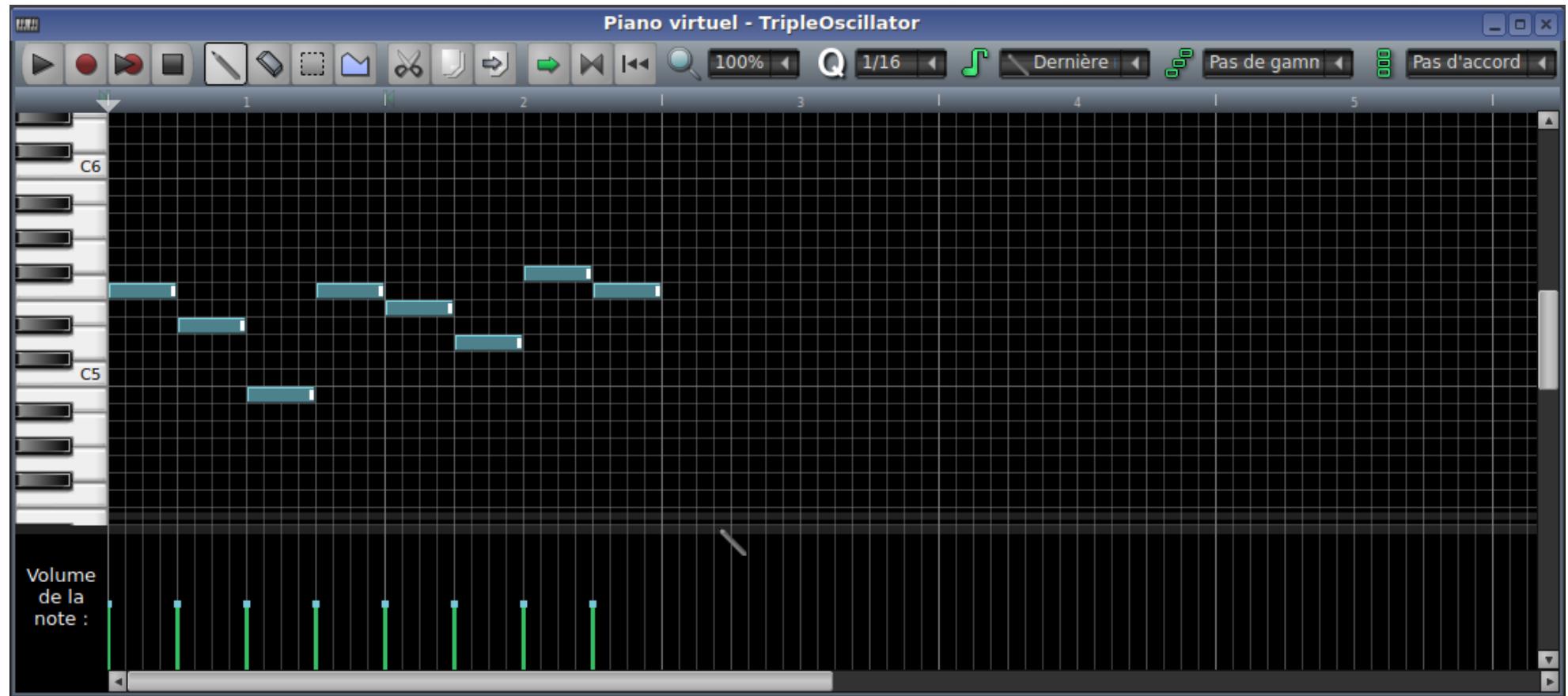
The toolbar

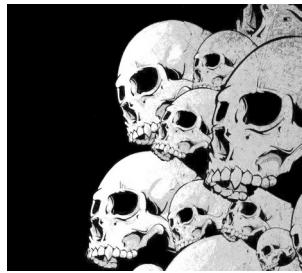




LMMS

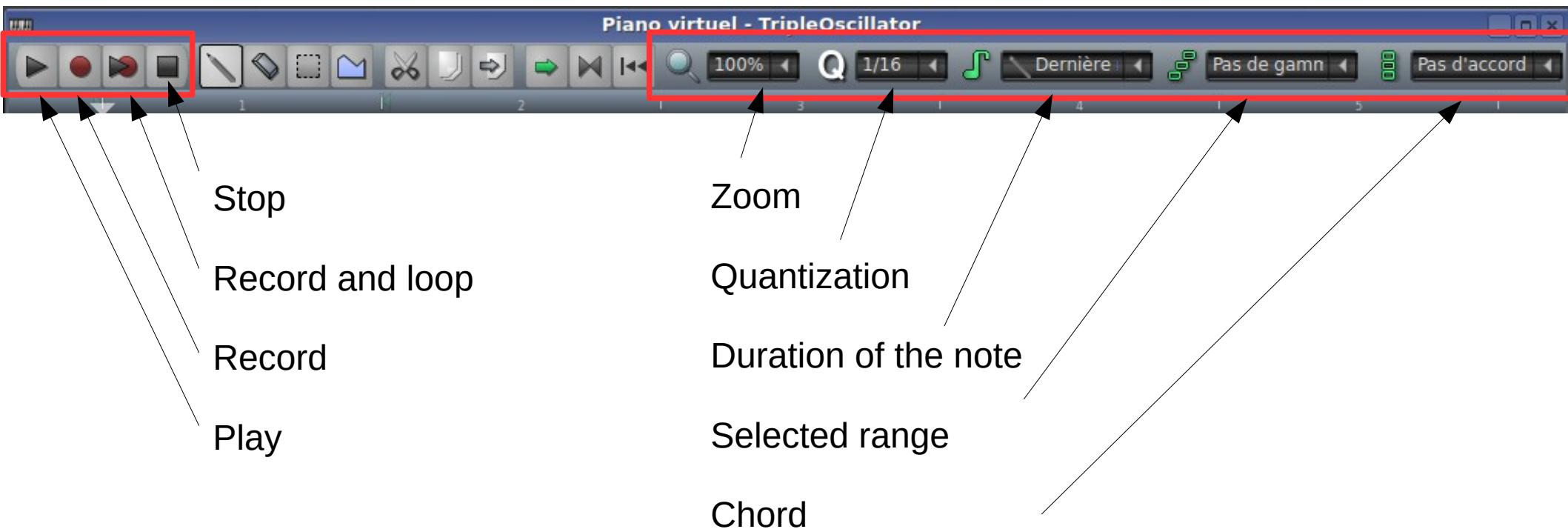
The piano-roll

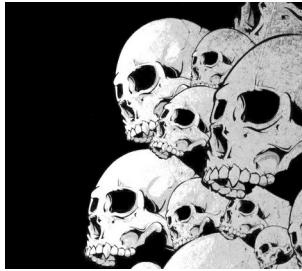




LMMS

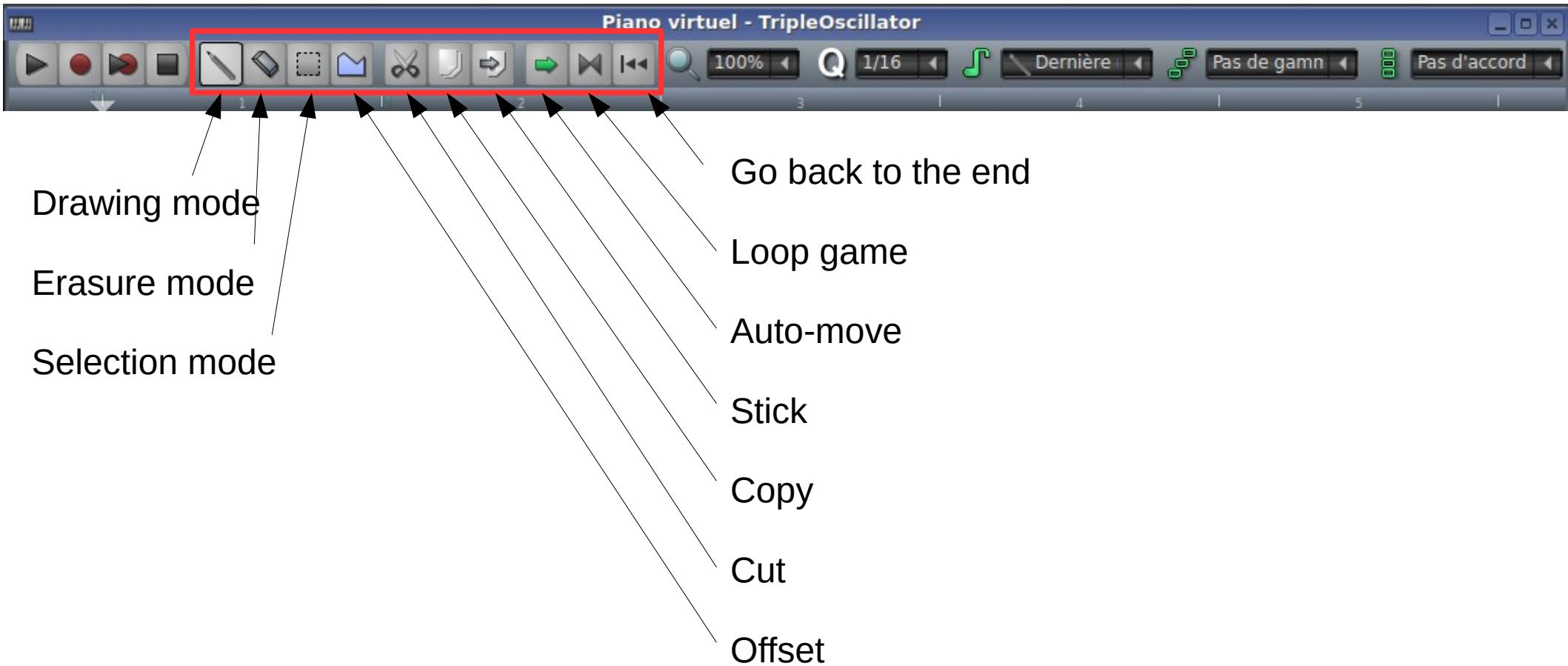
Piano rool / menu

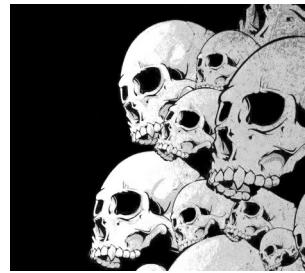




LMMS

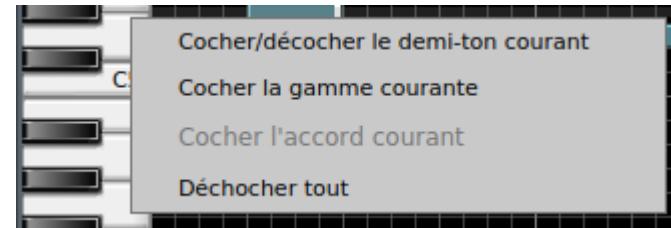
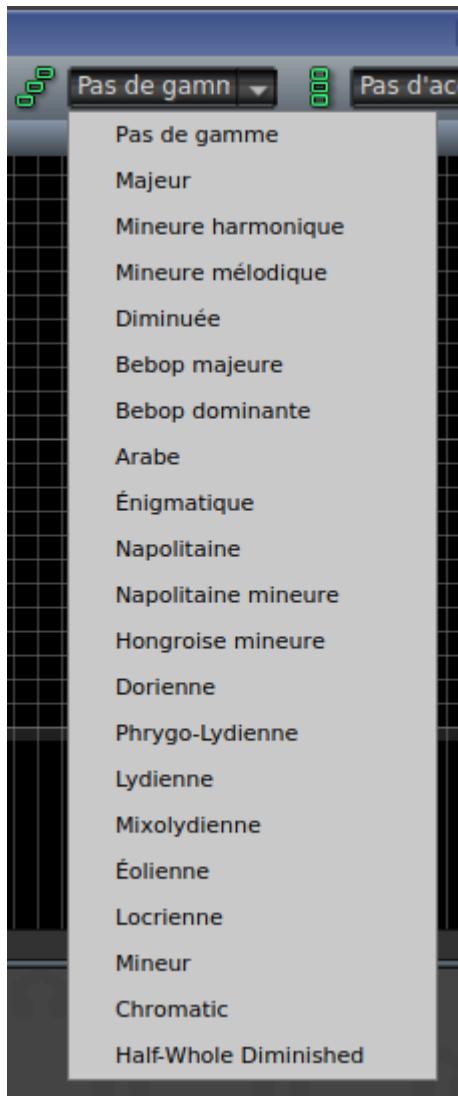
Piano roll / menu





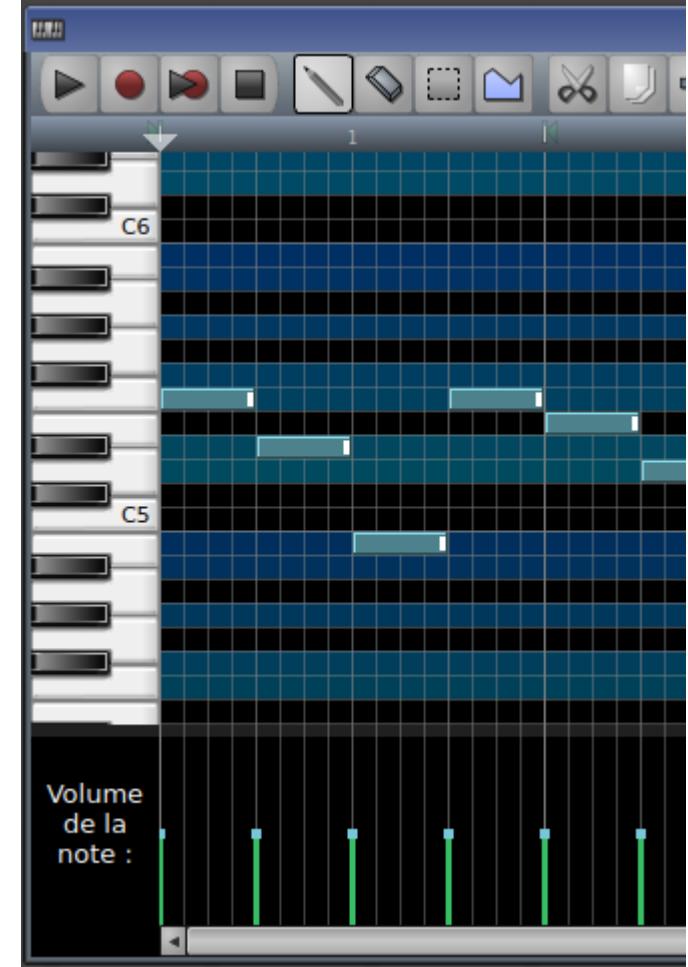
LMMS

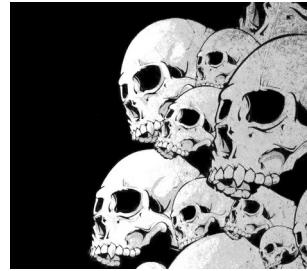
Piano roll – the scales



We select the range

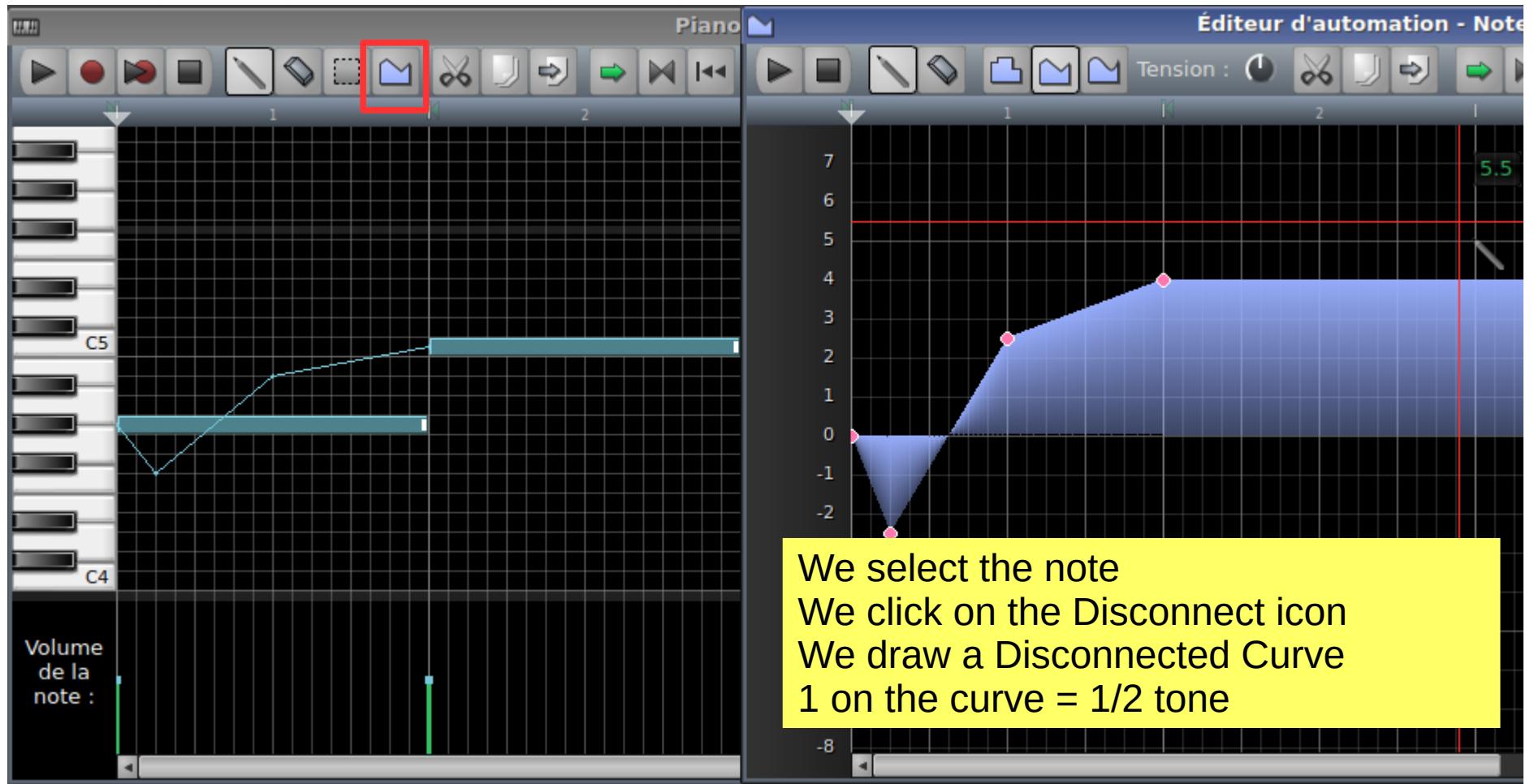
Right click on the piano then
"check the current range"





LMMS

Piano Roll – Disconnected



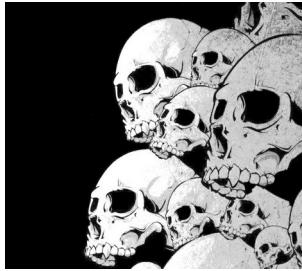
LMMS

The Mixer



Track mix level to the Master track
Channel number
Label + Activation indicator
Mixing track
Effect zone of the selected track

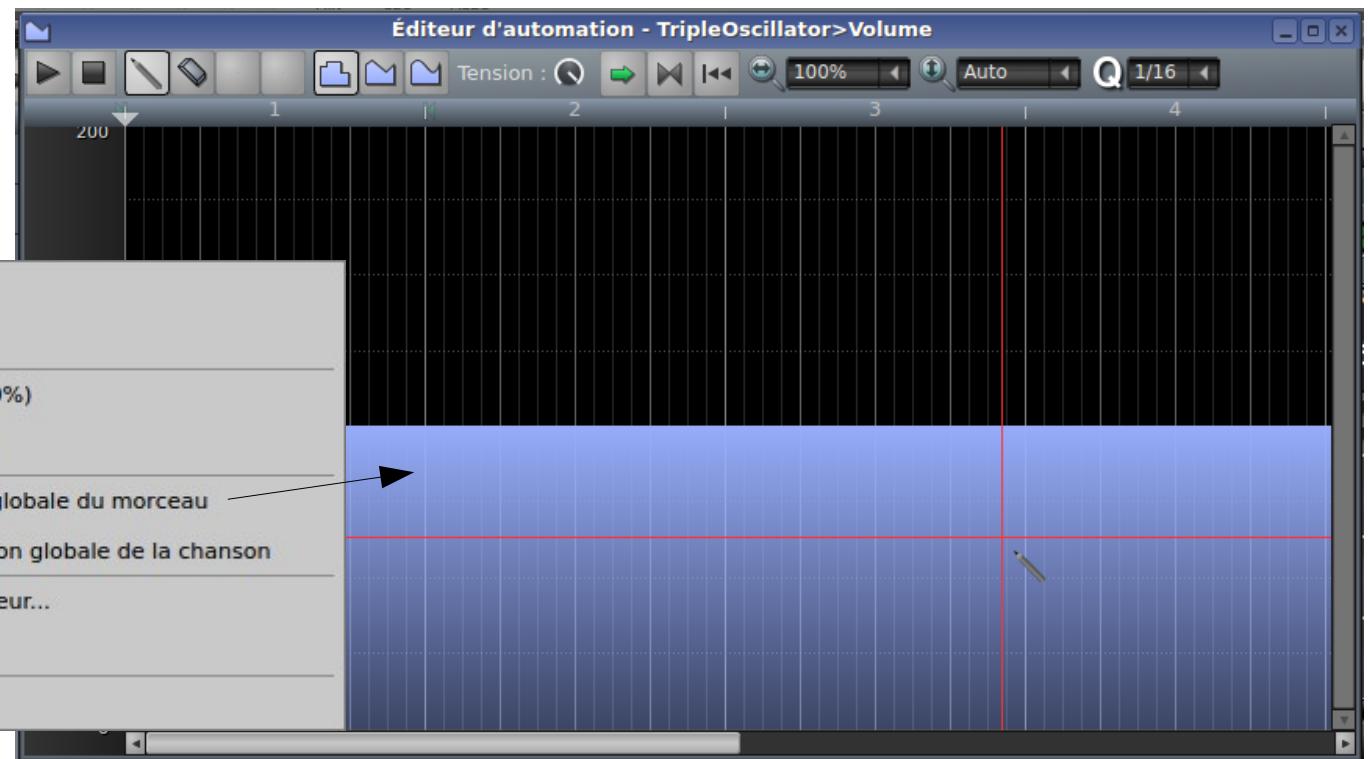
Please note, the Send button exists in versions 0.4, has disappeared in version 1.0 and returned to version 1.1

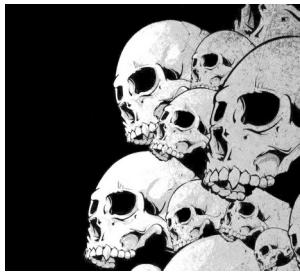


Automation

Global automation

A right click on the button to automate and then click on 'Edit the overall automation of the song'.
This automation track is not moving like a clip.
It remains global at the song.



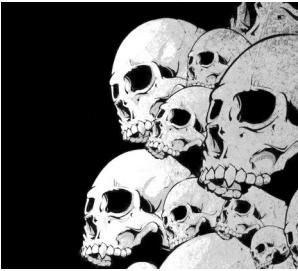


Automation

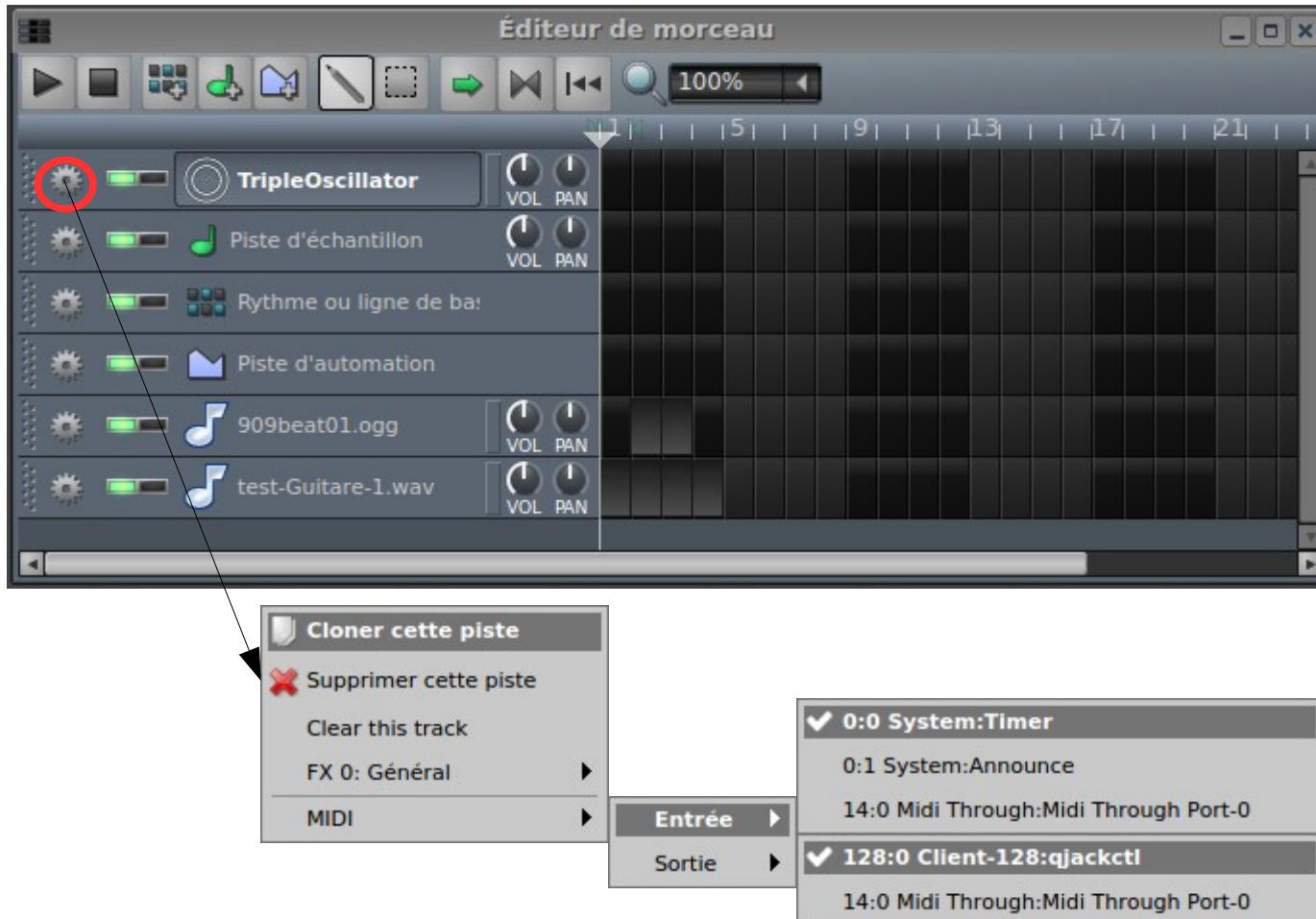
Local Automation

The screenshot shows the DAW's song editor with tracks listed on the left: 'TripleOscillator', 'Piste d'échantillon', 'Rythme ou ligne de ba...', and 'Piste d'automation'. The 'Piste d'automation' track is highlighted with a red box and has an arrow pointing from it to the 'TripleOscillator' plugin window on the right. The 'TripleOscillator' window displays its configuration and three oscillators (OSC 1, OSC 2, OSC 3) with various controls and a keyboard at the bottom.

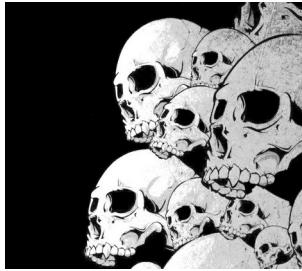
We make a CTRL + click and we slide / place the button that we want to automate on an automation track of the song editor.
This automation sequence can be copied on this automation track.



MIDI assignment



By making a left click on this button, the MIDI assignment menu appear.
It allows you to control an LMMS instrument with a MIDI keyboard.

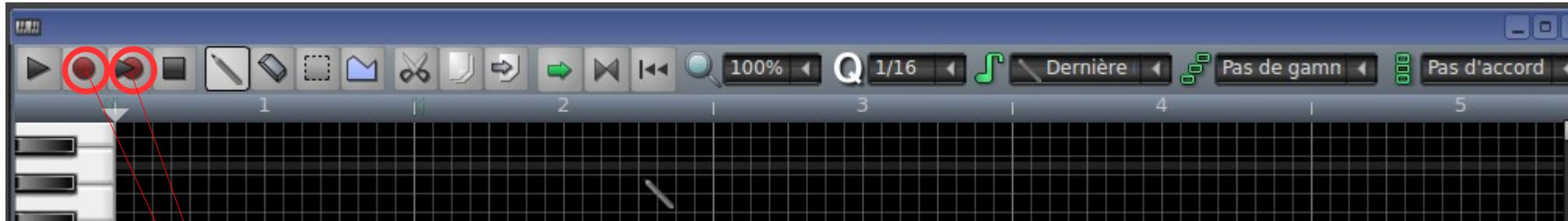


Recording Piano-roll audio track

Before being able to record from the MIDI in the Roll piano, a MIDI instrument must be assigned to the LMMS instrument (see [MIDI assignment](#)).

Once this is done, we open the Piano Roll of the LMMS instrument track that we want to record.

We can then make 2 types of recording:

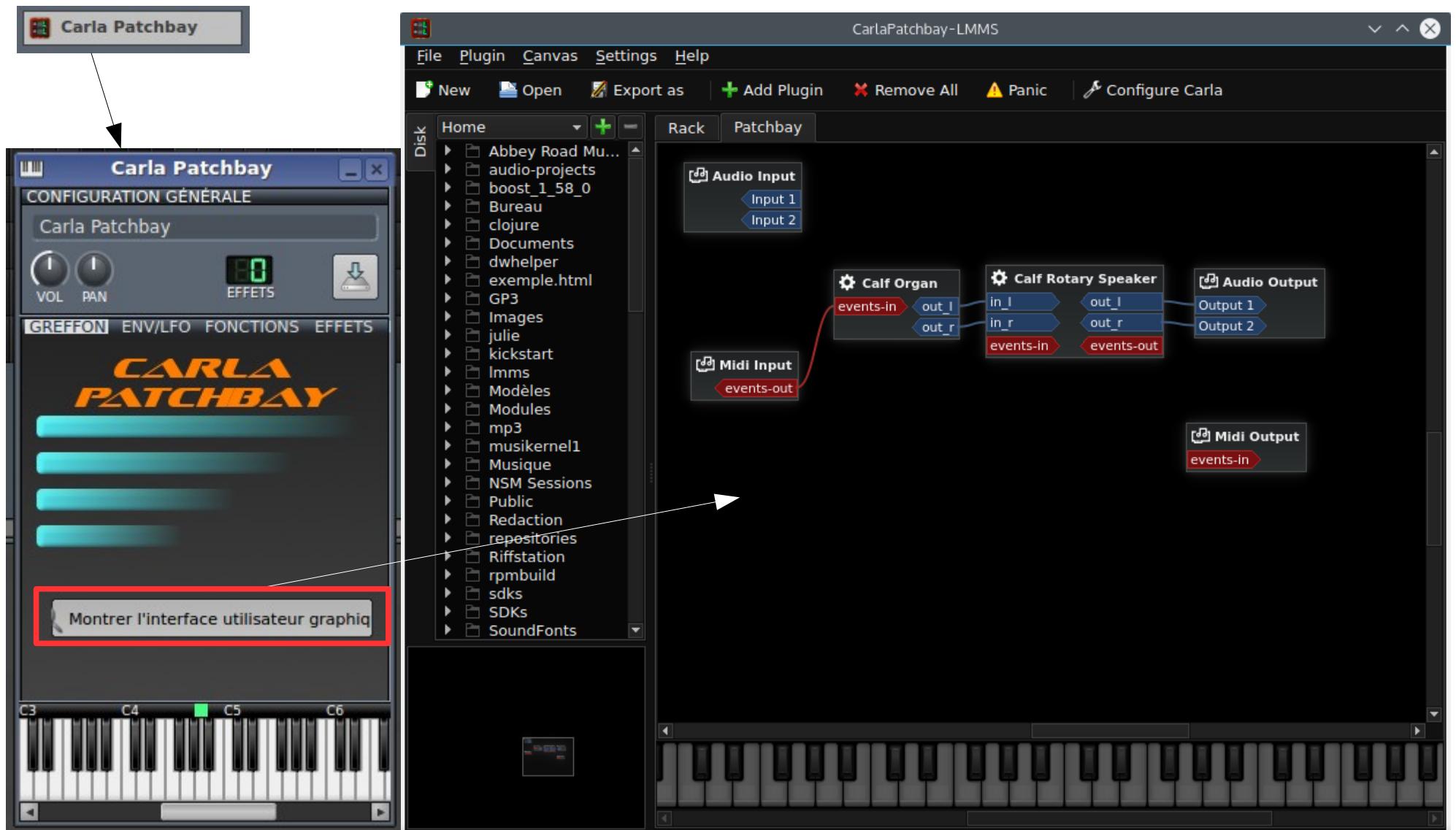


Recording from a MIDI source while the song is played.

Recording from a MIDI source. The song is not played.

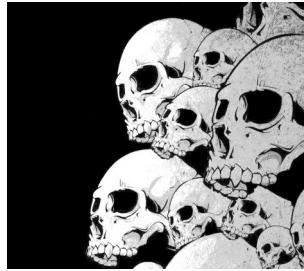
LMMS

Carla Patchbay



LMMS

Carla Rack



The screenshot shows the LMMS application window titled "CarlaRack-LMMS". The menu bar includes File, Plugin, Settings, and Help. The toolbar has New, Open, Export as, Add Plugin, Remove All, Panic, and Configure Carla. A sidebar on the left shows a file tree under "Disk" with various folders like Abbey Road Mu..., audio-projects, boost_1_58_0, Bureau, clojure, Documents, dwhelper, exemple.html, GP3, Images, julie, kickstart, lmms, Modèles, Modules, mp3, musikernel1, Musique, NSM Sessions, Public, Redaction, repositories, Riffstation, rpmbuild, sdks, SDKs, SoundFonts, Téléchargements, tmp, TuxGuitar, and Vidéos. The main workspace displays two modules: "Calf Organ" and "Dyson compressor". The "Calf Organ" module has knobs for 16', 51, 8', 4', 22, 2', and 13. The "Dyson compressor" module has knobs for Pk lmt, Release, Fst cmp, Cmprssn, Dry/Wet, and Volume. An arrow points from the "Carla Rack" button in the top-left corner of the LMMS window to the "Carla Rack" configuration window. Another arrow points from the "Montrer l'interface utilisateur graphiq" (Show graphical user interface) button in the Carla Rack configuration window to the graphical interface of the Carla Rack module in the LMMS workspace.

Carla Rack

File Plugin Settings Help

New Open Export as + Add Plugin ✘ Remove All ⚠ Panic 🔍 Configure Carla

Disk Home + -

- Abbey Road Mu...
- audio-projects
- boost_1_58_0
- Bureau
- clojure
- Documents
- dwhelper
- exemple.html
- GP3
- Images
- julie
- kickstart
- lmms
- Modèles
- Modules
- mp3
- musikernel1
- Musique
- NSM Sessions
- Public
- Redaction
- repositories
- Riffstation
- rpmbuild
- sdks
- SDKs
- SoundFonts
- Téléchargements
- tmp
- TuxGuitar
- Vidéos
- bell_lac2013.jpg
- Blood_Stock.jpg
- cake_mozza.odt
- color_blood_ba...
- color_skull_1.jpg
- color_skull_2.jpg

Carla Rack

CONFIGURATION GÉNÉRALE

Carla Rack

VOL PAN EFFETS

GREFON ENV/LFO FONCTIONS EFFETS

CARLA RACK

Montrer l'interface utilisateur graphiq

C3 C4 C5 C6

Carla Rack

CarlaRack-LMMS

On/Off Calf Organ

GUI Edit Remove

16' 51 8' 4' 22 2' 13

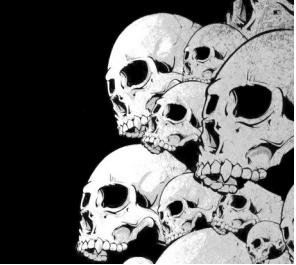
MIDI AUDIO OUT

Calf studiogear

On/Off Dyson compressor

Pk lmt Release Fst cmp Cmprssn

Dry/Wet Volume



LMMS Preferences

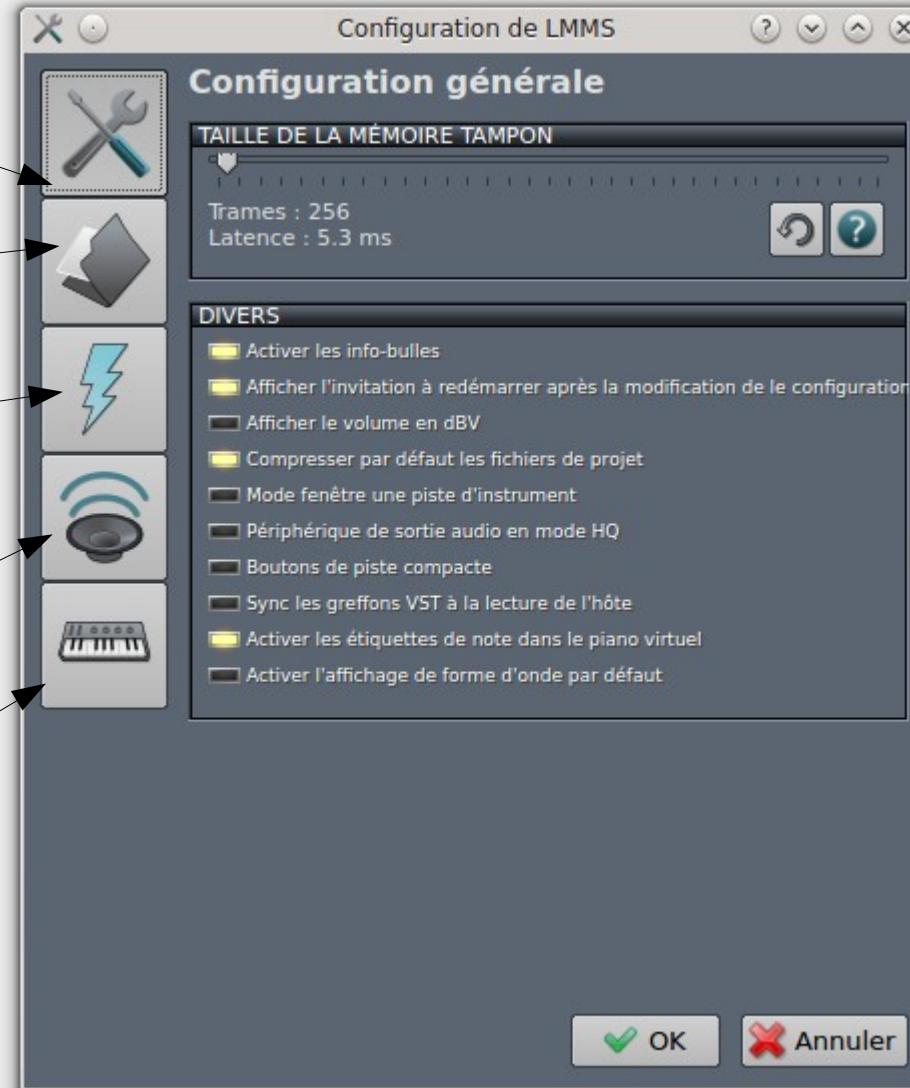
General Configuration

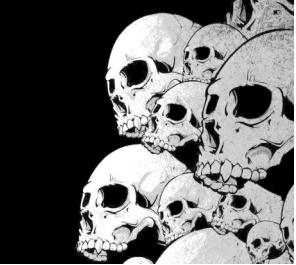
The paths

Performances

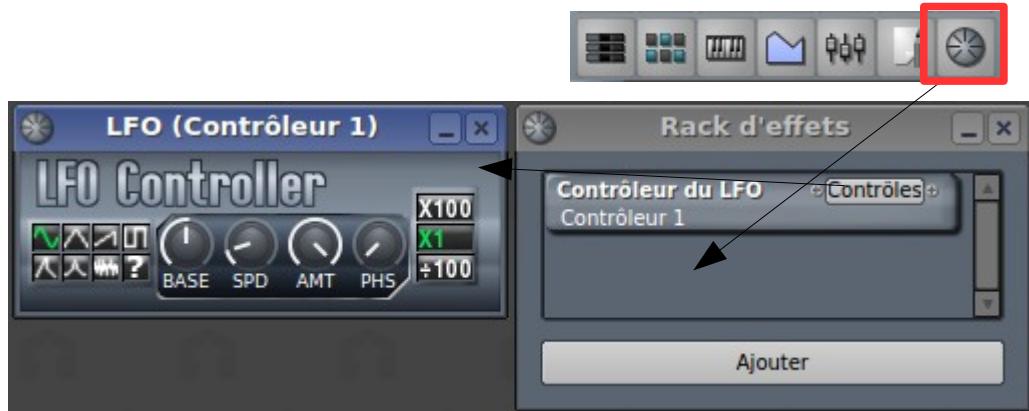
Configuration Audio

Configuration MIDI





LMMS Controllers



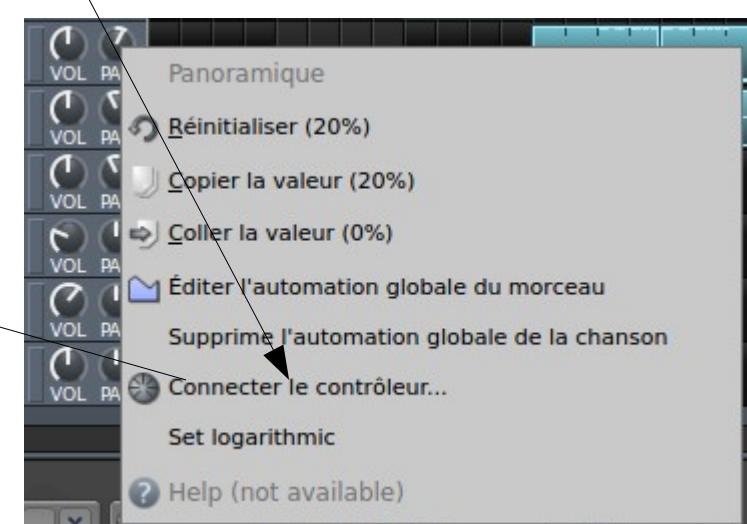
If we want to use a
MIDI controller

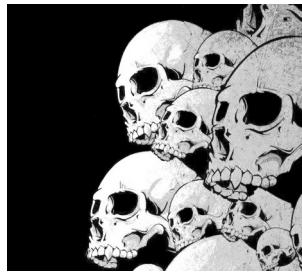
If you want to use
an automatic
controller



A controller is an automatic oscillator that is used to vary a button and produce interesting effects.

We right click on the button that we want to vary then on 'Connect the controller'.





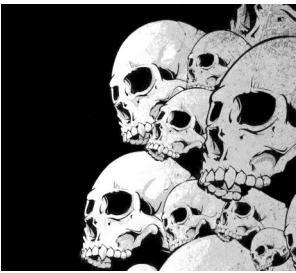
LMMS Controllers



BASE: Value of offset
AMNT: amplitude of the effect
MULT: multiplier
ATCK: Attack
DCAY: Decay

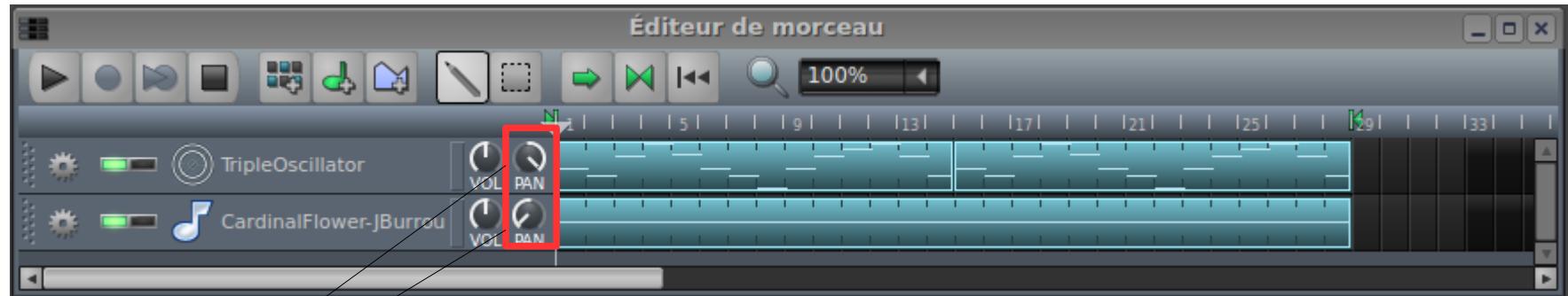
$$p(t) = M \cdot (B + A \cdot s(t))$$

We select the instrument or track whose sound amplitude for the controller we want to use. We add the 'Peak Controller' effect.
This effect then appears in the list of automatic controllers.



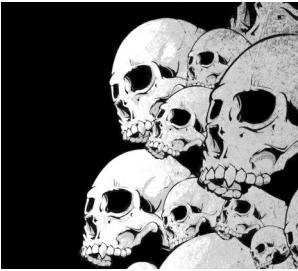
LMMS

The Vocoder



Multiband filter to adjust the rendering.

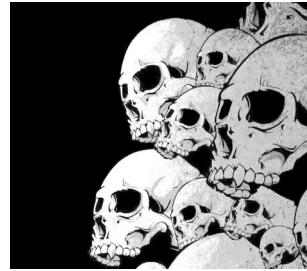




Nice drum breaks

Extract from this Wikipedia page. There is also this YouTube page that gives good ideas.

- "Fencewalk" by Mandrill
- The Amen Break from "Amen, Brother" (1969) by The Winstons
- "Funky Drummer" by James Brown
- "Scratchin'" by Magic Disco Machine
- "Scorpio" by Dennis Coffey
- "Careless Whisper" by George Michael
- "Back Burner" by August Burns Red
- "Super Sperm" by Captain Sky
- "Mardi Gras" by Bob James
- "Soul Makossa" by Manu Dibango
- "In The Bottle" by Gil Scott-Heron
- "Everlong" by Foo Fighters
- "Spider in the Shower" by Gil Scott-Heron
- "One" by Metallica
- "Geek U.S.A" by The Smashing Pumpkins
- "Apache" by the Incredible Bongo Band.



Divers

A list of good quality samples:

https://wiki.laptop.org/go/Free_sound_samples

Some sites where to download samples:

<https://freesound.org>

<https://archive.org>

Recover synth settings, LMMS and other pieces:

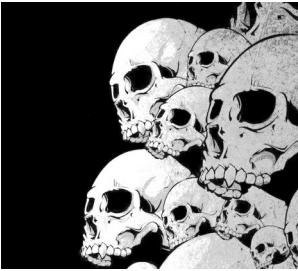
<https://lmms.io/lsp>

The LMMS site:

<https://lmms.io>

Access to source code:

<https://github.com/LMMS/LMMS>



LMMS Tutorials

Tutorial 1: tuto_drum_master.mmpz → We send all the tracks of a drum to a main track which we can use to adjust the general level of the battery

Tutorial 2: tuto_dub.mmpz → Automate the sending of a part of the sound of a track to another track (via an automation on the level level on a mixer bar). On this new track, the sound feeds a delay effect with Feedback and a Reverb. The whole gives a widely used effect in the Dub music style.

Tutorial 3: tuto_loop.mmpz → we simply put a recording on a LMMS track. The recording is played at the right speed to the metronome and we add a brief fade in opening and closing to avoid any clicks due to a sudden variation of the signal.

Tutorial 4: Tuto_Spectrum.mmpz → Illustration of the use of the Spectrum effect allowing to visualize the spectrum of a signal. It can be useful to control certain effects.

Tutorial 5: tuto_vocoder.mmpz → How to configure a vocoder effect under LMMS.