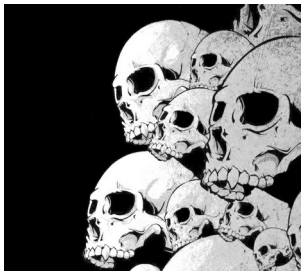
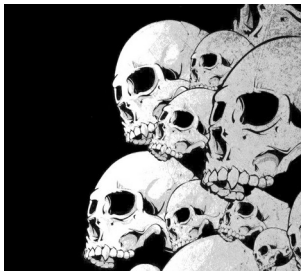


Introduction to Linux

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



The 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) .trun ([400,600])*[1, -1]), 0.98).
```

https://www.youtube.com/watch?v=wNWFSIadAH8

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

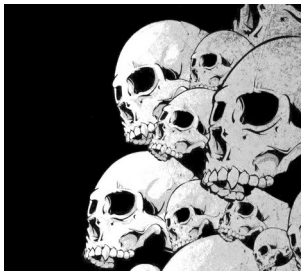
Chuck : http://chuck.cs.princeton.edu

```
// 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;
```

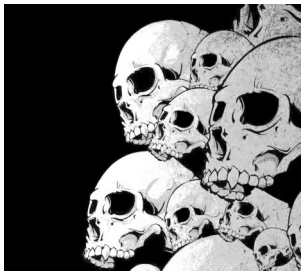
miniAudicle

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



The Live Coding 2/5

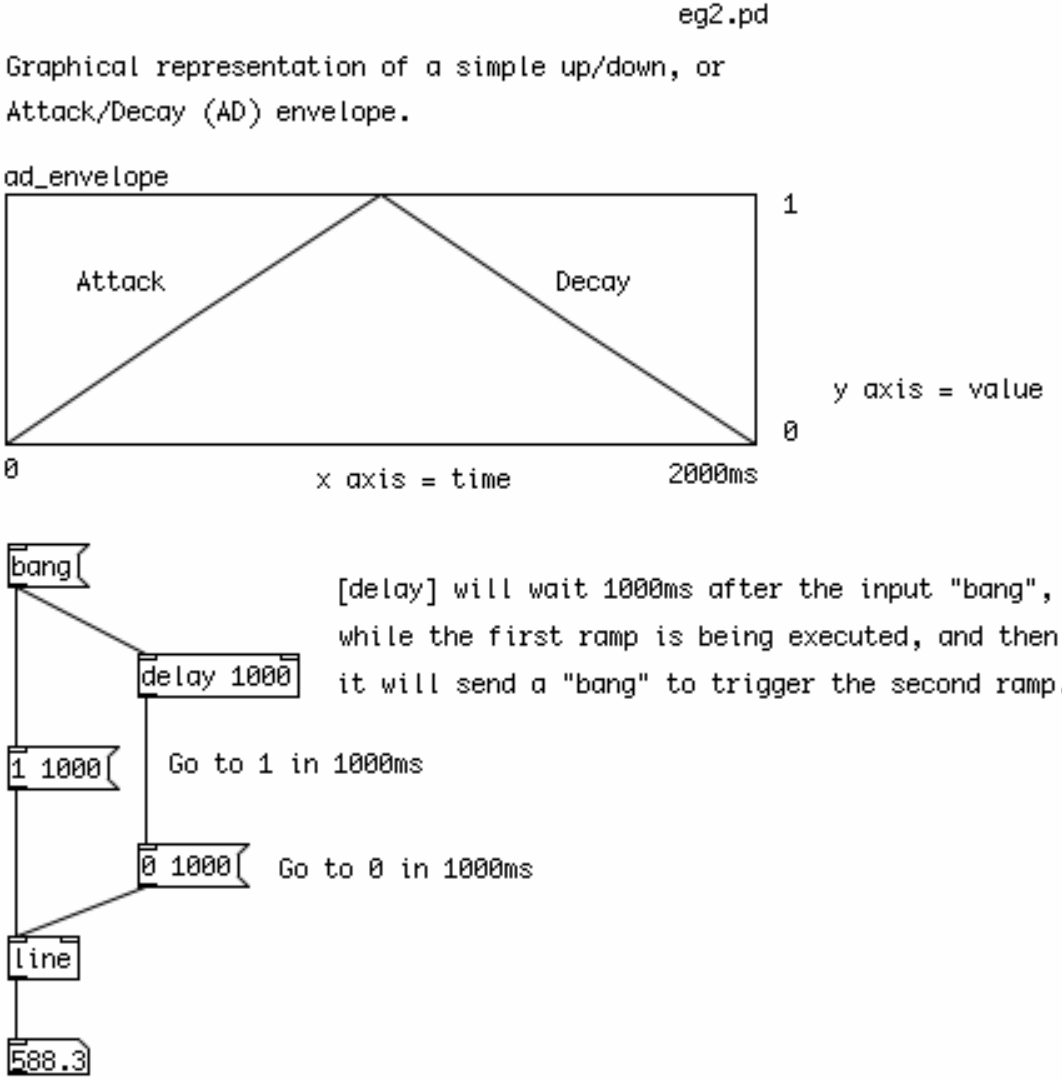
https://sonic-pi.net

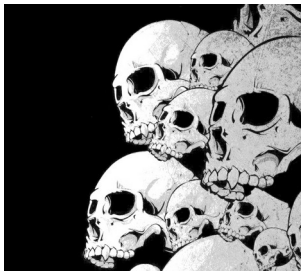


The Live Coding – 3/5

Pure Data : https://puredata.info

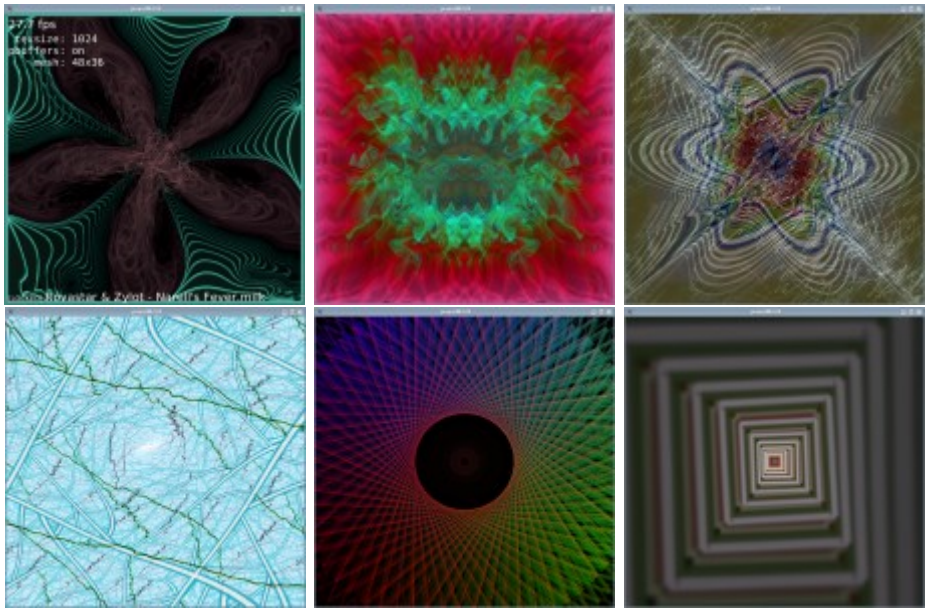
A visual programming tool dedicated to audio and video.





The Live Coding – 4/5

ProjectM: a video diffuser synchronized at the audio
https://github.com/projectm-visualizer/projectm



ProjectM code from Winamp.

To launch the Jack version of Projectm

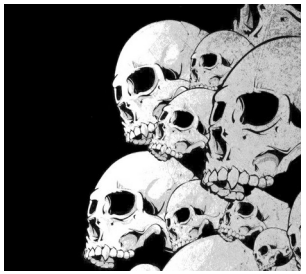
```
$ projectM-jack
```

To launch the Pulseaudio version of Projectm

```
$ projectM-pulseaudio
```

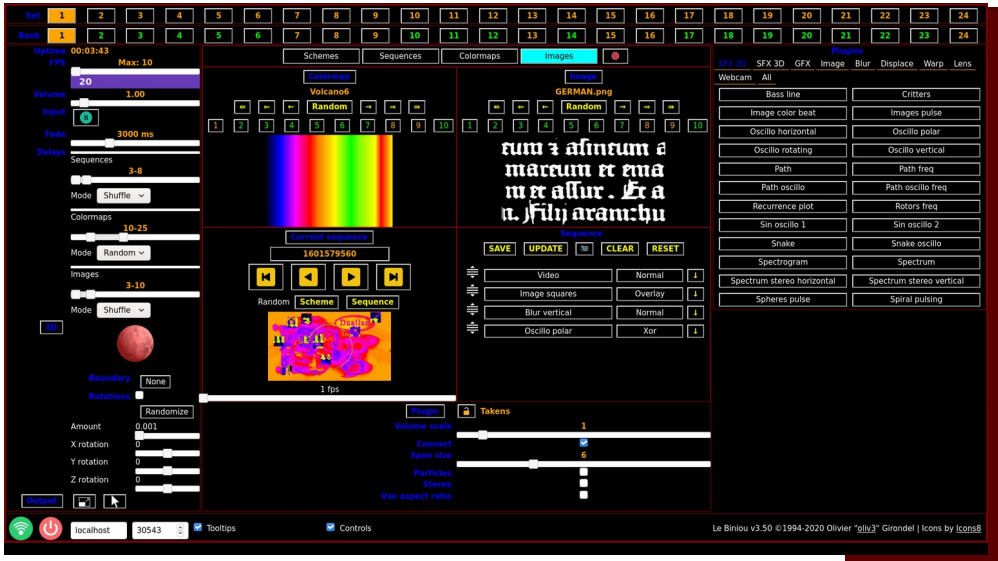
F1: Help
F2: song title
F3: Preset name
F4: Rendering configuration
F5: FPS
F11: Full screen

L: Ventu / delay the preset
M: displays the menu
A: random preset
N: Next preset
P: Previous preset



The Live Coding – 5/5

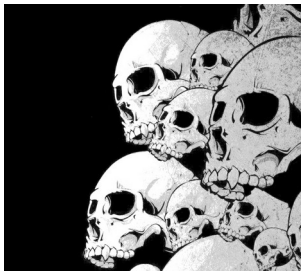
https://biniou.net



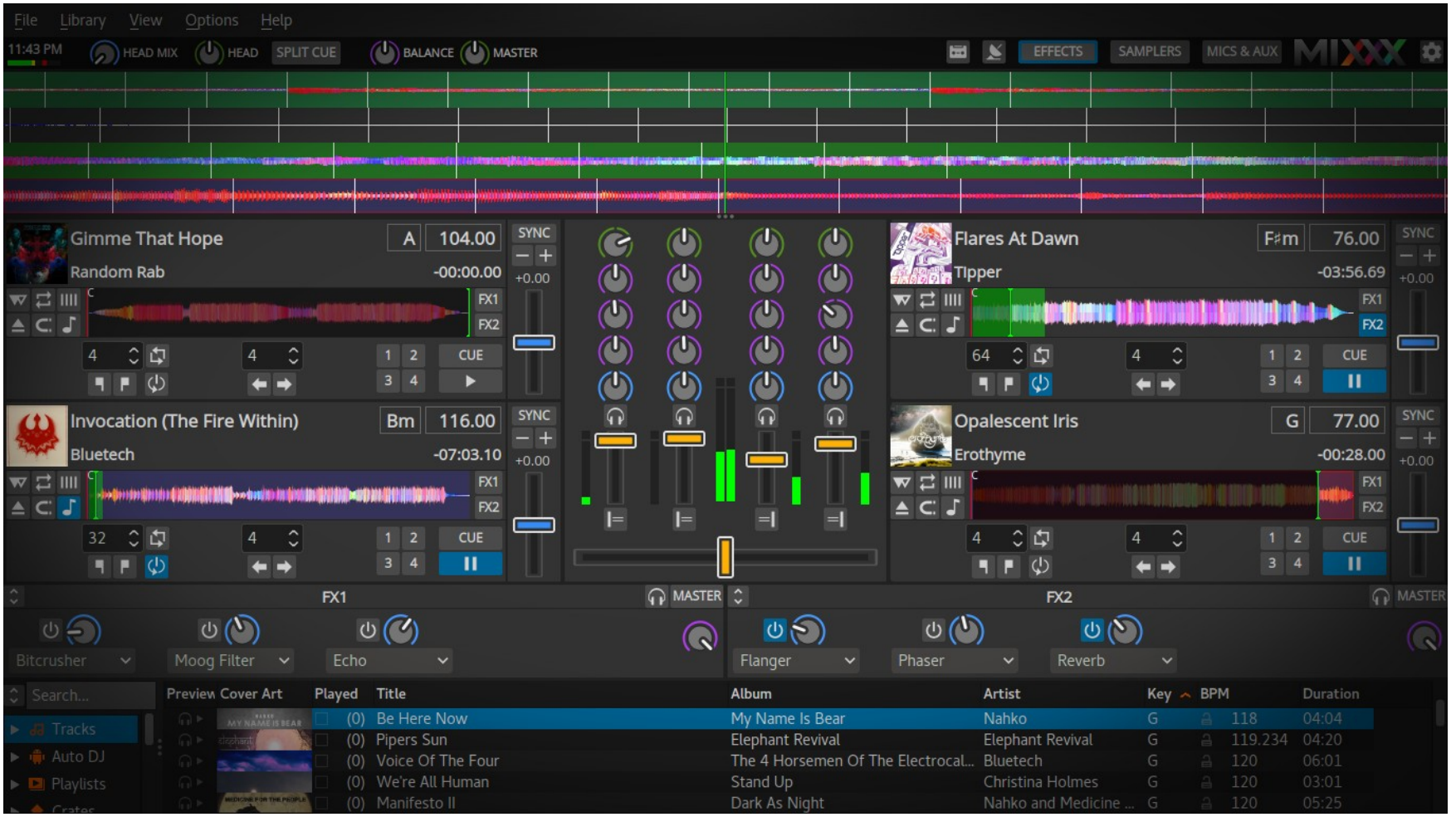
To start Lebiniou:
$ lebiniou -Input Jackaudio

And in the event of a conflict on access to the webcam:
$ lebiniou -Input Jackaudio -Wabcams 0

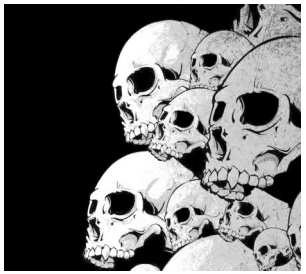
Lebiniou starts a control window (left) and an animation window (right). You must then connect the lebiniou input to an audio output.



Mixxx
For the Djing



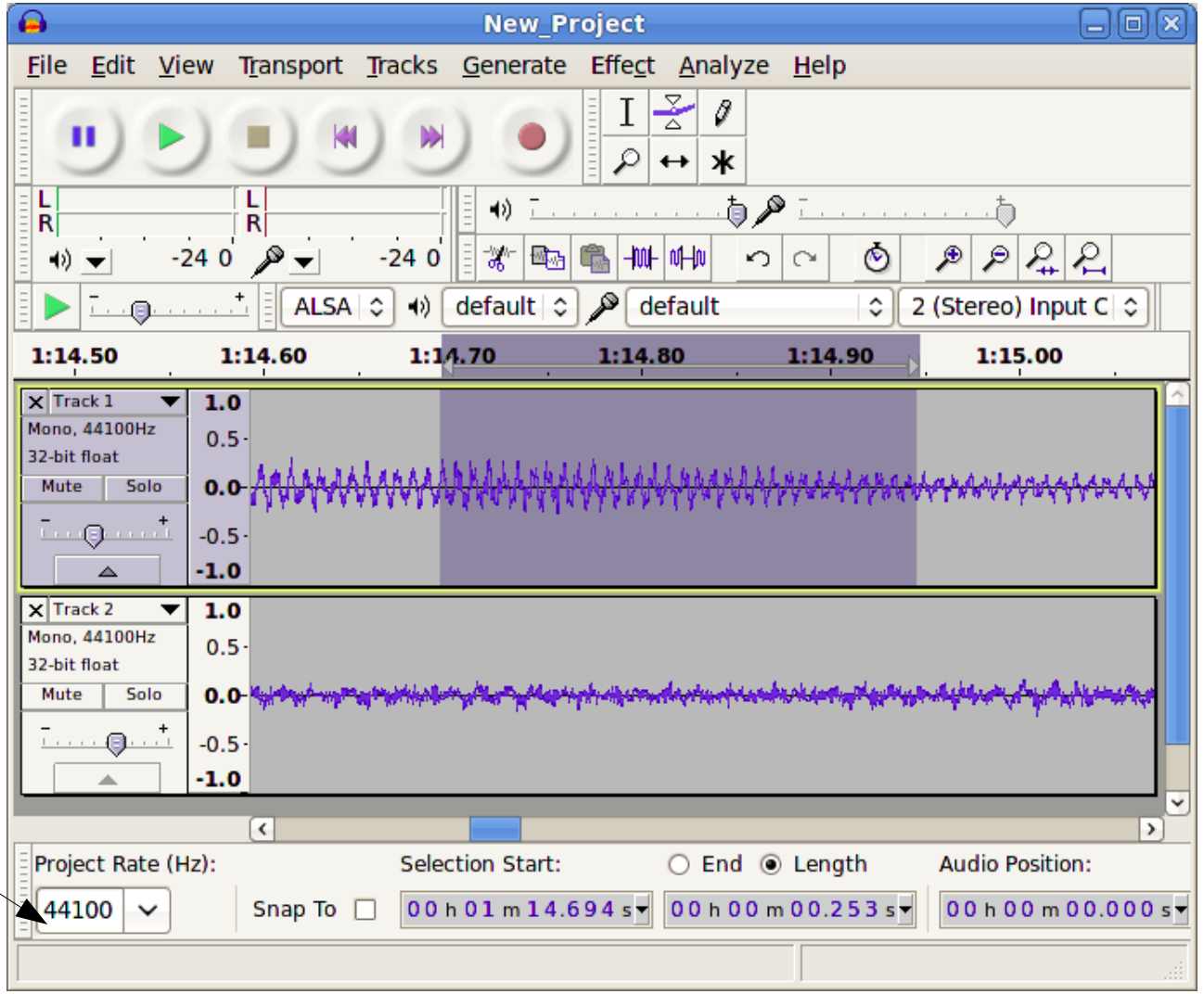
https://www.mixxx.org



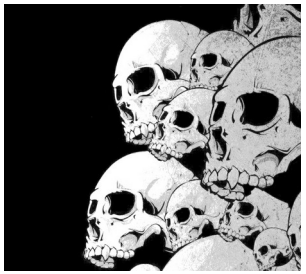
Audacity
The audio editor

When we use Audacity with Jack, take care to adjust the sampling frequency:
Edition → Preferences → Quality

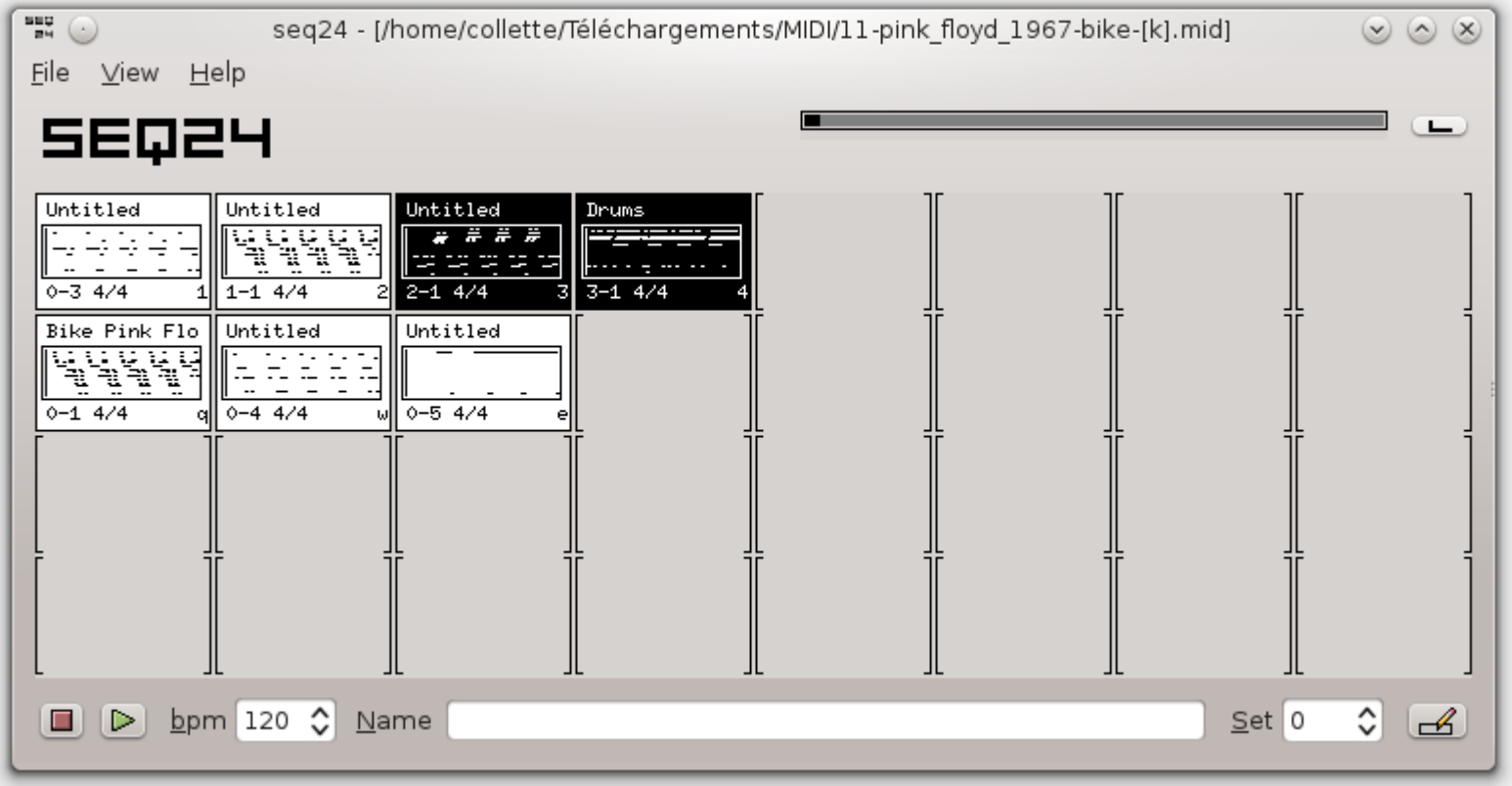
It will be necessary to match this sampling frequency with that of Jack.



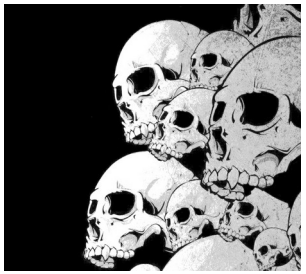
https://www.audacityteam.org/



SEQ24
A matrix sequencer



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

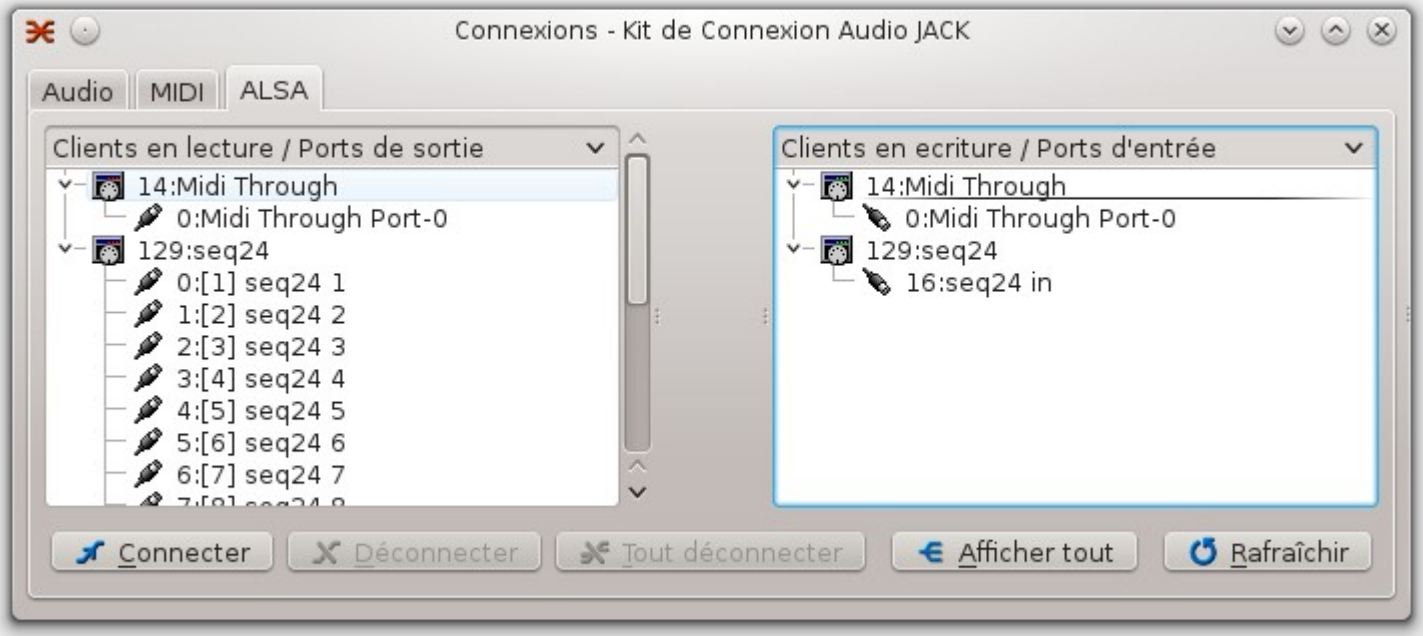


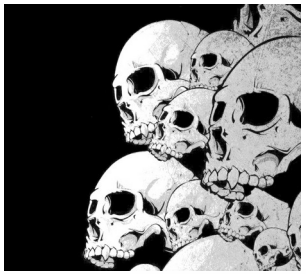
SEQ24
Jack side

Recommended command line start:

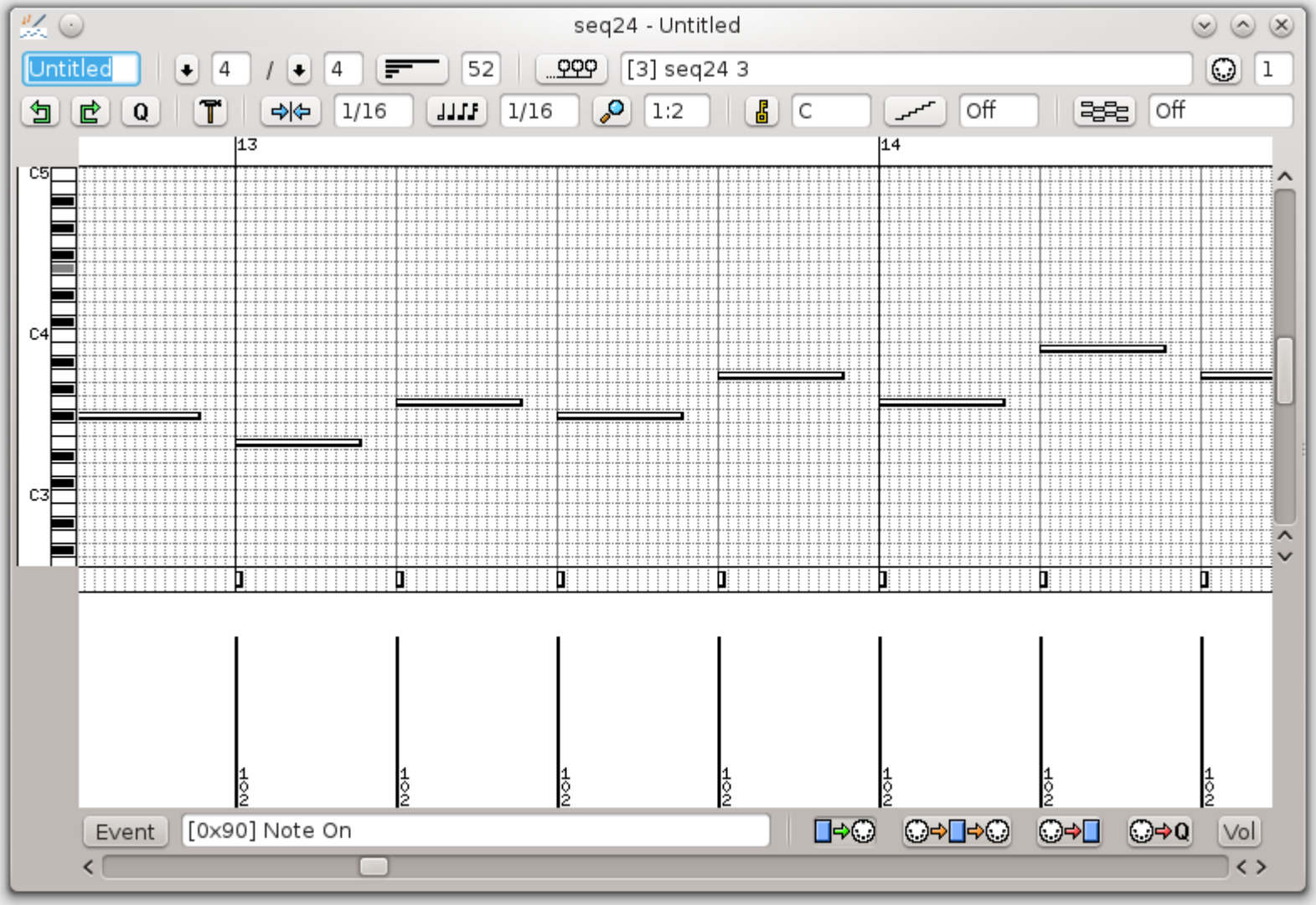
```
$ seq24 -m
```

-M, - -Manual_alsa_ports: SEQ24 will not reserve Alsa ports

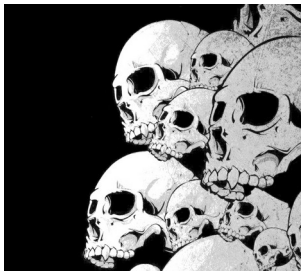




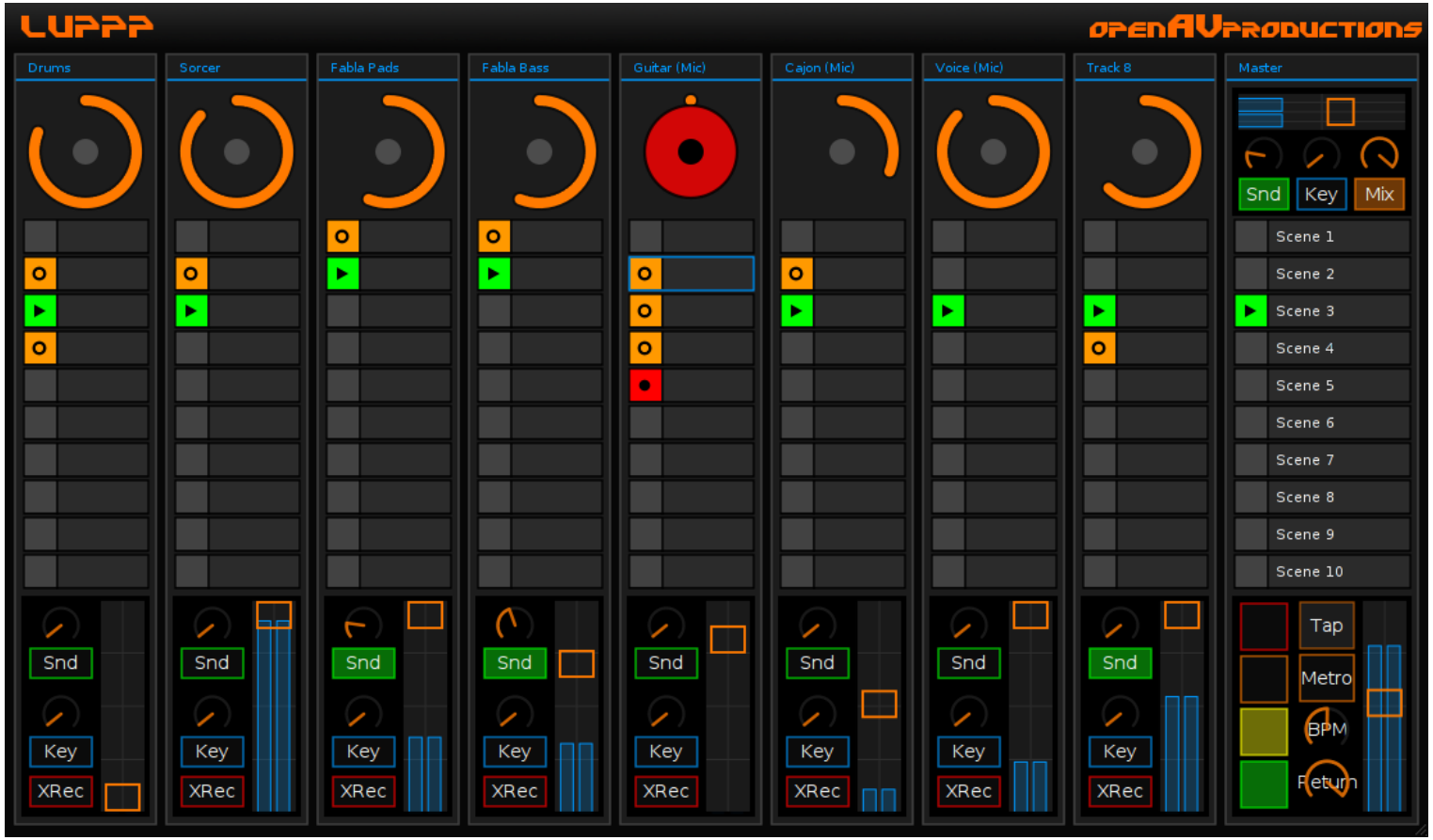
SEQ24
The MIDI editor



seq192
seq24
seq42
seq66

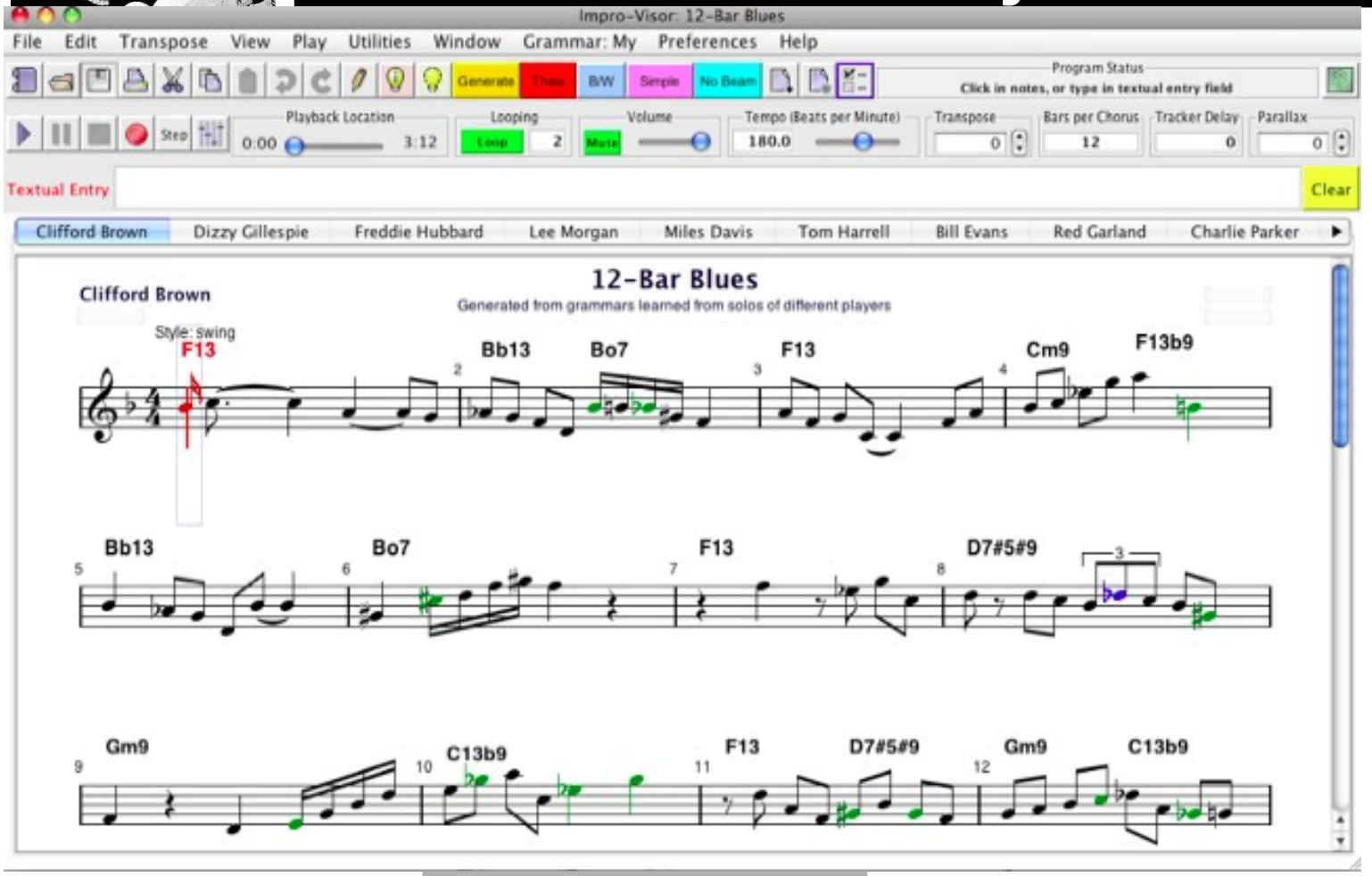


OPENAV / LUPPP
A matrix sequencer



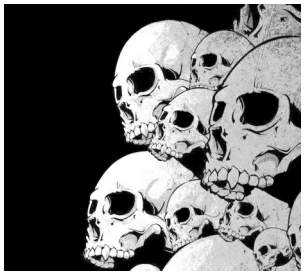
http://openavproductions.com/luppp

Improvisor For jazz



$ dnf install Impro-Visor

https://www.cs.hmc.edu/~keller/jazz/improvisor/



Improvisor For jazz

To connect improvisor to Qsynth, you must launch the MIDI virtual interface of Alsa:

$ sudo modprobe snd-virmidi

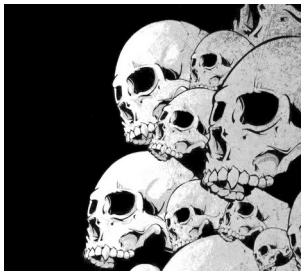
We obtain 4 Virtual Raw Midi as shown the following image:
In Alsa Out, we have:

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

After that, just connect improvisor to a virtual Rawmidi and Qsynth input to a virtual Rawmidi output.

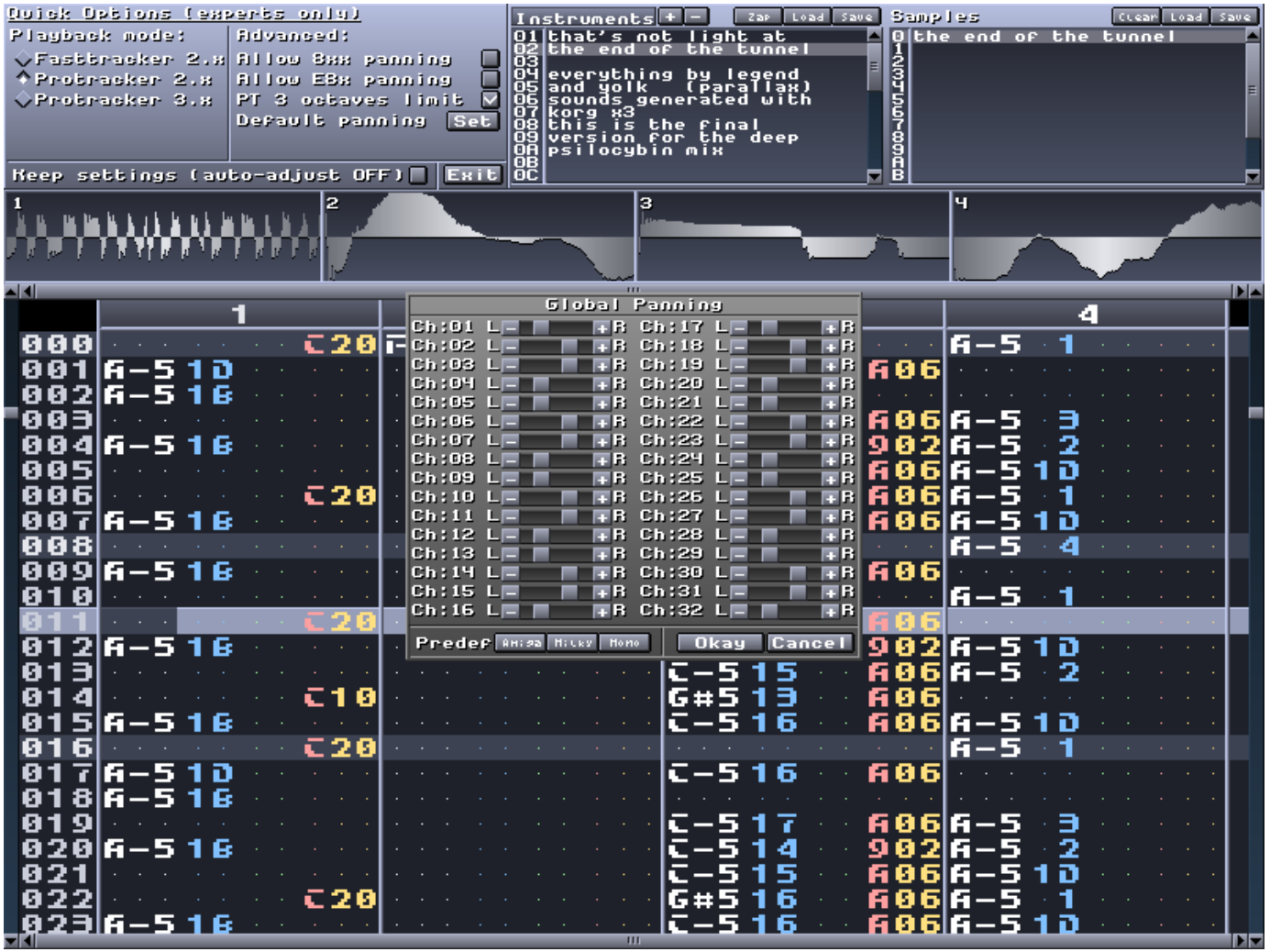
In Alsa in, we have:

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

https://milkytracker.org/

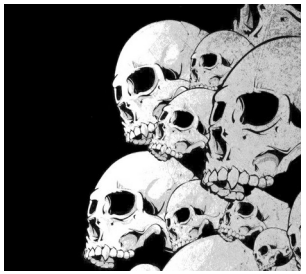


Historical

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)
Skaletracker – 2003 (PC)

File type :
XM - MOD - IT - S3M
See Wikipedia article

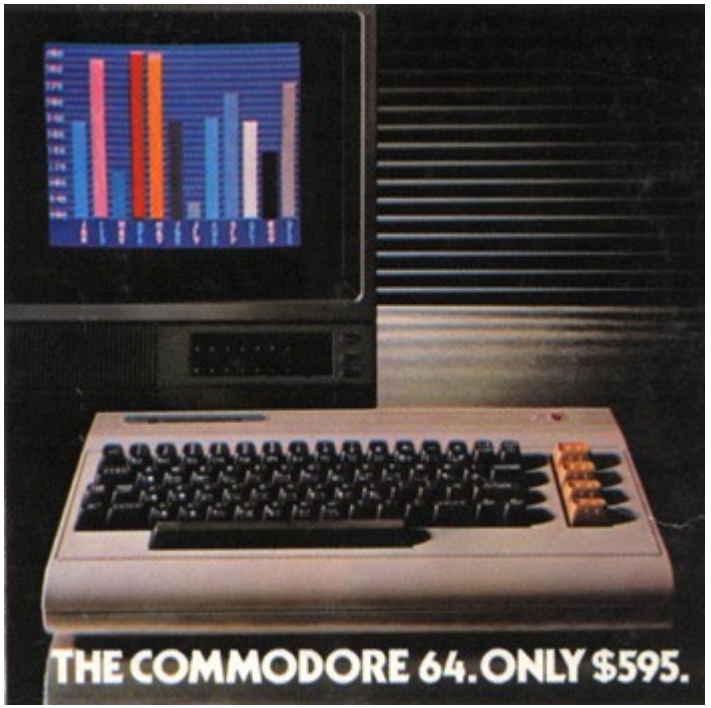
Exemple YouTube

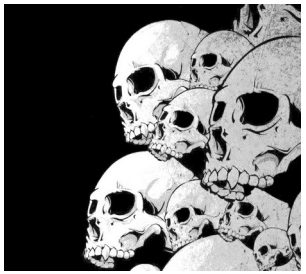


Milkytracker

Amiga - 1987

Commodore - 1982

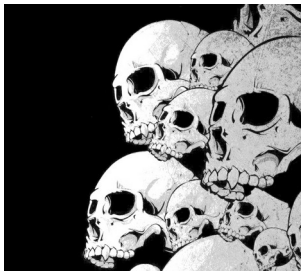




Klystrack

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

Example on YouTube



Protrekkr

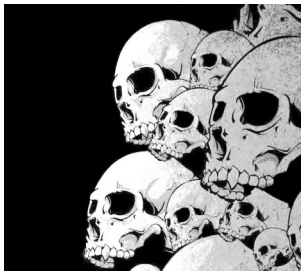
https://github.com/falkTX/protrekkr

Two versions of Protrekkr exist:
- an OSS version
- a jack version

The version hosted on Github is Jack compatible.

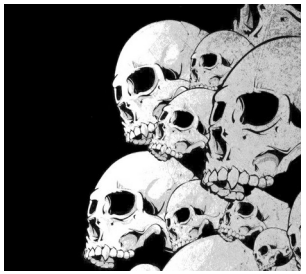
Example on YouTube

24/08/2013



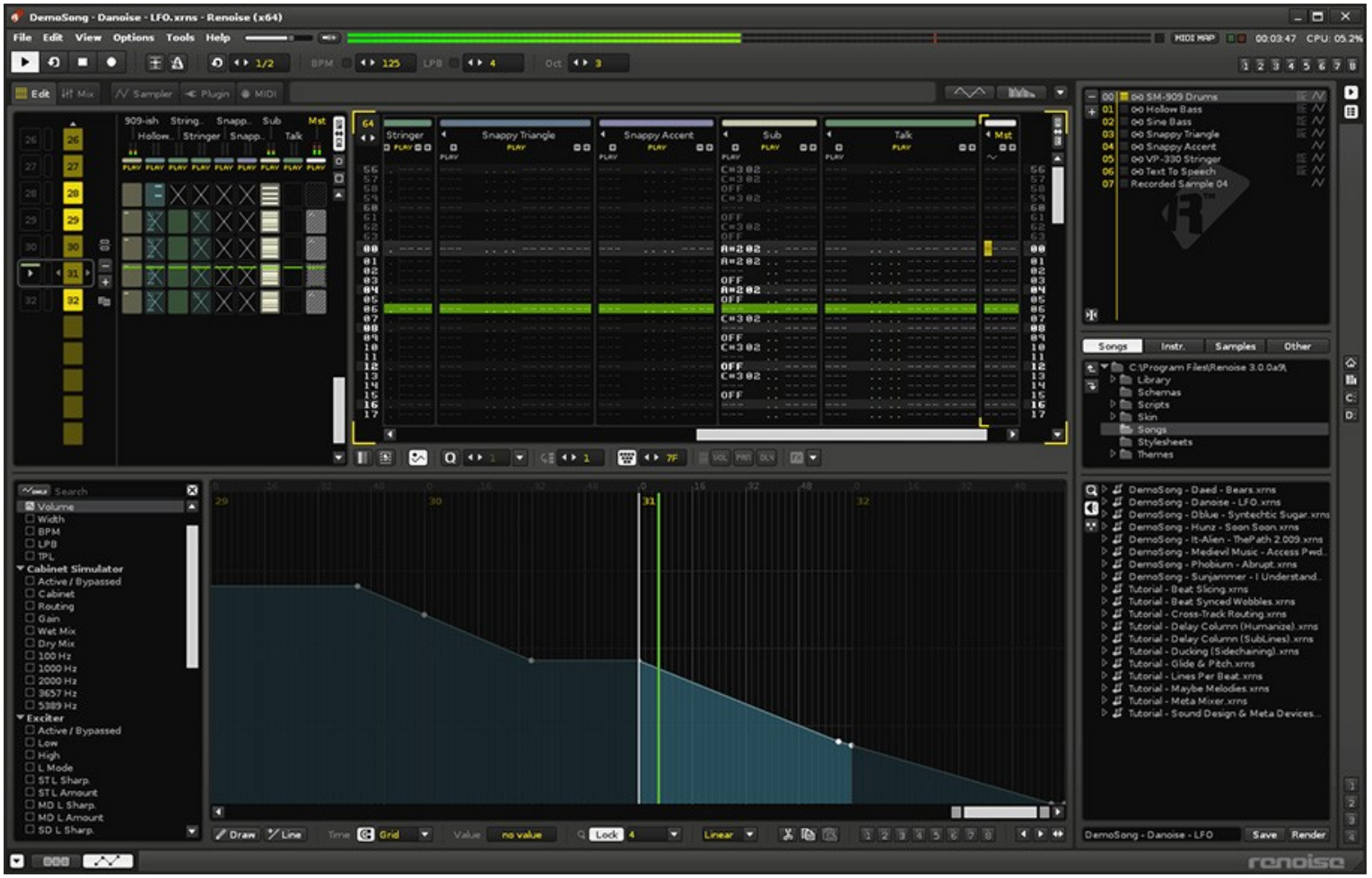
Trackers

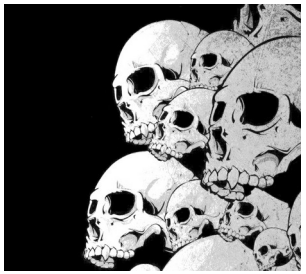
```
$ dnf install BambooTracker
$ dnf install famitracker
$ dnf install fasttracker2
$ dnf install goatracker
$ dnf install hivelytracker
$ dnf install plebtracker
$ dnf install protracker2
$ dnf install schismtracker
$ dnf install tiatracker
$ dnf install soundtracker
$ dnf install furnace
$ dnf install protrekkr
$ dnf install protrekkr2
$ dnf install tutka
$ dnf install zytrax
```



Renoise

https://www.renoise.com





Various

Files for Protrekkr and Milkytracker:

https://modarchive.org

Rivendell - Open Source radio

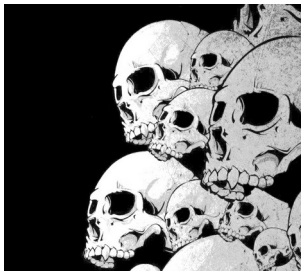
https://www.rivendellaudio.org

Jack Net / Jamulus / Ninjam

Music via Internet

https://jamulus.io

https://www.cockos.com/ninjam



Webography

Presets of all kinds for Linux tools:
https://musical-artifacts.com

Sources of samples:
https://freesound.org
https://archive.org
https://wiki.laptop.org/go/free_sound_samples

Documentations of various tools:
https://en.flossmanuals.net

Community site:
http://linuxmao.org/accueil
https://librearts.org/
https://www.linuxaudio.org
https://linuxmusicians.com
https://linuxdaw.org/

Files for mixing:

Nine Inch Nails songs:
https://nindestruct.com/remix.html

Different songs:
https://www.cambridge-mt.com/ms/mtk

Live Coding resources:
https://sccode.org/