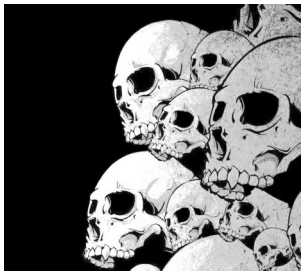
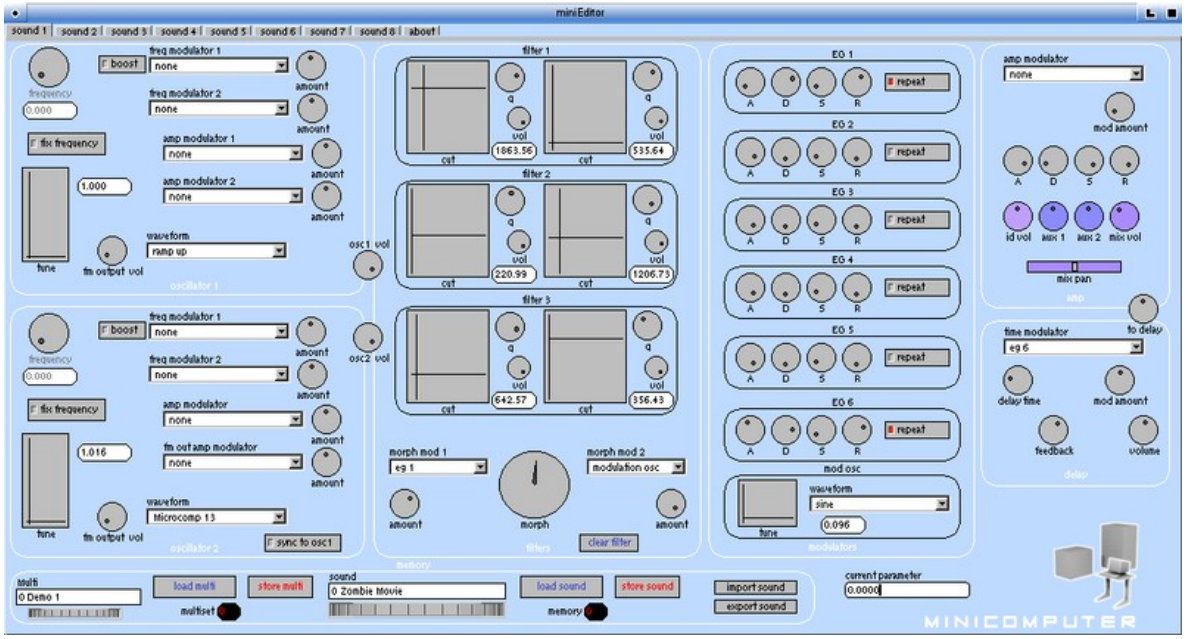
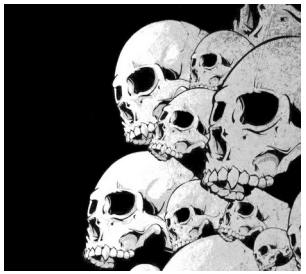


Linux and Synthesizers



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

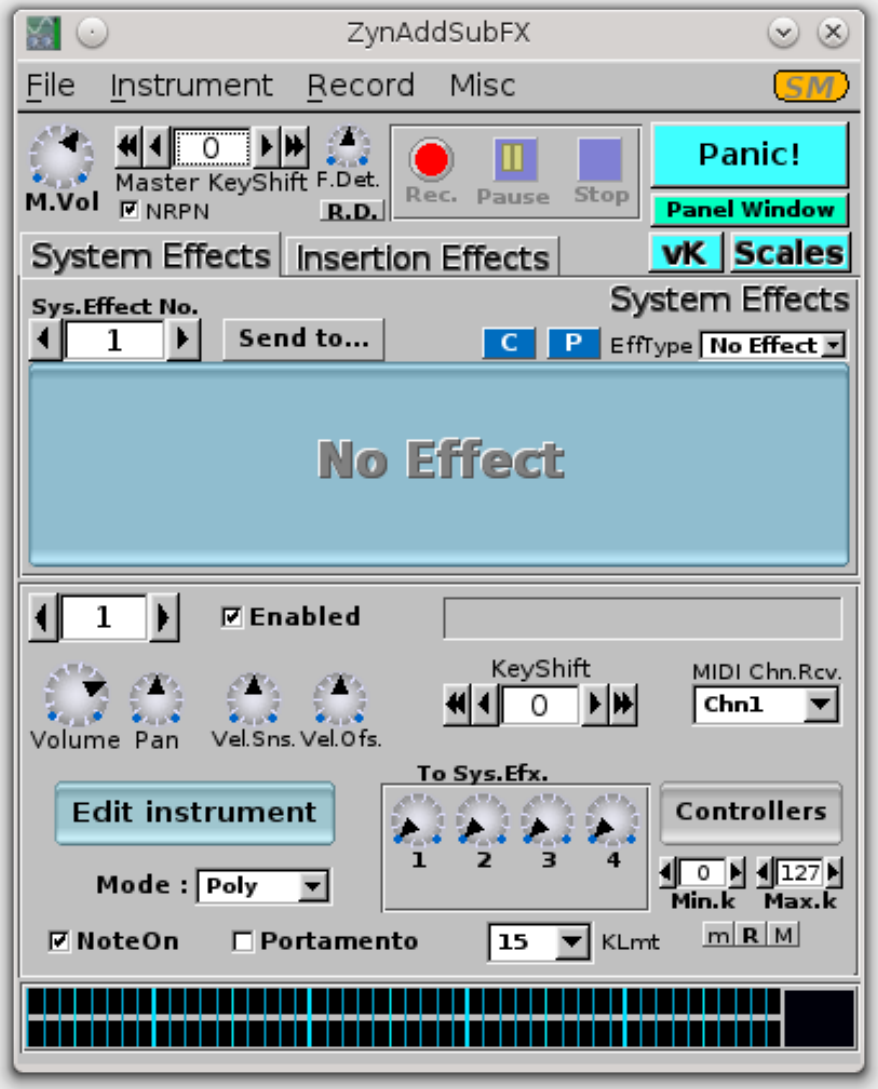
CC BY



ZynAddSubFX (1/3)

Un synthétiseur très puissant qui est installé avec plein de patches.
Supporte Jack et Alsa.
Existe sous la forme de plugin DSSI.

https://zynaddsubfx.sourceforge.io/



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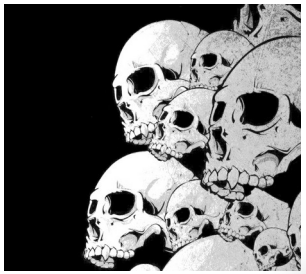


ZynAddSubFX (2/3)

/usr/share/zynaddsubfx/banks/Collection/

Refresh bank list | New Bank...

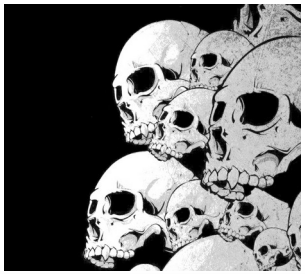
1. Xylophone	33. Sweep Synth		97. Sharp	
2. Vibraphone	34. Warm Synth		98. Sharp and Warm	
3. Soft Vibes	35. Hard Synth	67. Soft Flute	99. Sharp and Deep	131. Lite Guitar
4. Simple Chimes	36. Bright Synth	68. Warm Flute	100. Sharp Reed	132. Trem Guitar
5. Silver Bell	37. Multi Synth		101. Far Reed	133. Smooth Guitar
	38. Slow Saw			134. Nylon Guitar
	39. Medium Saw	71. Ocarina	103. Clarinet	
8. Ethereal	40. Hard Saw		104. Bassoon	
	41. Voiced Saw	73. Variable Reed		
10. Trem Lead	42. Sweep Saw		106. Aooww	
		75. Smooth	107. Daooww	139. Home Piano
12. Trem Synth Piano	44. Wipe Synth		108. Yaooww	140. Moonlight Piano
13. Trem Synth	45. Hard Stereo Swee	77. Matrix	109. Yiee	141. Soft Piano1
	46. Master Synth Low	78. Sweep Matrix	110. Eeoow	142. Soft Piano2
15. Simple Square	47. Master Synth High	79. Ice Field		143. Space Piano
16. Full Square	48. Sharp Synth	80. Hollow Ice Field	112. Overdrive	
17. Super Square		81. Beyond	113. Overdrive 2	
18. Steel Wire	50. Fretless Bass		114. Overdrive 3	146. Space Voice
19. Metal Drips	51. Decay Bass	83. Sweep Pad		147. Space Voice 2
20. Fantasia	52. Steel Bass	84. Breathy Pad	116. Power Guitar 1	
21. Soft	53. Synth Bass	85. Bottle	117. Power Guitar 2	149. Soft Choir
22. Ultra Soft	54. Distorted Bass	86. ReedBank		150. Full Choir
23. Whistle		87. Sweep Rushes		151. Soft Ahh
24. Wipe Whistle		88. Rushes	120. Wet Brass	152. Breathy Ahh
25. Ghost Whistle	57. Sub Delay	89. Medium Rushes		
	58. Reed Organ	90. Bright Rushes	122. Extended Rushes	
	59. Soft Organ	91. Bright Rush Pipe	123. Prophesy	155. Super Pad
28. Echo Bubbles	60. Thin Pipe	92. Bright Rush Long T		156. Hyper Pad
29. Full Strings	61. Great Organ	93. Voyager	125. Pan Pipe 32	157. Hyper Matrix
30. Slow Strings	62. Hammond Organ	94. Soft Voyager	126. Pan Pipe	158. Extreme
	63. Percussion Organ	95. Soft Voyager Reve	127. Pan Pipe 96	
32. Pizzicato Strings	64. Sines	96. Echo Choir		160. Wind and Surf

READ | WRITE | CLEAR | SWAP

Show PADsynth status

auto close

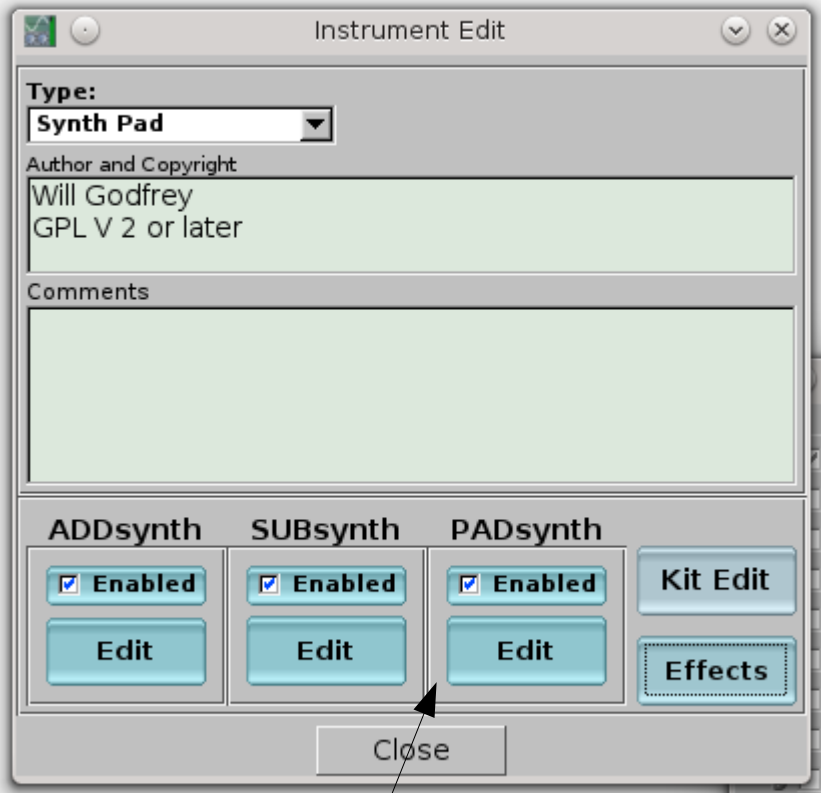
Close

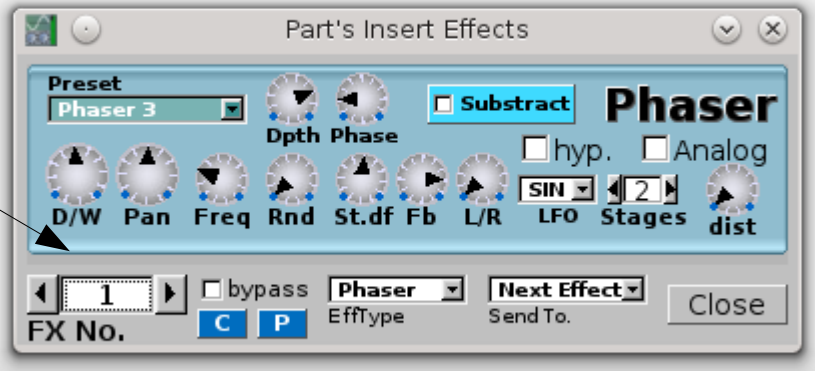


ZynAddSubFX (3/3)

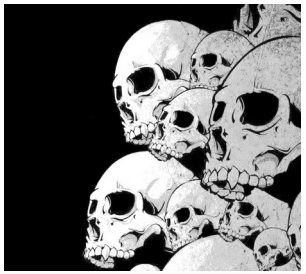
Gestion d'effets par son

Gérer sa bibliothèques de sons / Midi





3 types de modélisation :
- ADDSynth
- SUBSynth
- PADSynth

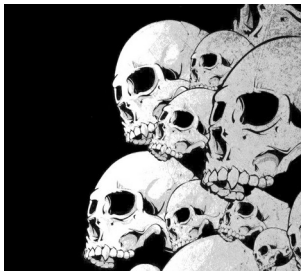


AmSynth

Synthétiseur simple d'utilisation fournit avec une grande quantité de patches.
Existe sous la forme de plugin LV2.

http://code.google.com/p/amsynth/?p=index

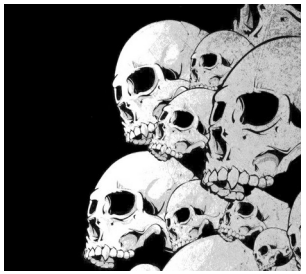
CC BY



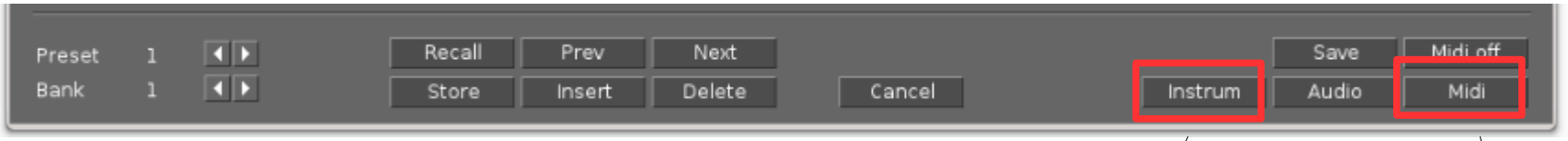
Aeolus (1/2)

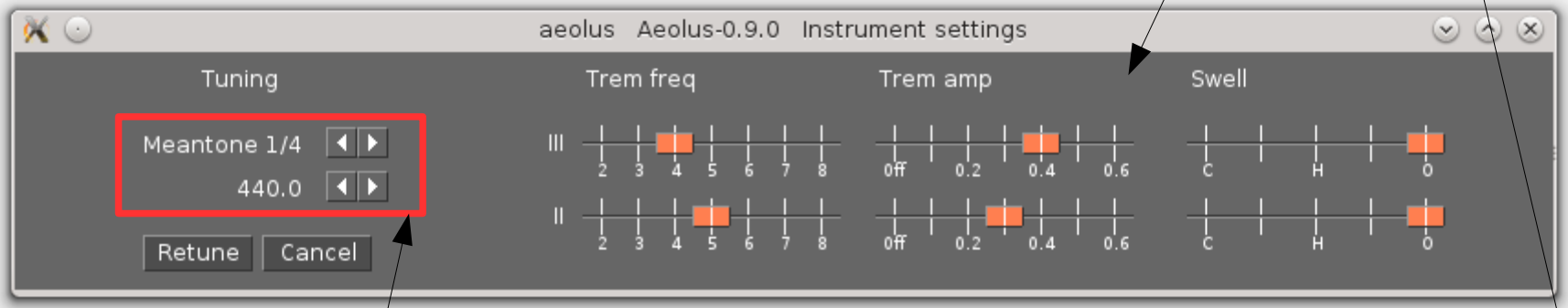
http://kokkinizita.linuxaudio.org/linuxaudio/aeolus/index.html

CC BY

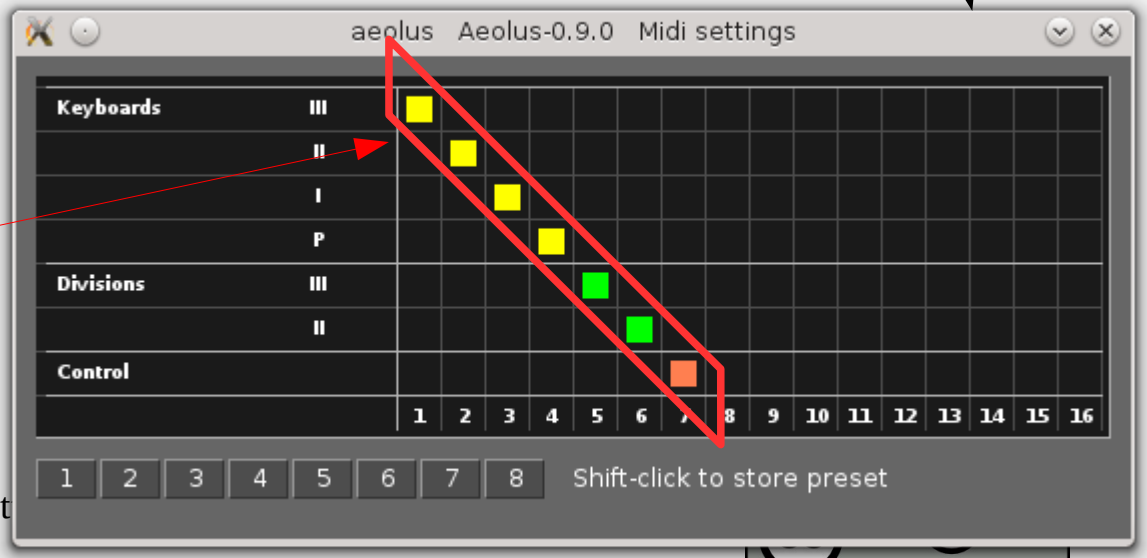


Aeolus (2/2)



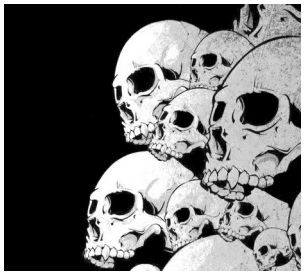


Gestion du type d'orgue



Affectation du canal MIDI et des différents claviers

BY

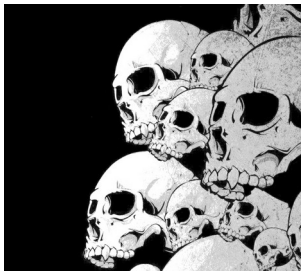


PhaseX

https://github.com/williamweston/phasex

Entièrement contrôlable par MIDI.
Très puissant.
Installé avec quelques patches intéressants.

CC BY

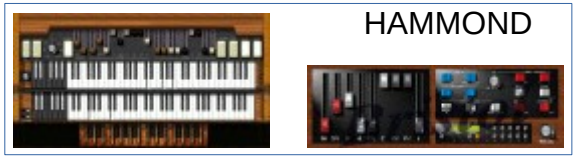


Bristol

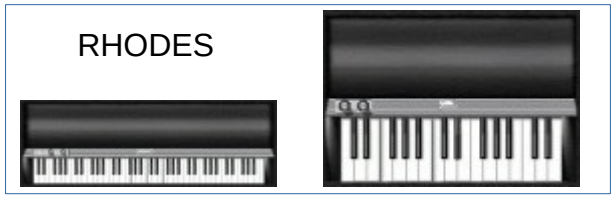
Les monuments du synthé

http://bristol.sourceforge.net

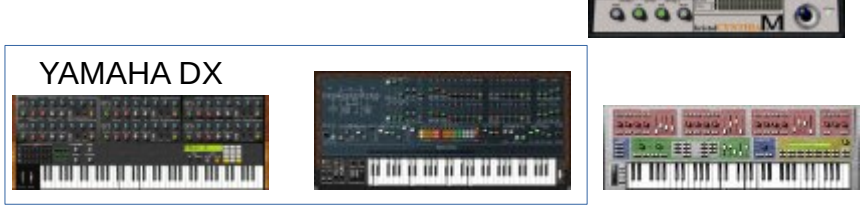
MOOG



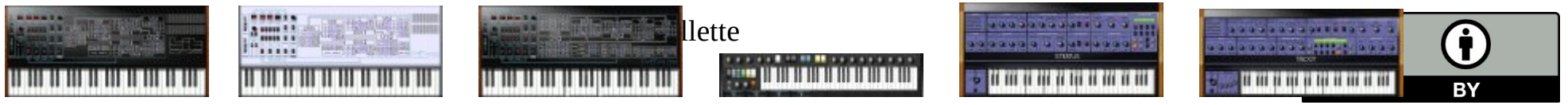
HAMMOND



RHODES

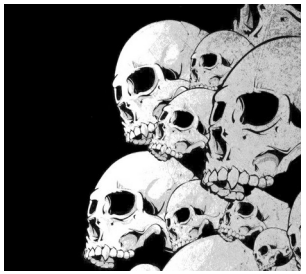


YAMAHA DX



llette

BY



Bristol

Le mini-moog

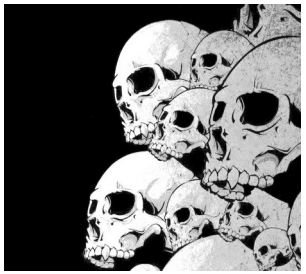
http://fr.wikipedia.org/wiki/Minimoog

Mini moog

Le minimoog est un synthétiseur analogique monophonique, inventé par Robert Moog. Commercialisé en 1970.

Il a notamment été utilisé par de nombreux musiciens, dont Eloy Fritsch, Rick Wakeman Jean-Michel Jarre, Rush, Toto, Marillion, Keith Emerson, Rick Wakeman, Yes, Vangelis, Herbie Hancock et Richard Tandy (ELO).

Mini



Bristol

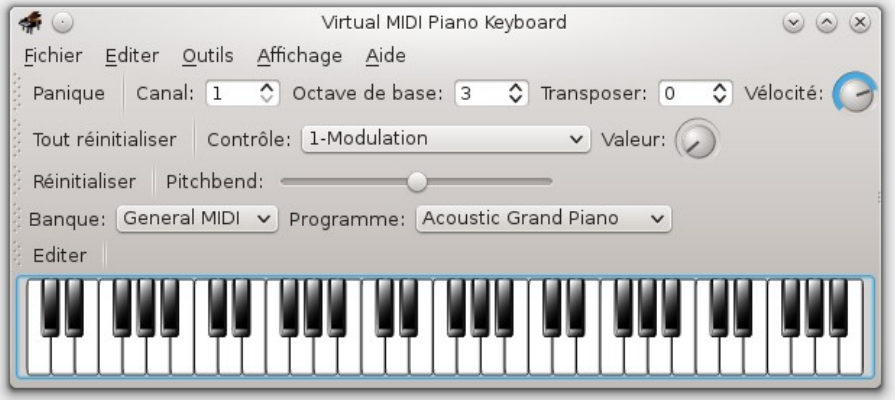
-mini : sélection du synthé
-jack: utilisation de jack pour la sortie audio
-jdo : utilisation de jack pour l'entrée midi

Petit problème : bristol se lance en ligne de commande

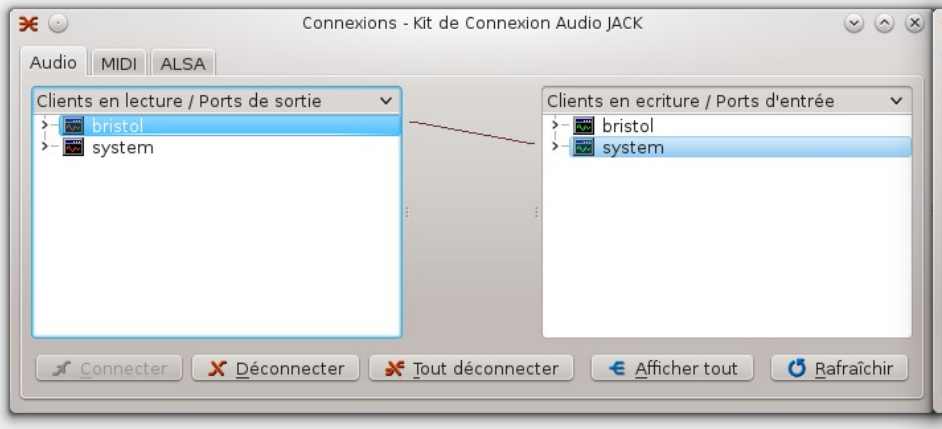
```
$ startBristol -mini -jack -jdo
```

miniMoog

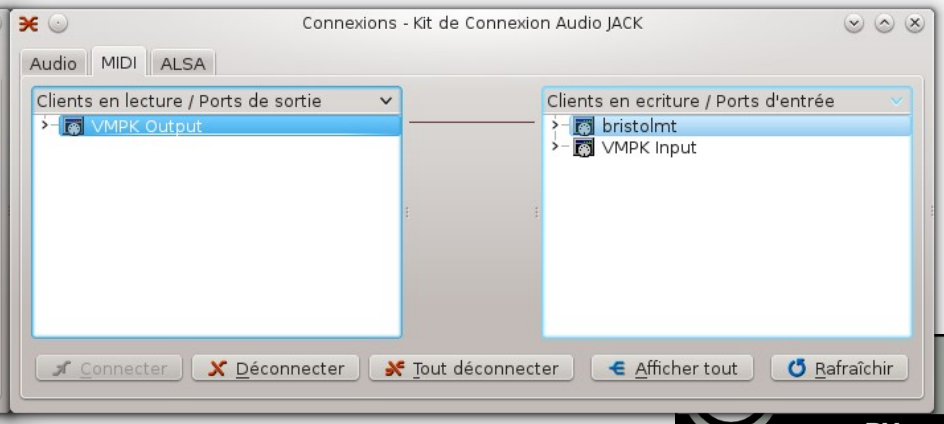
VMPK



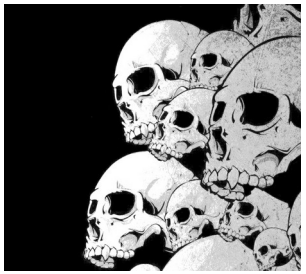
Jack audio



Jack MIDI



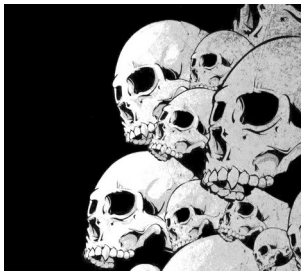
BY



Bristol
Liste des synthétiseurs

-mini	moog mini
-explorer	moog voyager
-voyager	moog voyager electric blue
-memory	moog memory
-sonic6	moog sonic 6
-mg1	moog/realistic mg-1 concertmate
-hammond	hammond module (deprecated, use -b3)
-b3	hammond B3 (default)
-prophet	sequential circuits prophet-5
-pro52	sequential circuits prophet-5/fx
-pro10	sequential circuits prophet-10
-pro1	sequential circuits pro-one
-rhodes	fender rhodes mark-I stage 73
-rhodesbass	fender rhodes bass piano
-roadrunner	crumar roadrunner electric piano
-bitone	crumar bit 01
-bit99	crumar bit 99
-bit100	crumar bit + mods
-stratus	crumar stratus synth/organ combo

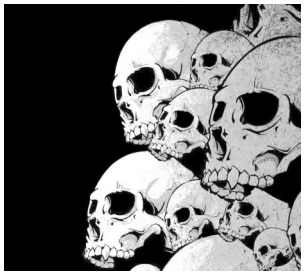
CC BY



Bristol
Liste des synthétiseurs

-trilogy	crumar trilogy synth/organ/string combo
-obx	oberheim OB-X
-obxa	oberheim OB-Xa
-axxe	arp axxe
-odyssey	arp odyssey
-arp2600	arp 2600
-solina	arp/solina string ensemble
-polysix	korg polysix
-poly800	korg poly-800
-monopoly	korg mono/poly
-ms20	korg ms20 (unfinished: -libtest only)
-vox	vox continental
-voxM2	vox continental super/300/II
-juno	roland juno-60
-jupiter	roland jupiter-8
-bme700	baumann bme-700
-bm	bristol bassmaker sequencer
-dx	yamaha dx-7
-cs80	yamaha cs-80 (unfinished)

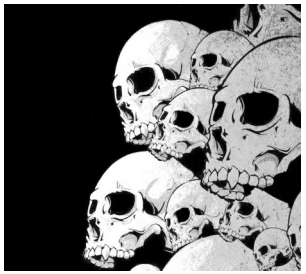
CC BY



Bristol
Liste des synthétiseurs

-sidney	commodore-64 SID chip synth
-melbourne	commodore-64 SID polyphonic synth (unfinished)
-granular	granular synthesiser (unfinished)
-aks	ems synthi-a (unfinished)
-mixer	16 track mixer (unfinished: **-libtest** only)

CC BY

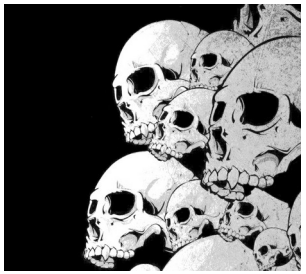


QMidiArp

http://qmidiarp.sourceforge.net/

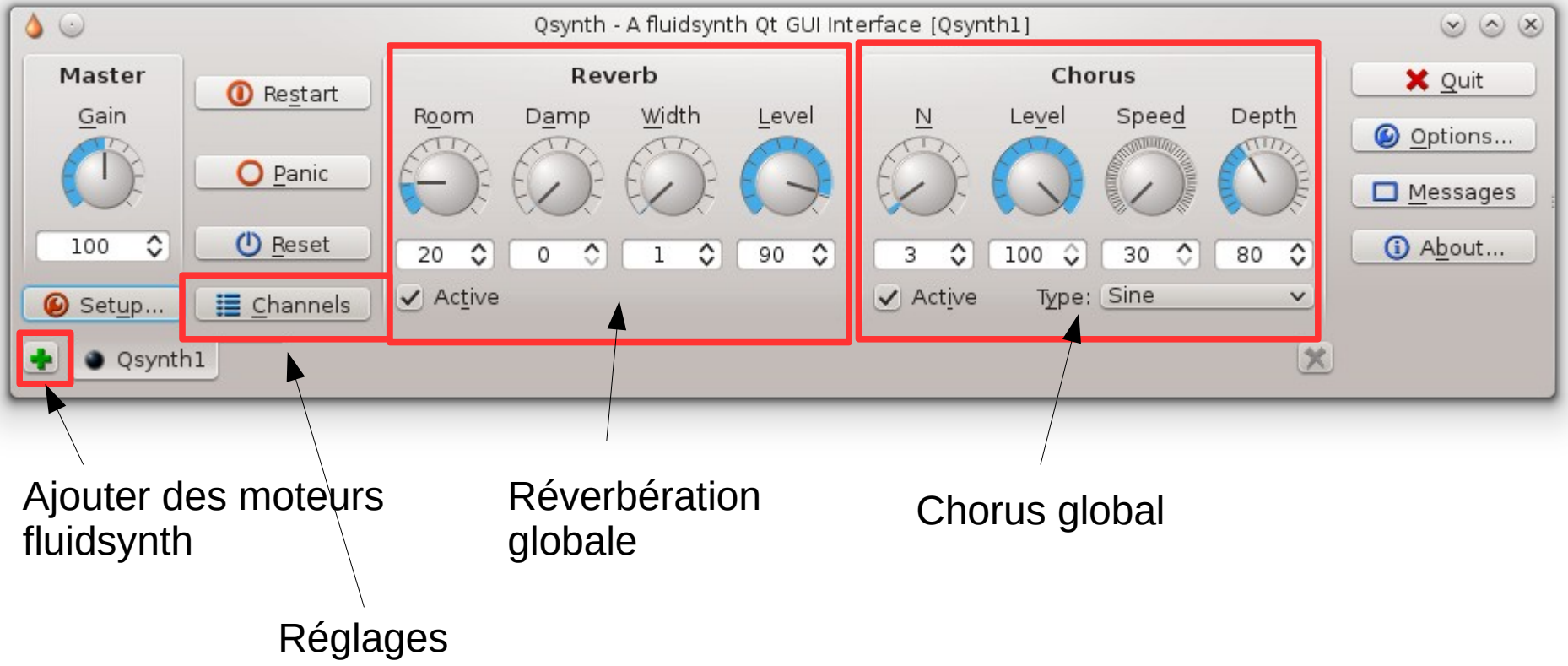
Pour transformer une note MIDI en séquences ou autre.

CC BY

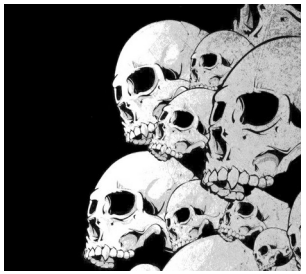


QSynth

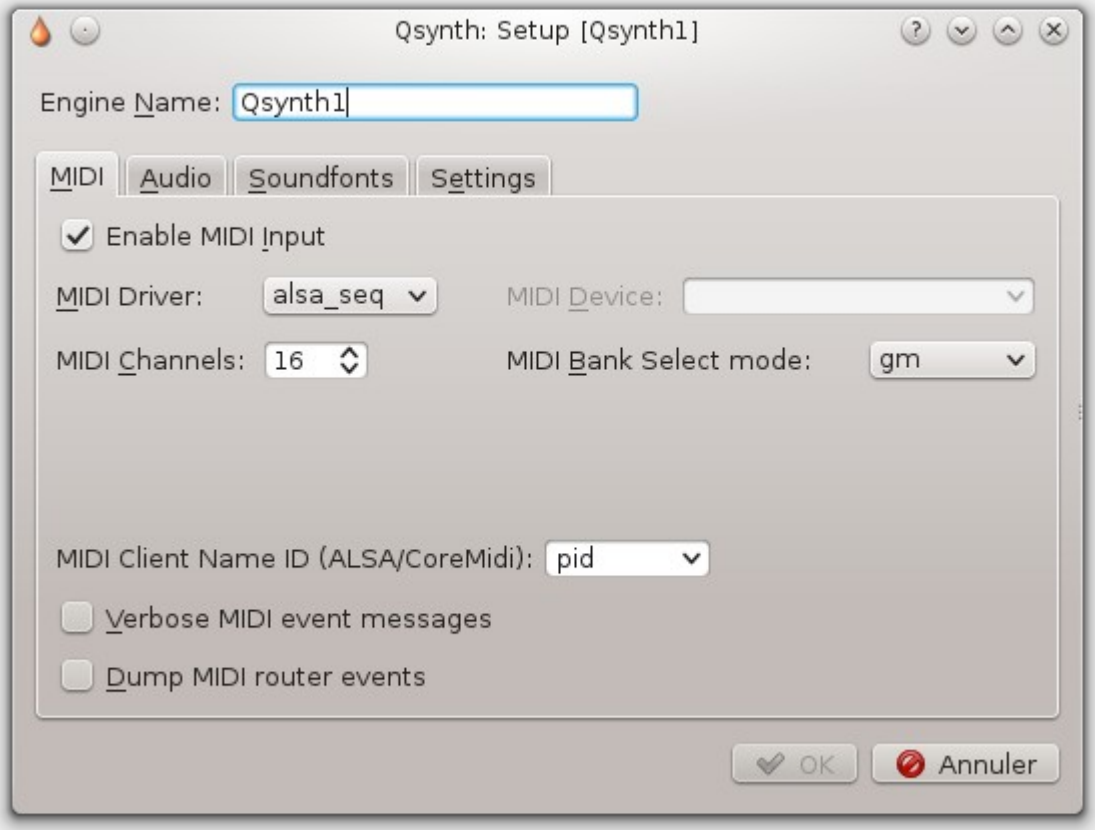
Qsynth est une interface graphique à fluidsynth. Elle permet de lire des Sound Fonts SF2.



CC BY

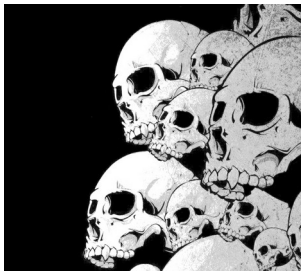


Qsynth
Setup 1/4

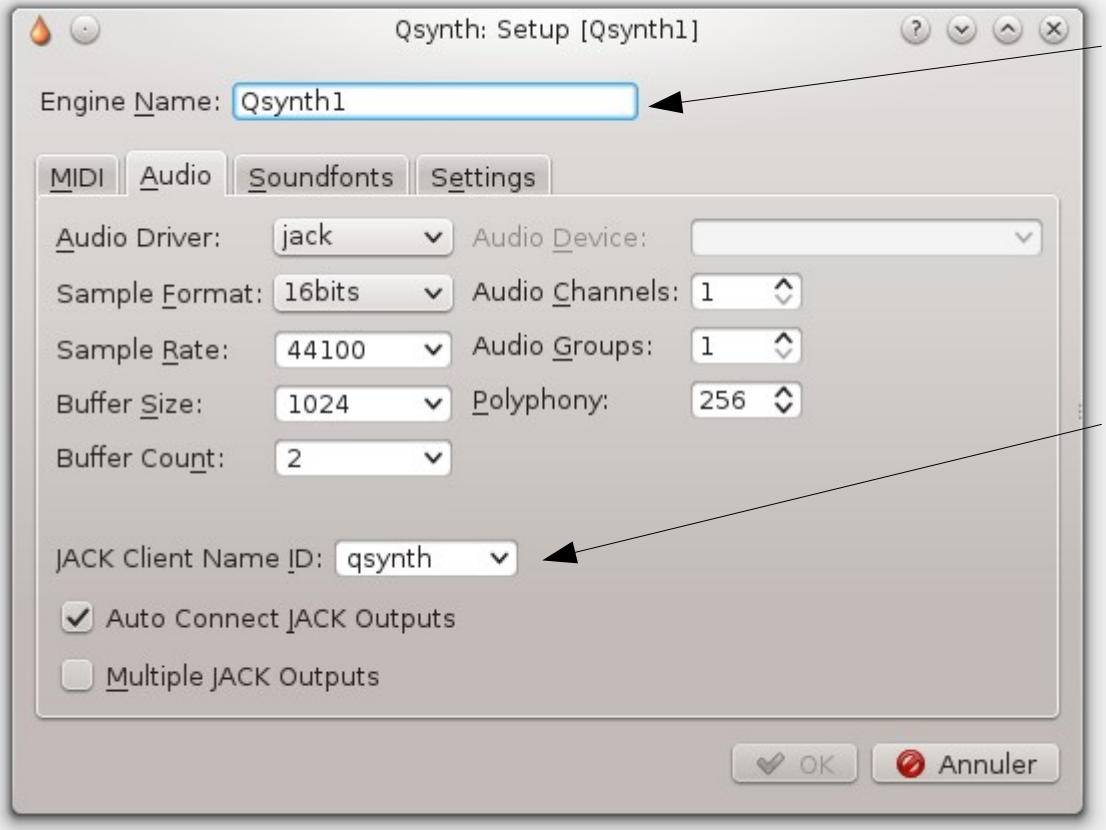


Menu permettant de sélectionner le type d'entrée MIDI à utiliser :
- alsa_seq
- jack

CC BY



Qsynth
Setup 2/4



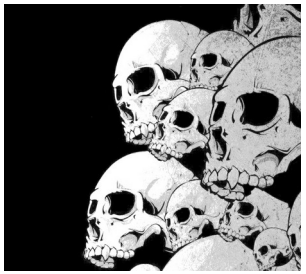
Modification du nom du moteur

Sélection du driver audio :
- jack
- alsa

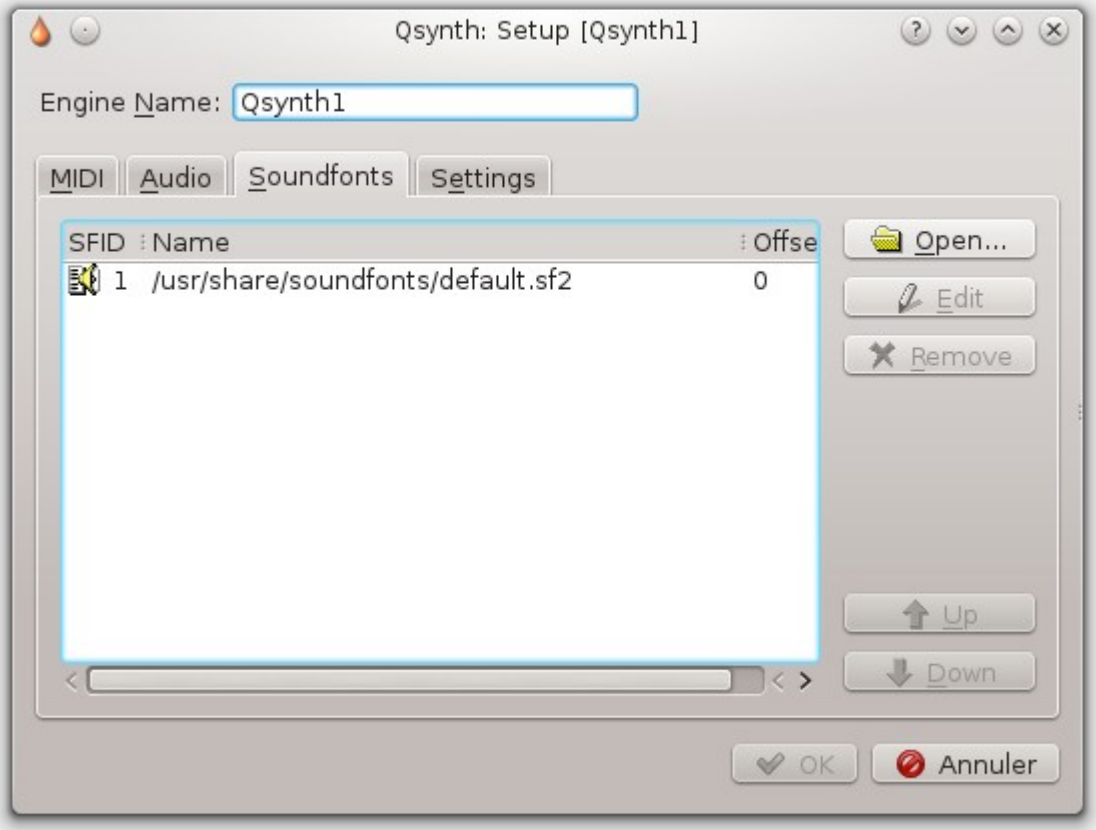
Sélection de certains paramètres audio

Modification du nom Jack

CC BY

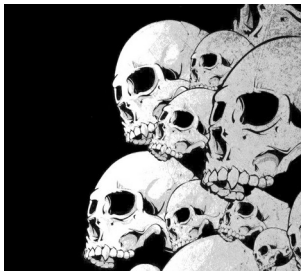


Qsynth
Setup 3/4

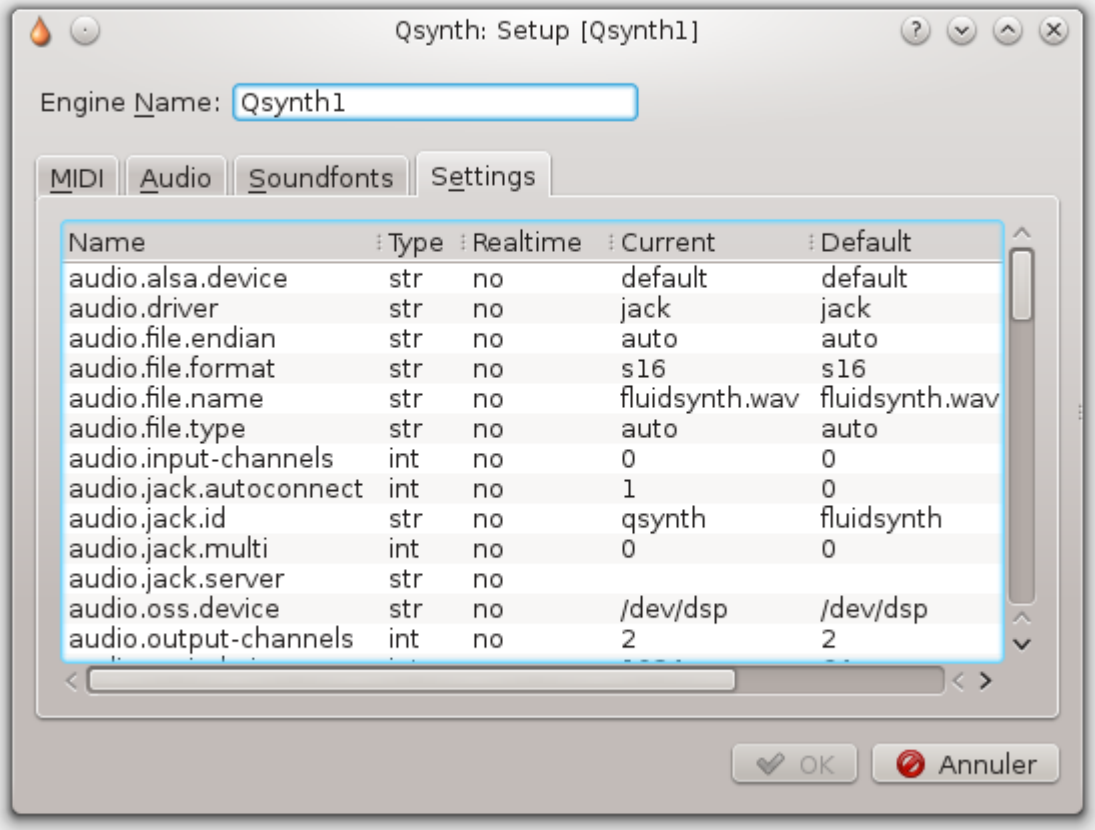


Fenêtre de chargement des SoundFonts

CC BY

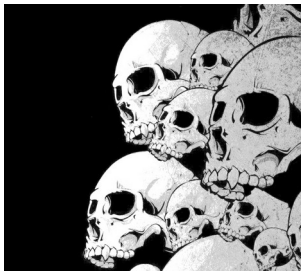


Qsynth Setup 4/4

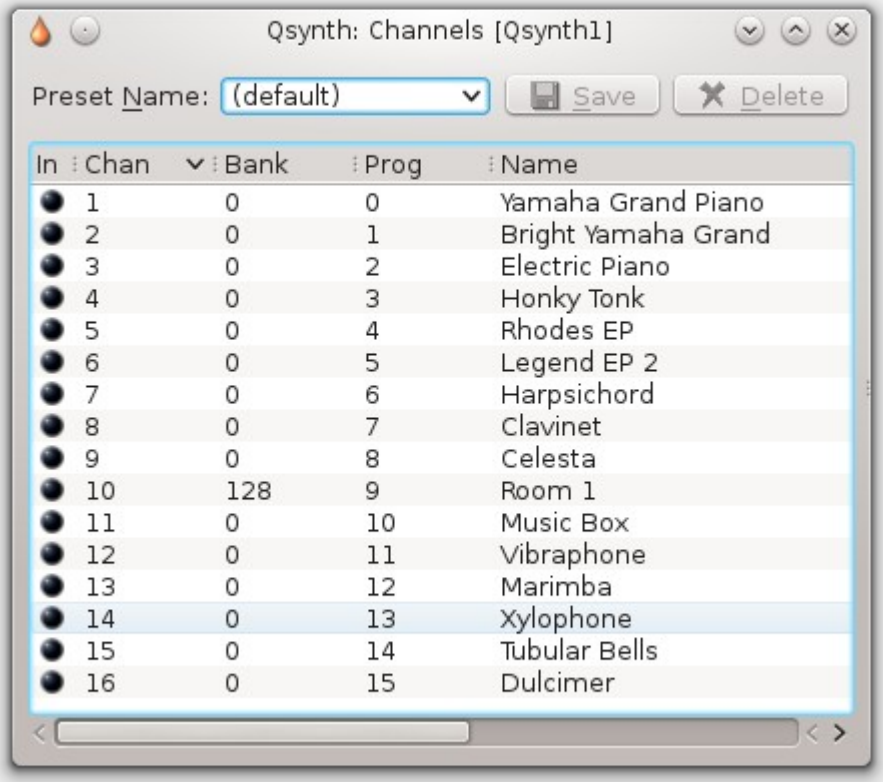


Fenêtre de réglage des options de fluidsynth

CC BY

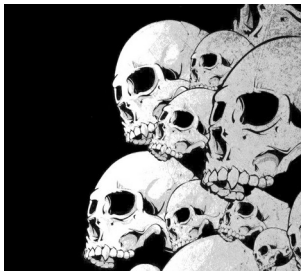


Qsynth Channels

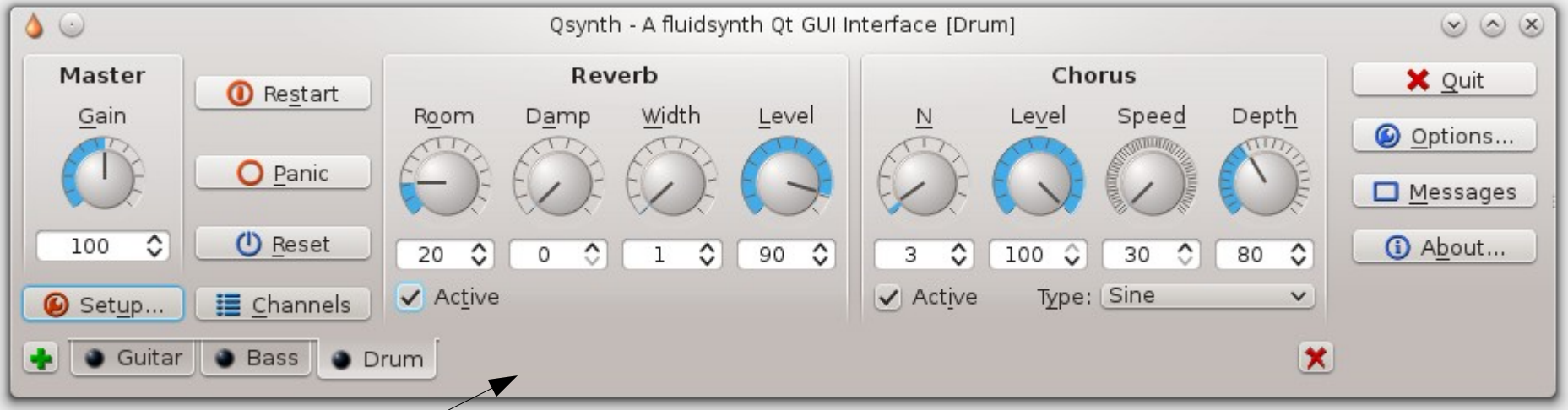


Fenêtre d'affectation des instruments et des canaux.
1 fenêtre par moteur fluidsynth.

CC BY



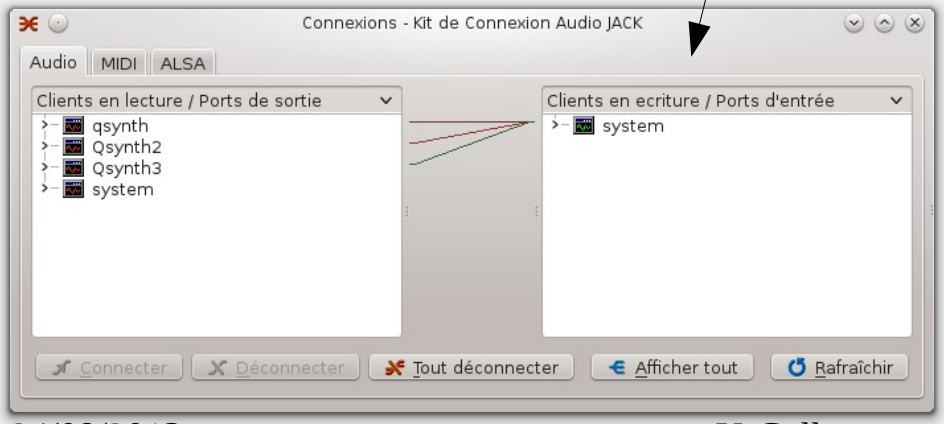
QSynth

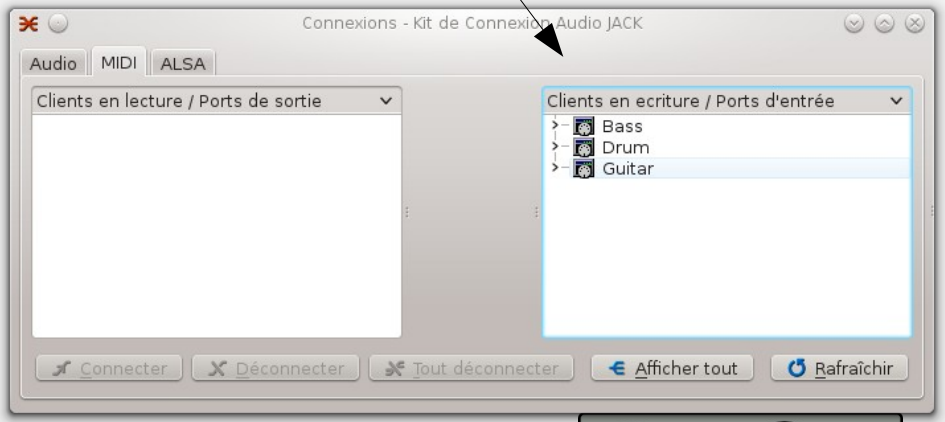


Coté QSynth

Coté Jack audio

Coté Jack MIDI





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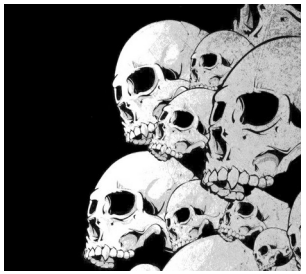
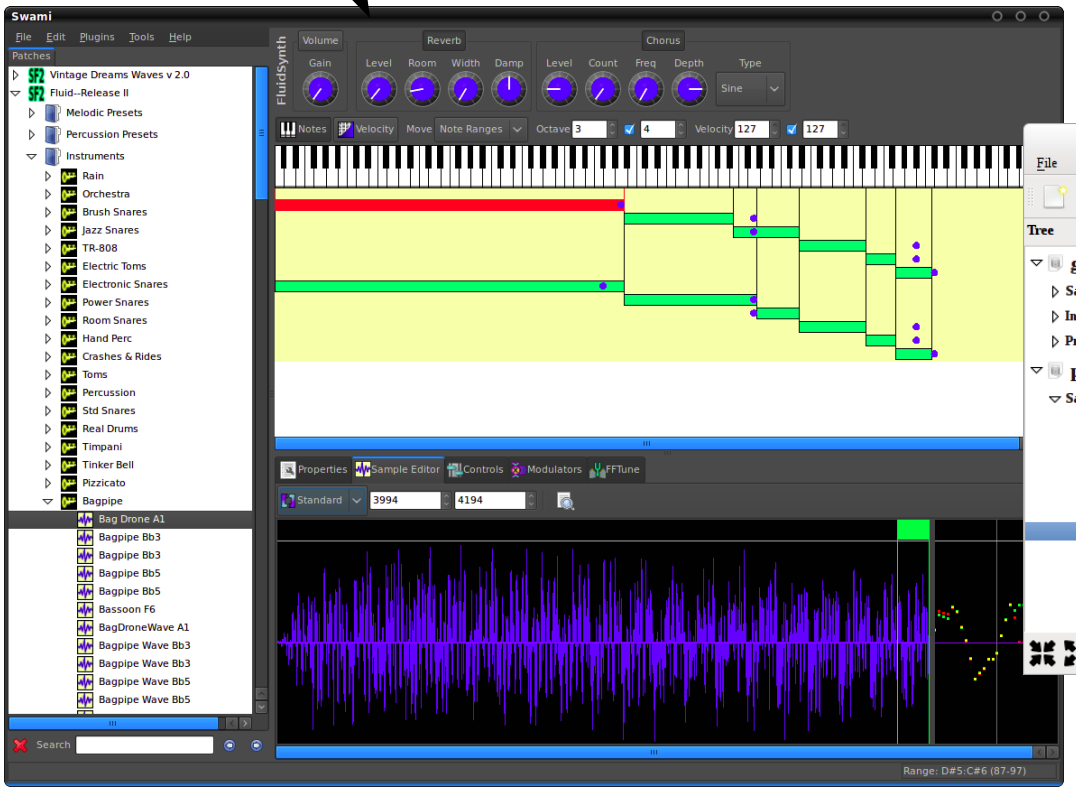
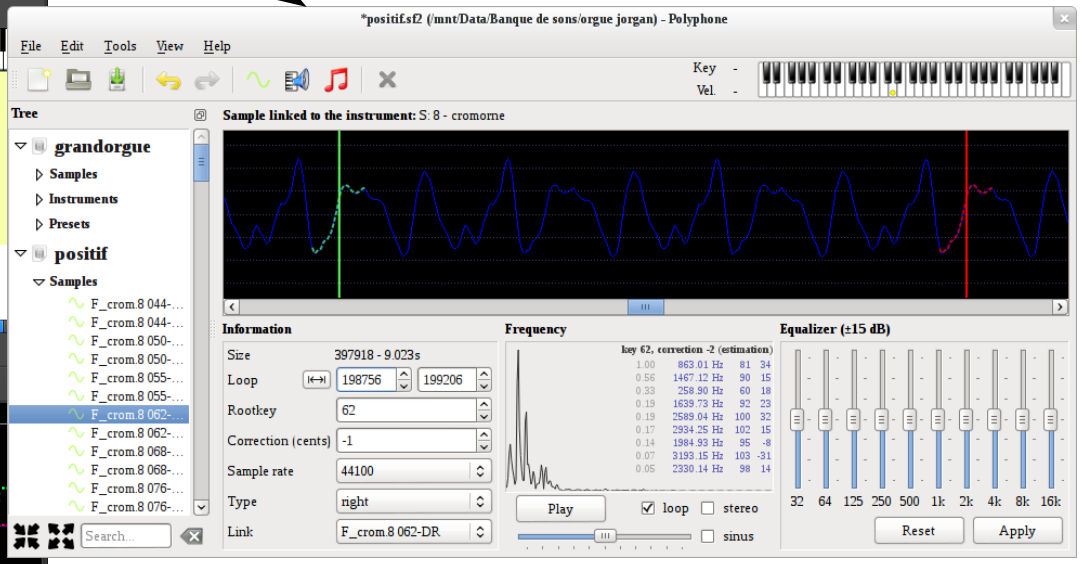


SF2
Swami

Pour modifier ou créer une Sound Font SF2 :
- Polyphone (http://www.polyphone.fr)
- Swami (http://www.swamiproject.org)





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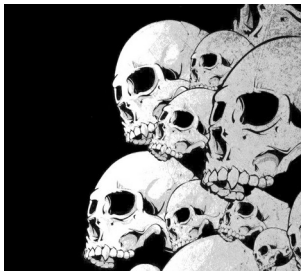
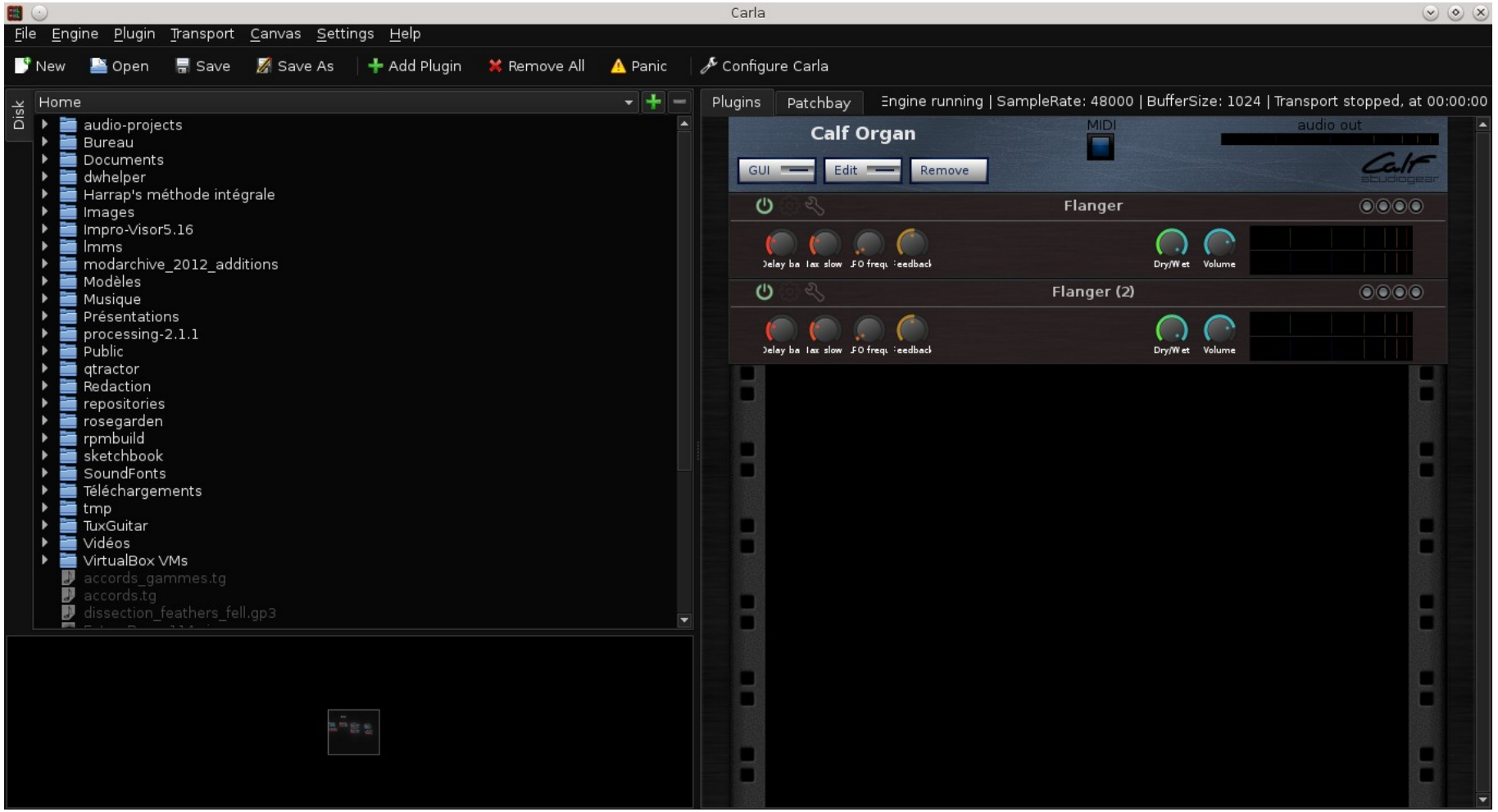


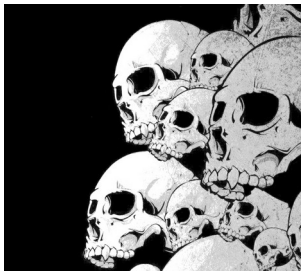
Carla

Rack de plugins

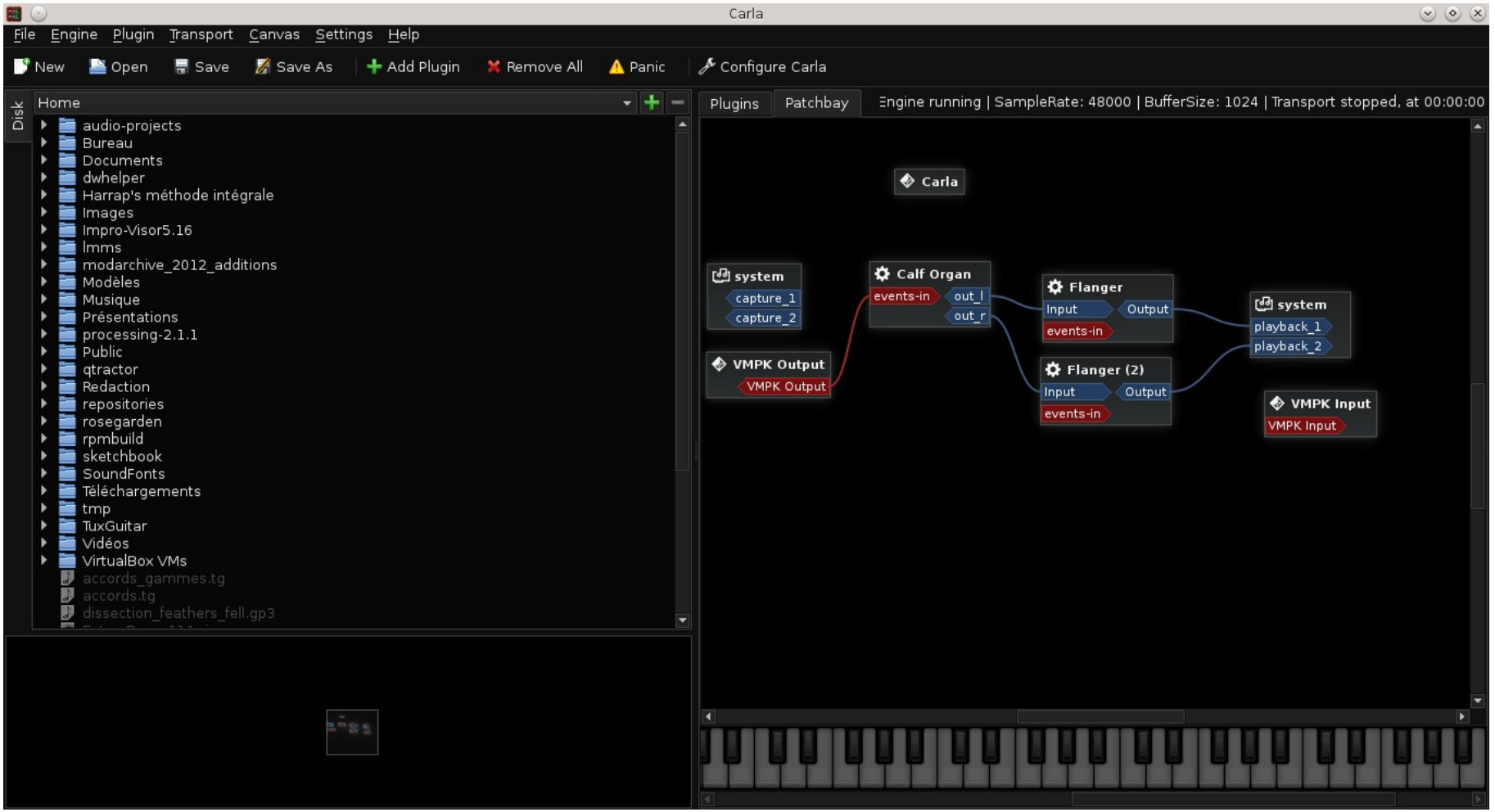


https://github.com/falkTX/Carla

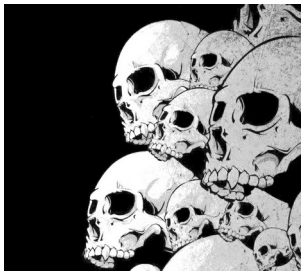
CC BY



Carla
Patchbay



CC BY

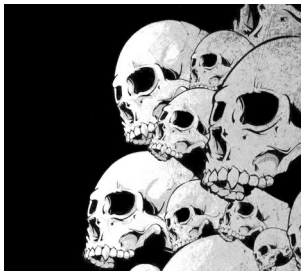


Ourorgan

Un orgue à samples

http://sourceforge.net/p/ourorgan/wiki/Home/

CC BY



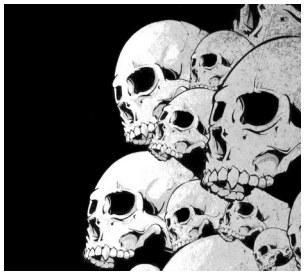
LinuxSampler

Un player de samples

Supporte les formats :
- SF2
- SFZ
- GIG

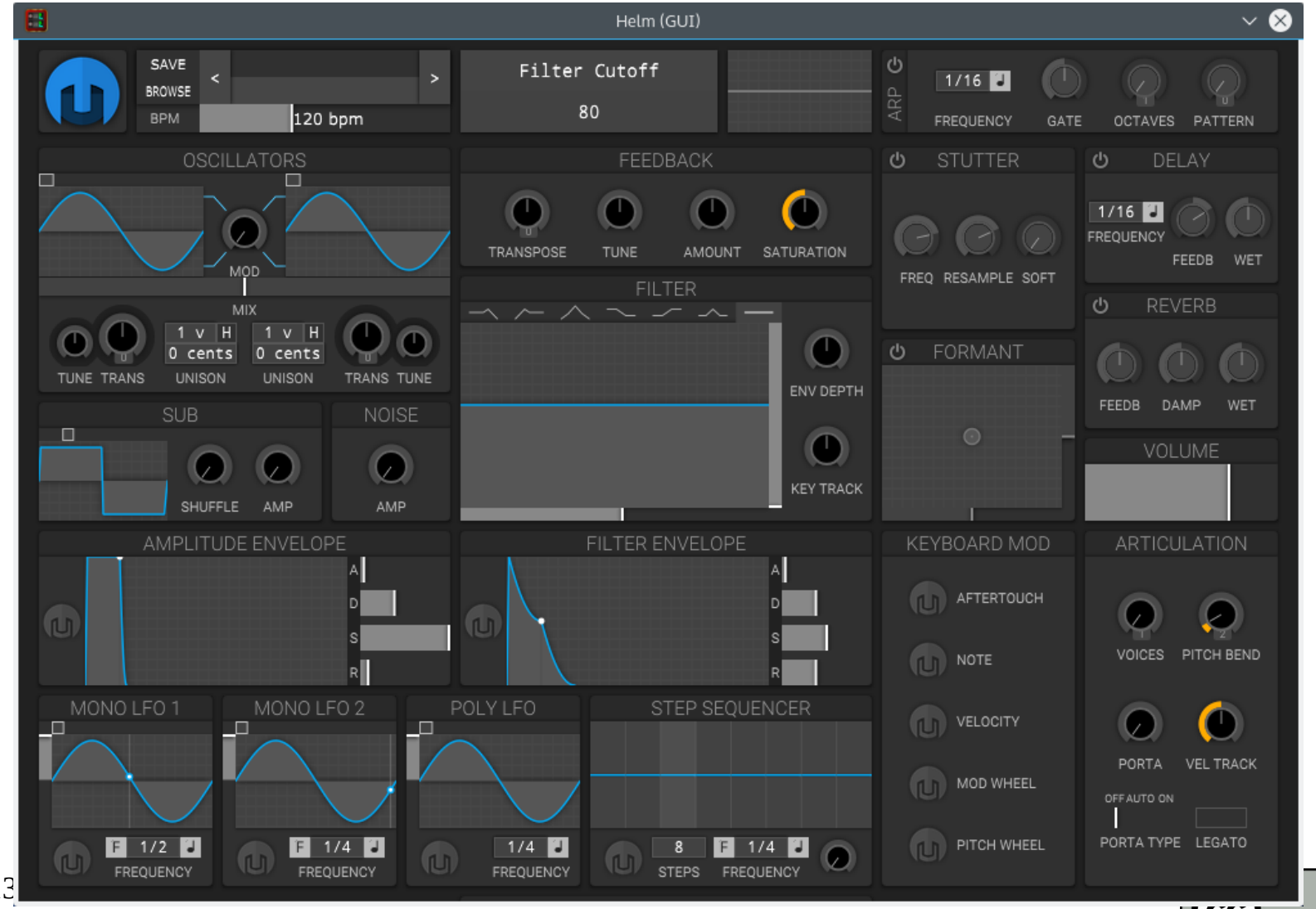
https://linuxsampler.org/

CC BY



Helm

https://tytel.org/helm/



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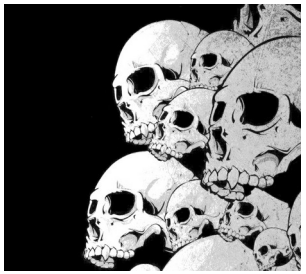


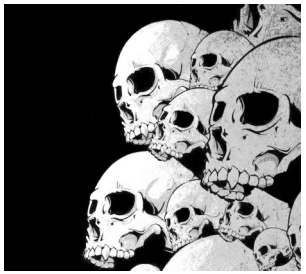
DISTRHO

Une série de plugins VST portés vers LV2.
https://distrho.sourceforge.io/

Dexed
drowaudio-distortion
drowaudio-distortionshaper
drowaudio-flanger
drowaudio-reverb
drowaudio-tremolo
drumsynth
EasySSP
eqinox
KlangFalter
LUFSMeter
LUFSMeterMulti
Luftikus
Obxd
PitchedDelay
StereoSourceSeparation
TAL-Dub-3

TAL-Filter-2
TAL-Filter
TAL-NoiseMaker
TAL-Reverb-2
TAL-Reverb-3
TAL-Reverb
TAL-Vocoder-2
TheFunction
ThePilgrim
Vex
Wolpertinger

CC BY



DISTRHO – 1/7

Arctican :
These are simple but useful plugins, "developed as there was nothing similar out there".
In the pack you will find 2 Arctican plugins: "The Function" and "The Pilgrim".

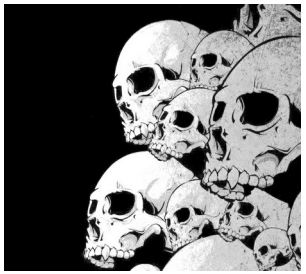
Dexed :

Dexed is a plugin synth that is closely modeled on the Yamaha DX7.
The goal of this synth is to be a tool/companion for the original DX7.

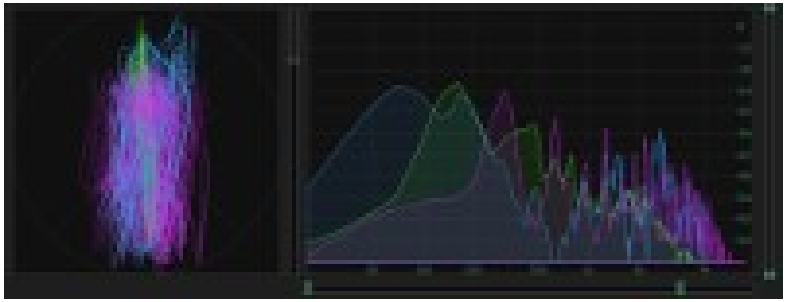
DrowAudio :

Professional grade audio plugin suite from dRowAudio, now available for Linux.

CC BY



DISTRHO – 2/7

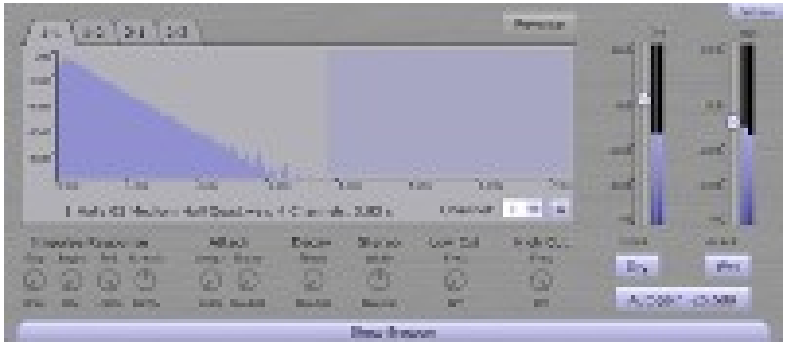


EasySSP :

Easy Sound Space Perception is a small and lightweight audio visualization tool, which currently provides spectrometer and goniometer views.

Juced :

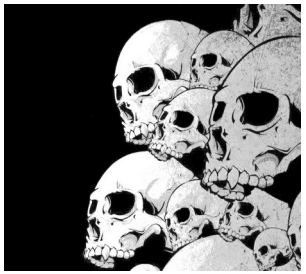
Plugins originally in the Jucetice project, then moved to Juced.
We took DrumSynth and EQinox and made them work better and in LV2 format.



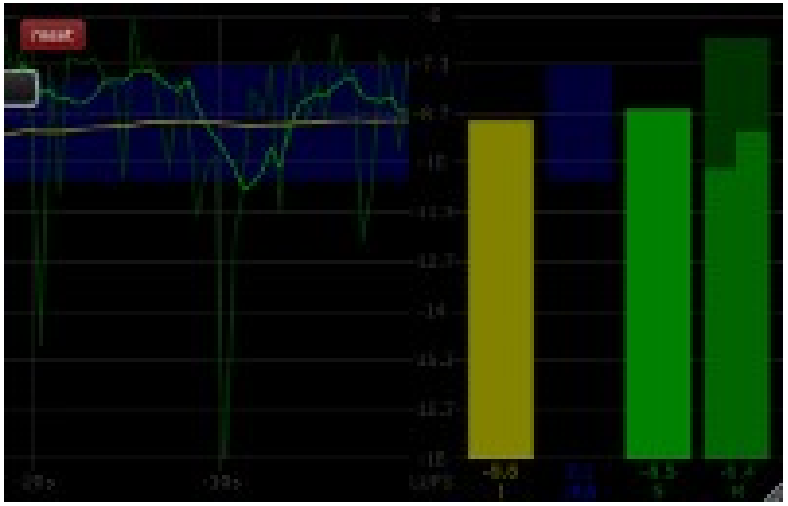
KlangFalter :

KlangFalter is a convolution audio plugin.

CC BY



DISTRHO – 3/7



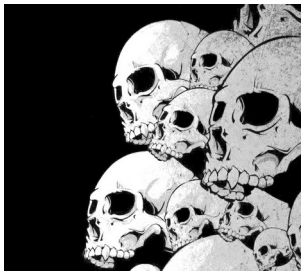
LUFS Meter :

The LUFS Meter plugin measures loudness similar to the human perception of loudness.

Luftikus :

Luftikus is a digital adaptation of an analog EQ with fixed half-octave bands and additional high frequency boost.
As an improvement to the hardware it allows deeper cuts and supports a keep-gain mode where overall gain changes are avoided.

CC BY



DISTRHO – 4/7

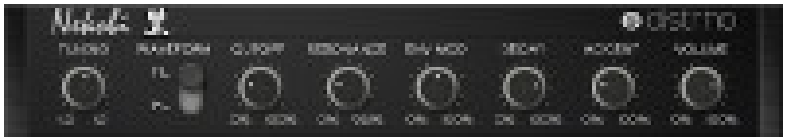
Mverb :

MVerb is a studio quality, open-source reverb.

Its release was intended to provide a practical demonstration of Dattorro's figure-of-eight reverb structure and provide the open source community with a high quality reverb.

Nekobi :

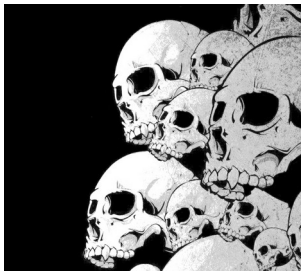
Nekobi is a simple single-oscillator synth based on the Roland TB-303.



Obxd :

Obxd is emulation of famous ob-x, ob-xa and ob8 synths.
While not copying originals, some of the features were taken to a better point.

CC BY



DISTRHO – 5/7

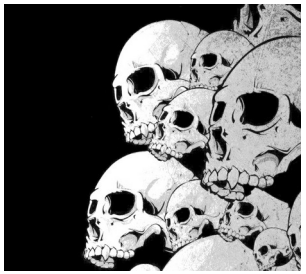
Pitched Delay :

PitchedDelay is a delay that allows the pitching the delayed signal, within or outside the feedback loop.

Stereo Source Separator :

This is a plugin that uses the spatial information hidden in the stereo signal to accomplish source separation.

CC BY

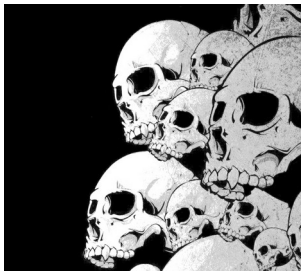


DISTRHO – 6/7

TAL :

This is a plugin pack from TAL (Togu Audio Line), now available for Linux.
In this pack you will find TAL Dub-3, Filter, NoiseMaker, Reverb and Vocoder.
A Special thanks goes to Patrick Kunz for making these awesome plugins!

CC BY



DISTRHO – 7/7

Vex :

Vex is a 3 oscillator subtractive waverom synth

Wolpertinger :

Wolpertinger is a subtractive, antialiased polyphonic software synthesizer, now working as a LV2 plugin.

CC BY