

## A 3D rendering of the word "Divers" in a bold, metallic, sans-serif font. The letters are thick and have a brushed metal texture with a gradient from light gray to dark gray. The word is slanted slightly to the right.



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# Le Live Coding 1/5

SuperCollider : <https://supercollider.github.io/>

```
play{SinOsc.ar(OnePole.ar(Mix( LFSaw.ar([1,0.99],  
[0,0.6],2000,2000).trunc([400,600])*[1,-1] ),0.98)).dup*0.1}
```

<https://www.youtube.com/watch?v=wNWFSladAH8>

CSound : <http://www.csounds.com/>

```
sr = 44100  
ksmps = 32  
nchnls = 2  
0dbfs = 1  
  
instr 1  
  
iflg = p4  
asig oscils .7, 220, 0, iflg  
outs asig, asig
```

QuteCsound

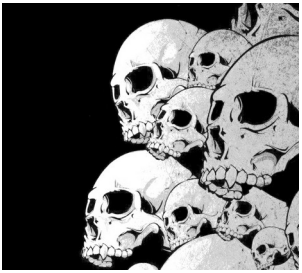
Chuck : <http://chuck.cs.princeton.edu/>

```
// set the global gain  
.1 => dac.gain;
```

```
// connect  
SinOsc a => dac;  
110.0 => a.freq;  
1::second => now;  
SinOsc b => dac;  
220.0 => b.freq;
```

miniAudicle

<https://www.youtube.com/watch?v=BHooZu5xzAs>  
<https://www.youtube.com/watch?v=vNrRdyDIniQ>



# Le Live Coding 2/5

<http://sonic-pi.net/>

```
1 # Rerezzed
2
3 # Coded by Sam Aaron
4
5 use_debug false
6 use_random_seed 103
7 notes = (scale :e1, :minor_pentatonic, num_octaves: 2).shuffle
8
9 live_loop :rerezzed do
10   tick reset
11   t = 0.02
12   sleep -t
13   with_fx :bitcrusher do
14     s = synth :mod_dsaw, note: :e2, sustain: 8, note_slide: t, release: 0
15     64.times do
16       sleep 0.125
17       control s, note: notes.tick
18     end
19   end
20 end
```

Buffer 0 Buffer 1 Buffer 2 Buffer 3 Buffer 4 Buffer 5 Buffer 6 Buffer 7 Buffer 8 Buffer 9

1 Bienvenue à Sonic Pi  
1.1 Codage en 'live'  
1.2 Exploration de l'interface  
1.3 Apprendre en jouant  
2 Synthés  
2.1 Vos premiers Beeps

Tutoriel Exemples Synthés Fx

music\_as :code  
code\_as :art

v2.10-dev

Sonic Pi v2.10.0-dev-24344 on Linux



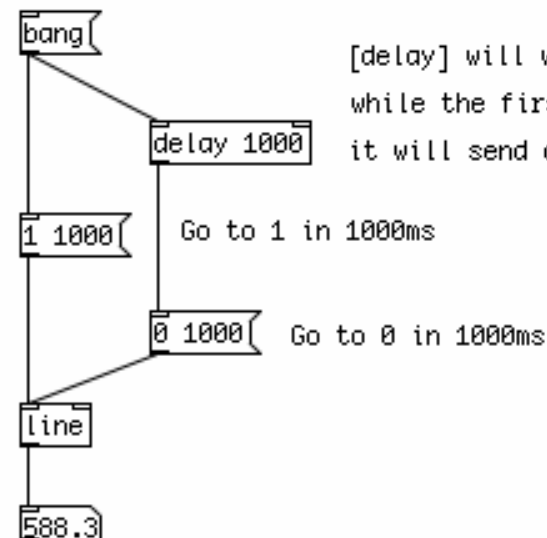
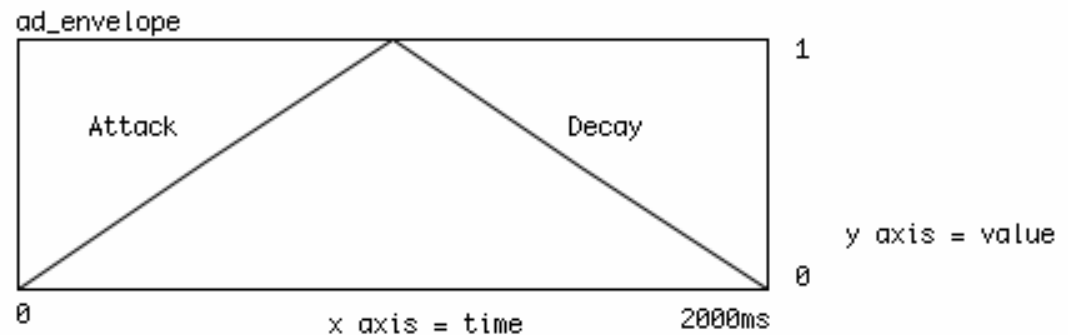
# Le Live Coding – 3/5

Pure Data : <http://puredata.info/>

Un outil de programmation  
visuel dédié à l'audio et à la  
vidéo.

eg2.pd

Graphical representation of a simple up/down, or  
Attack/Decay (AD) envelope.



[delay] will wait 1000ms after the input "bang",  
while the first ramp is being executed, and then  
it will send a "bang" to trigger the second ramp.



# Le Live Coding – 4/5

ProjectM : un diffuseur de vidéo synchronisé à l'audio

<http://projectm.sourceforge.net/>

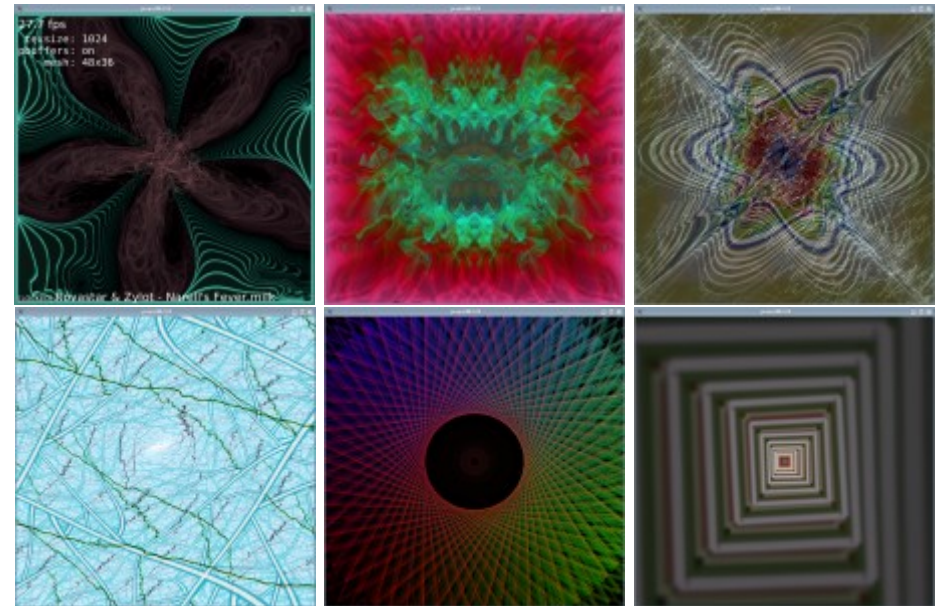
Code issu de WinAmp.

Pour lancer la version Jack de ProjectM

```
$ projectM-jack
```

Pour lancer la version PulseAudio de ProjectM

```
$ projectM-pulseaudio
```



F1 : Aide

F2 : Titre de la chanson

F3 : Nom du preset

F4 : Paramétrage du rendu

F5 : FPS

F : Plein écran

L : Verrouiller / Déverrouiller le preset

M : Affiche le menu

R : Preset aléatoire

N : Preset suivant

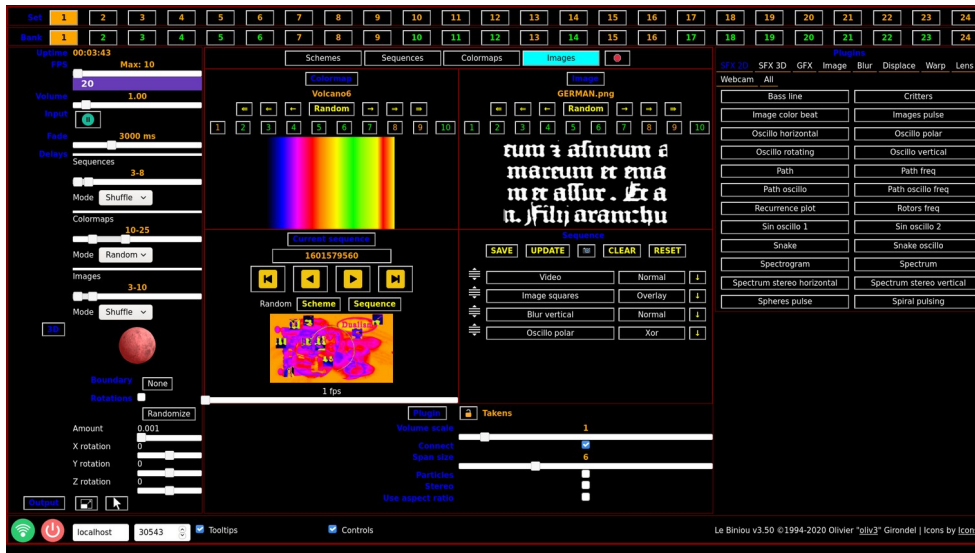
P : Preset précédent





# Le Live Coding – 5/5

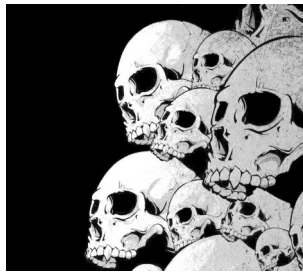
<https://biniou.net/>



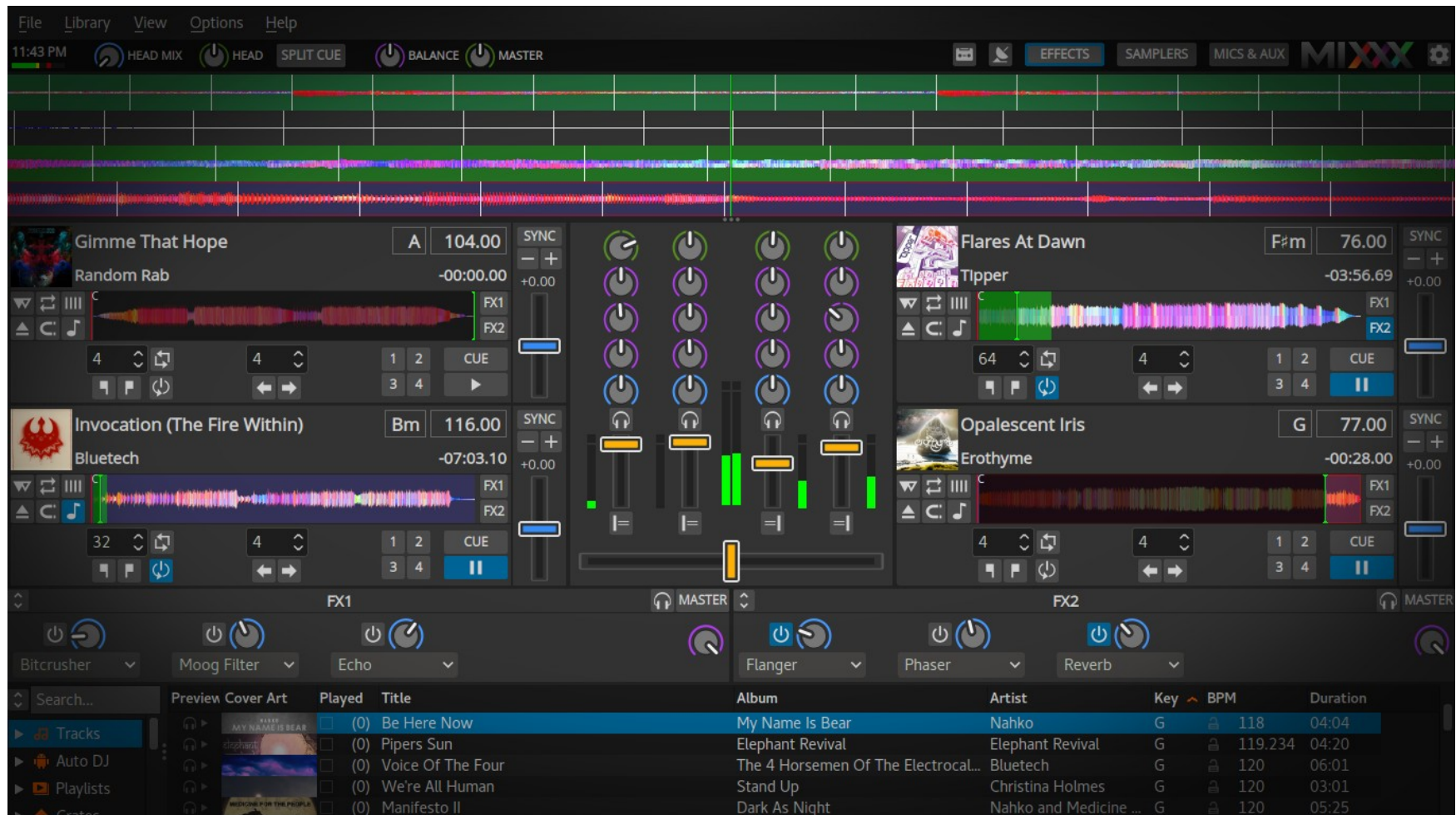
Pour démarrer lebinou :  
\$ lebinou --input jackaudio

Et en cas de conflit sur l'accès à la webcam :  
\$ lebinou --input jackaudio --webcams 0

Lebinou démarre une fenêtre de contrôle (à gauche) et une fenêtre d'animation (à droite).  
Il faut ensuite connecter l'entrée de lebinou à une sortie audio.



# Mixxx Pour le DJing



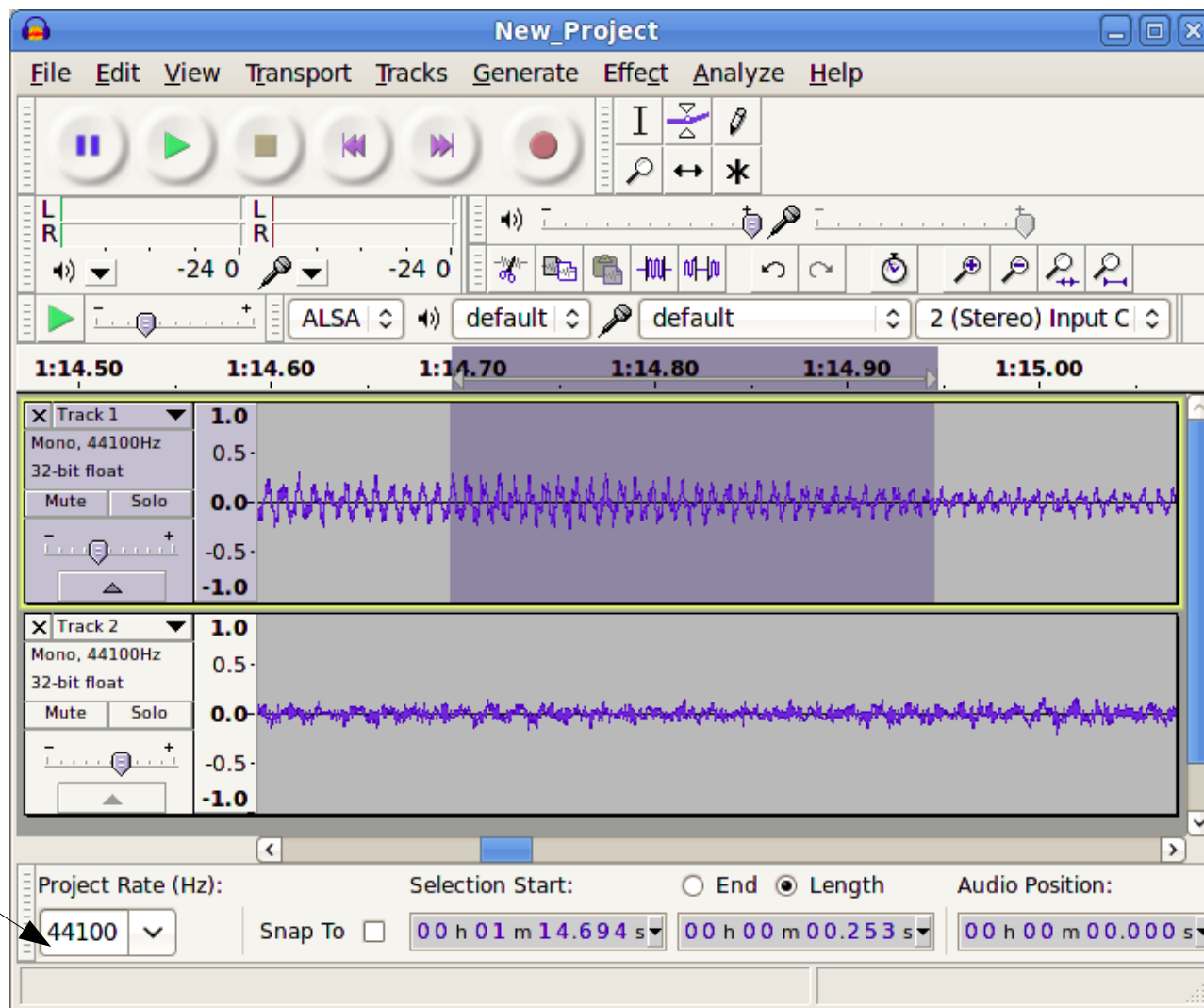


# Audacity

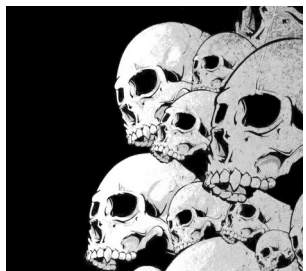
## L'éditeur audio

Lorsqu'on utilise Audacity avec Jack, il faut bien prendre garde de régler la fréquence d'échantillonnage :  
Edition → Préférences  
→ Qualité

Il faudra faire correspondre cette fréquence d'échantillonnage avec celle de Jack.

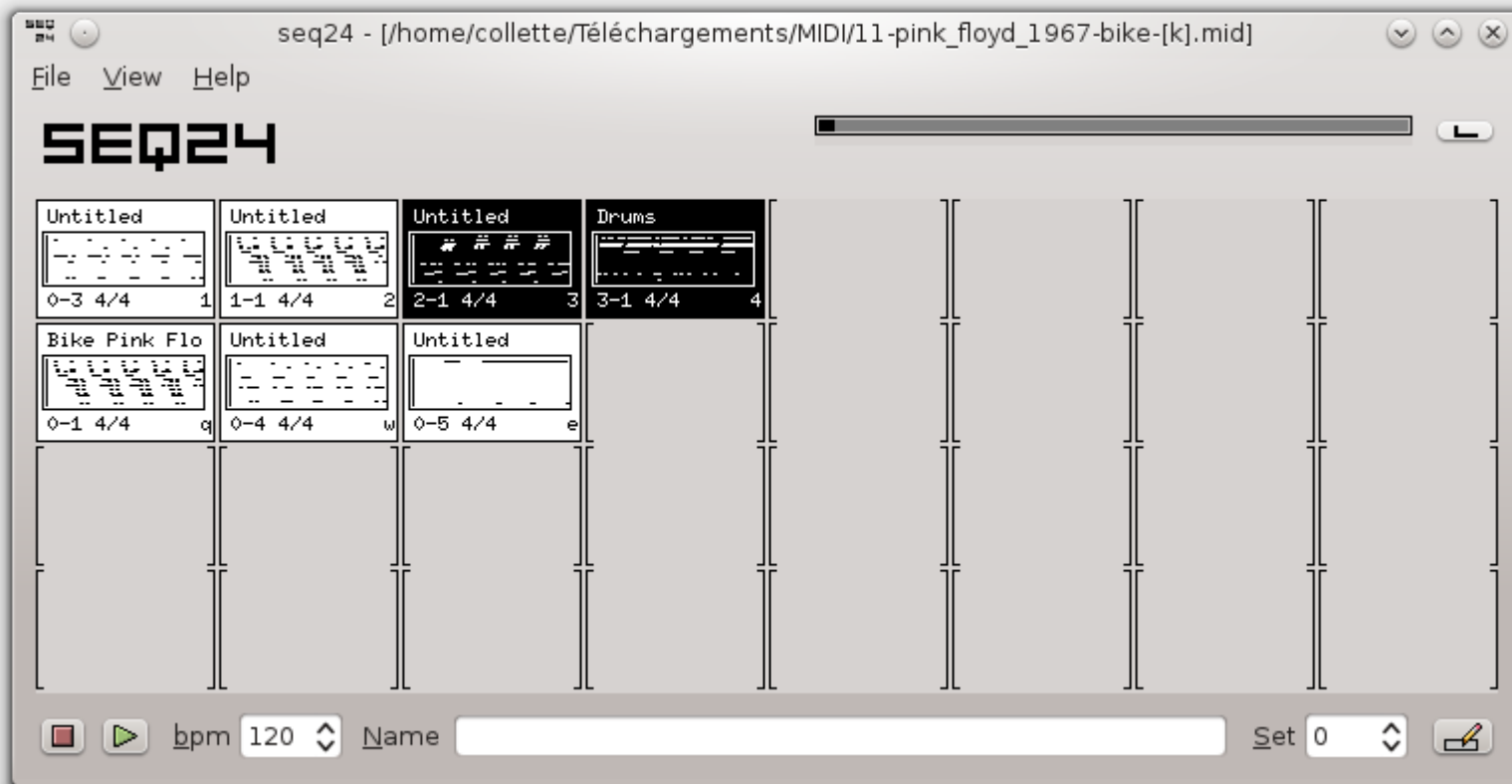




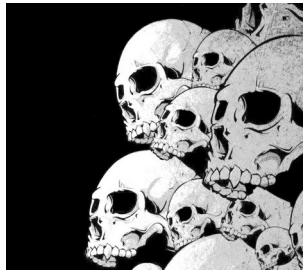


# Seq24

## Un séquenceur matriciel



<https://launchpad.net/seq24>  
<https://github.com/ahlstromcj/sequencer64>

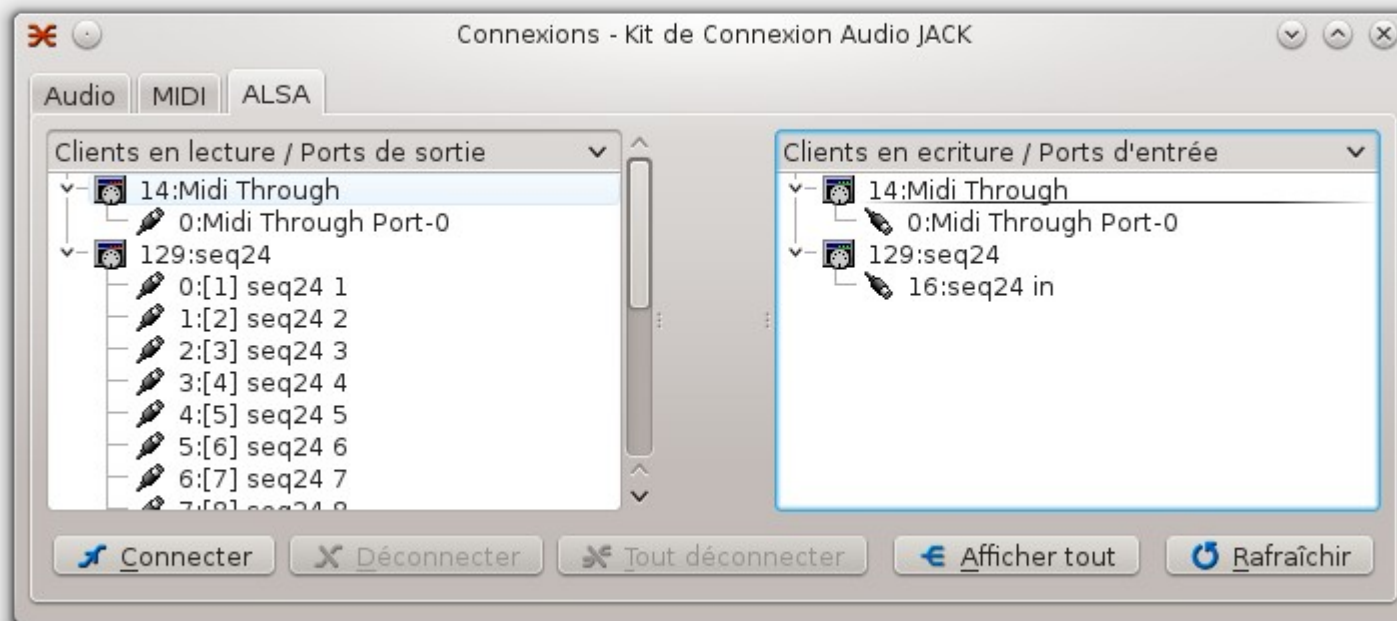


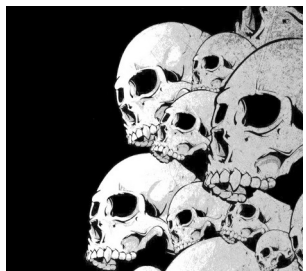
# Seq24 Coté Jack

Démarrage en ligne de commande recommandé :

```
$ seq24 -m
```

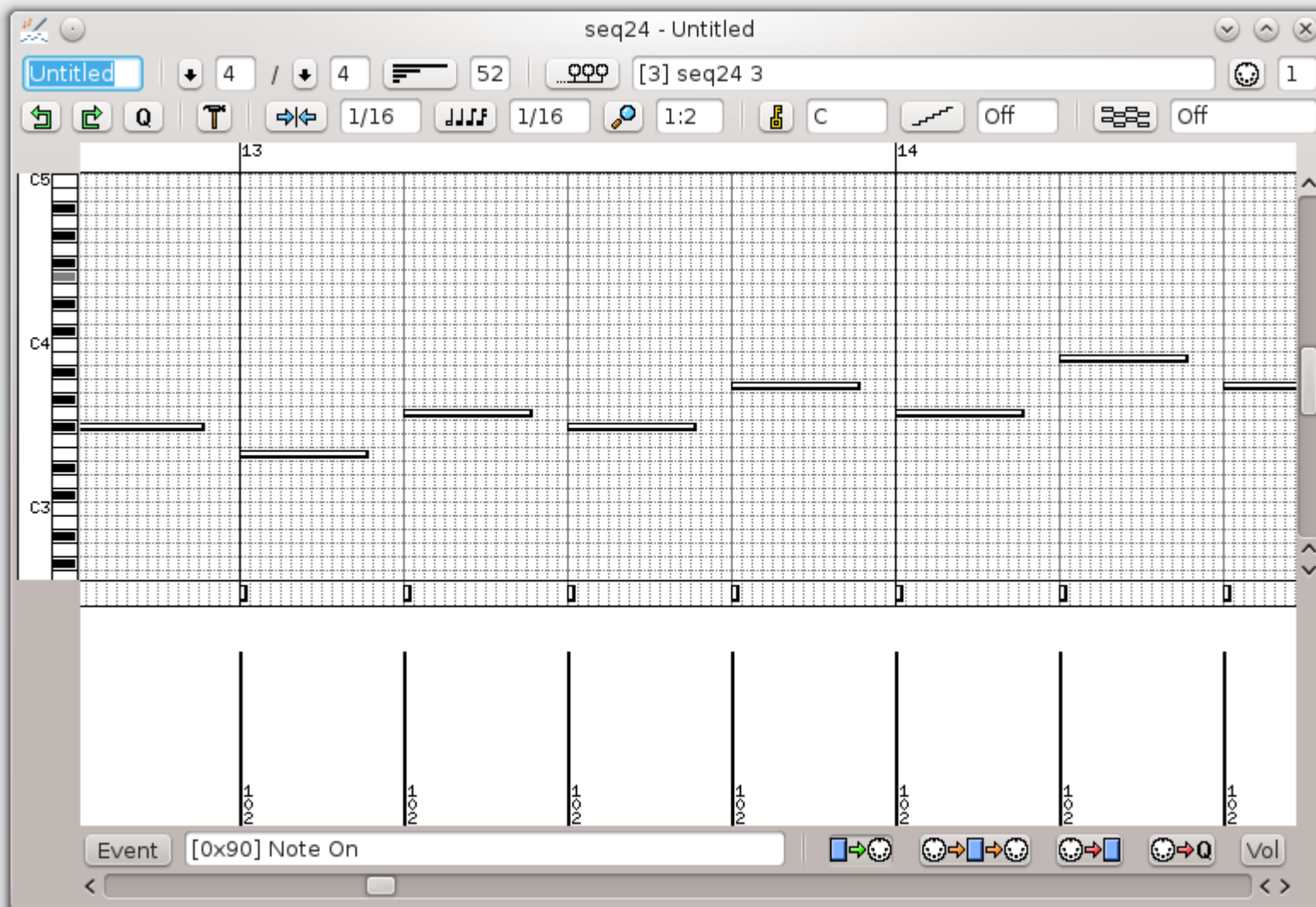
-m, --manual\_alsa\_ports: seq24 ne réquisitionnera pas de ports ALSA





# Seq24

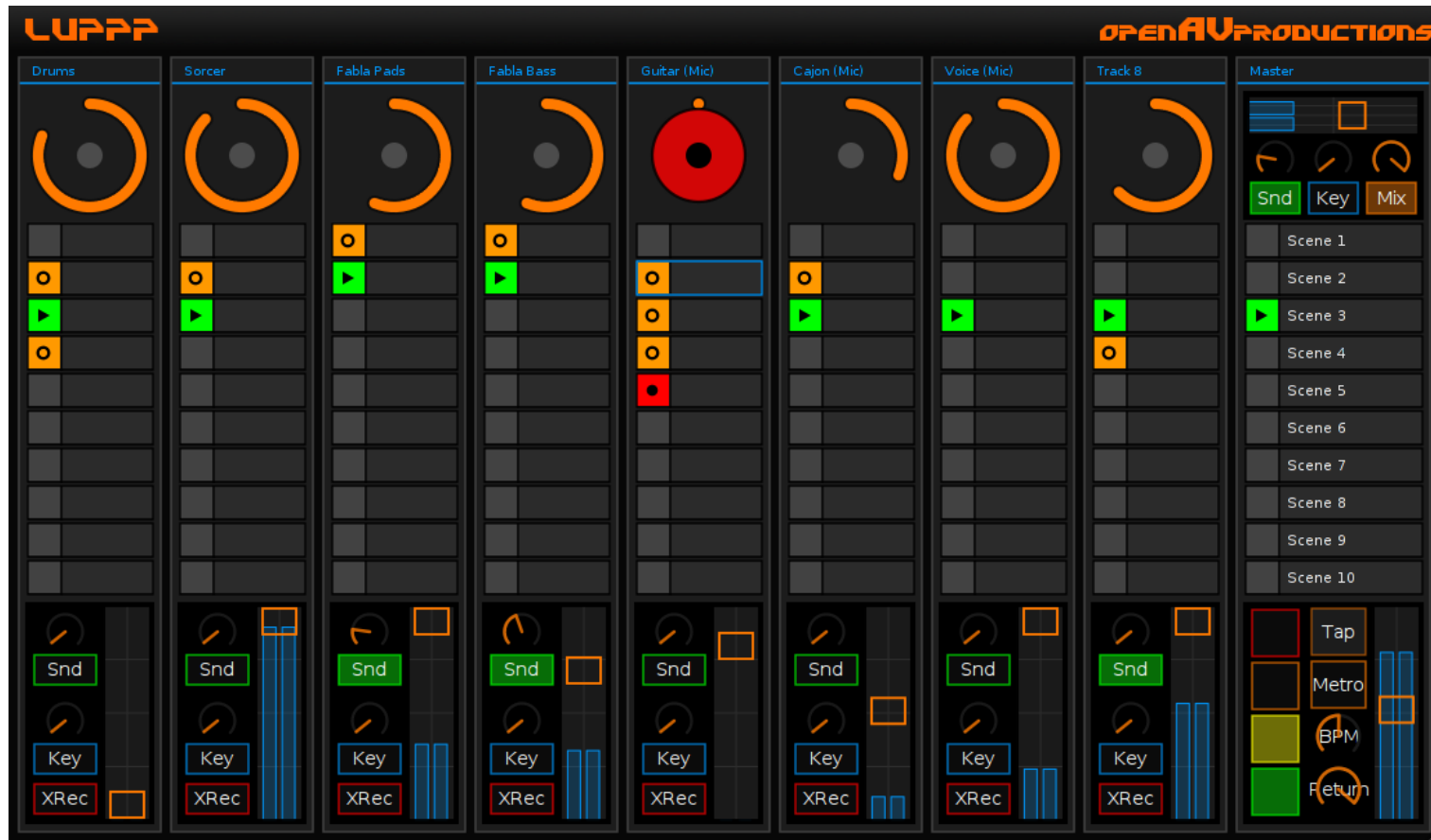
## L'éditeur MIDI





# OpenAV / Luppp

## Un séquenceur matriciel



<http://openavproductions.com/luppp/>

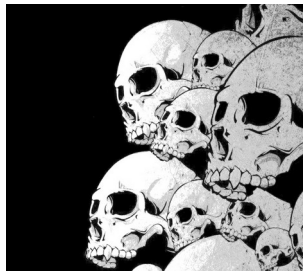




# Impro-visor Pour le Jazz

The screenshot shows the 'Impro-visor: 12-Bar Blues' application window. The title bar reads 'Impro-visor: 12-Bar Blues'. The menu bar includes 'File', 'Edit', 'Transpose', 'View', 'Play', 'Utilities', 'Window', 'Grammar: My', 'Preferences', and 'Help'. Below the menu bar is a toolbar with icons for file operations, playback, and generation. A 'Program Status' section on the right indicates 'Click in notes, or type in textual entry field'. The main interface features a 'Textual Entry' field and a 'Clear' button. A list of composers is displayed: Clifford Brown, Dizzy Gillespie, Freddie Hubbard, Lee Morgan, Miles Davis, Tom Harrell, Bill Evans, Red Garland, and Charlie Parker. The selected composer is 'Clifford Brown'. The main display shows a 12-Bar Blues progression for 'Clifford Brown', generated from grammars learned from solos of different players. The style is set to 'swing'. The progression is shown on a musical staff with 12 bars. The chords are: F13 (bar 1), Bb13 (bar 2), Bo7 (bar 3), F13 (bar 4), Cm9 (bar 5), F13b9 (bar 6), Bb13 (bar 7), Bo7 (bar 8), F13 (bar 9), D7#5#9 (bar 10), Gm9 (bar 11), C13b9 (bar 12). The notes are color-coded: red for the first bar, green for bars 2-4, blue for bars 5-6, and purple for bars 7-12.

<http://www.cs.hmc.edu/~keller/jazz/improvisor/>



# Impro-visor Pour le Jazz

Pour connecter Impro-visor à QSynth, il faut lancer l'interface virtuelle MIDI de ALSA :

```
$ sudo modprobe snd-virmidi
```

On obtient 4 Virtual Raw MIDI comme le montre l'image suivante:  
Enalsa Out, on a :

- 14: MIDI Through
- 20: Virtual Raw MIDI 1-0
- 21: Virtual Raw MIDI 1-1
- 22: Virtual Raw MIDI 1-2
- 23: Virtual Raw MIDI 1-3

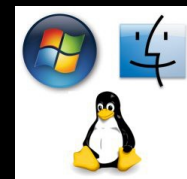
Après cela, il suffit de connecter Impro-Visor à une entrée Virtual RawMIDI et Qsynth à une sortie Virtual RawMIDI.

Enalsa In, on a :

- 14: MIDI Through
- 20: Virtual Raw MIDI 1-0
- 21: Virtual Raw MIDI 1-1
- 22: Virtual Raw MIDI 1-2
- 23: Virtual Raw MIDI 1-3
- 128:Timidity



# Milkytracker



<http://www.milkytracker.org/>



## Historique

Soundtracker – 1987 (Amiga)  
Protracker – 1990 (Amiga)  
Octamed – 1991 (Amiga)  
Scream Tracker 3 – 1993 (PC)  
Fast Tracker 2 – 1995 (PC)  
Impulse Tracker 2 – 1996 (PC)  
Renoise – 2000 (PC & Mac)  
Skalettracker – 2003 (PC)

## Type de fichiers

XM – MOD – IT – S3M

Voir l'article de [wikipedia](#)

Exemple YouTube

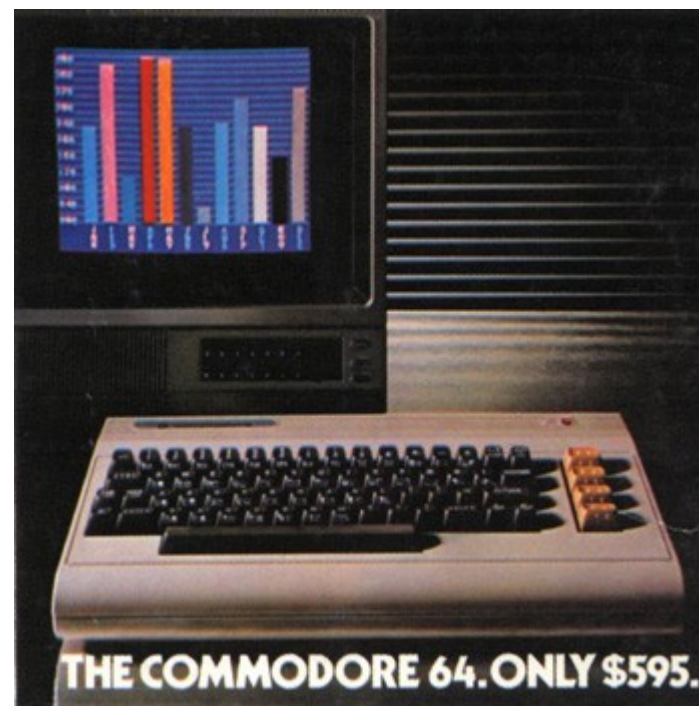


# Milkytracker

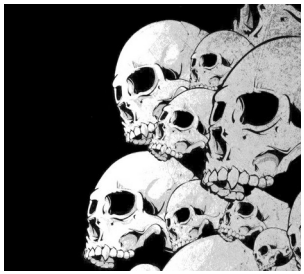
Amiga - 1987



Commodore - 1982





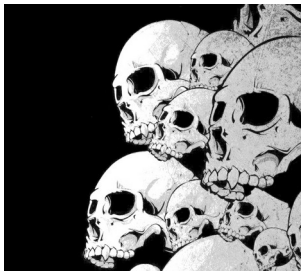


# Klystrack



Exemple YouTube

<https://kometbomb.github.io/klystrack/>



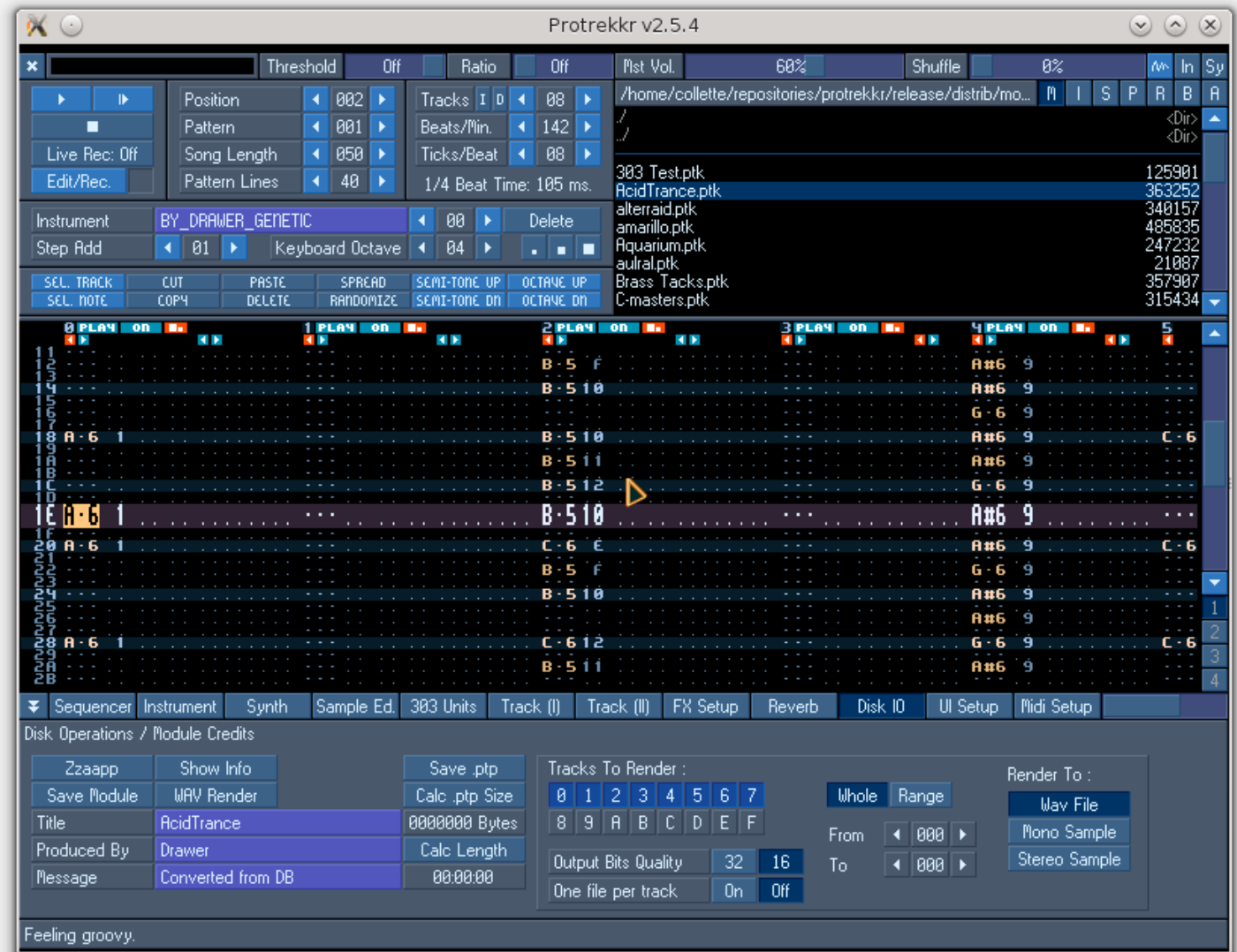
# Protrekkr

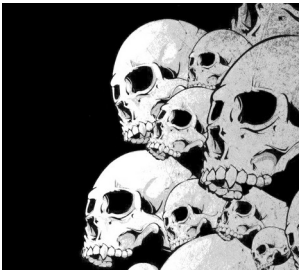
<https://github.com/falkTX/protrekkr>

Deux versions de ProTrekkr existent :  
- une version OSS  
- une version Jack  
La version hébergée sur GitHub est compatible Jack.

Exemple YouTube

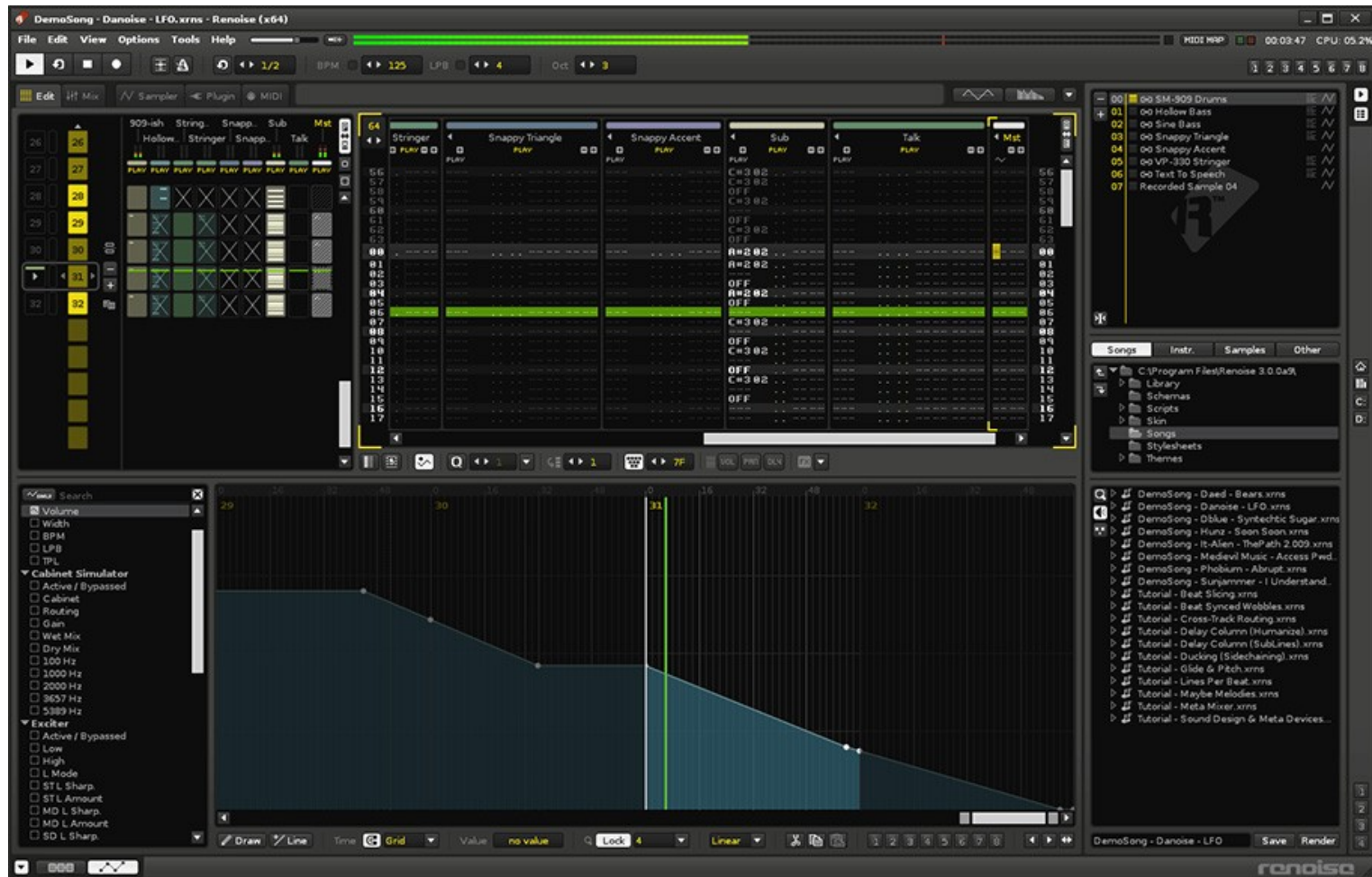
24/08/2013





# Renoise

<https://www.renoise.com>





# Divers

Des fichiers pour Protrekkr et MilkyTracker :

<http://modarchive.org/>

Rivendell – La radio Open Source

<http://www.rivendellaudio.org/>

Jack Net / Jamulus / Ninjam

La musique via internet

<http://lcon.sourceforge.net/>

<http://www.cockos.com/ninjam/>





# Webographie

Presets en tout genre pour les outils Linux : Fichiers pour le mixage :  
<https://musical-artifacts.com/>

Sources de samples :  
<http://freesound.org/>  
<https://archive.org/>  
[http://wiki.laptop.org/go/Sound\\_samples](http://wiki.laptop.org/go/Sound_samples)

Documentations de divers outils :  
<https://en.flossmanuals.net/>

Site communautaire :  
<http://linuxmao.org/Accueil>  
<http://libremusicproduction.com/>  
<http://www.linuxaudio.org/>  
<http://linuxmusicians.com/>

Chansons de Nine Inch Nails :  
<http://www.ninremixes.com/multitracks.php>

Différentes chansons :  
<http://www.cambridge-mt.com/ms-mtk.htm>

Des ressources en live coding :  
<http://sccode.org>  
<http://users.sussex.ac.uk/~nc81/modules/cm1/workshop.html>