



# Chiptune: a short 8-bit story

by Damiano "dag7" Gualandri



# Cracktro: a dive into the past



# Chiptune: one word, lot of sounds and lot of faces...

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Matthew  
Simmonds

4mat



Carlos  
Del Alamo

Estrayk



Fabio  
Bortolotti

Kenobit



Niamh  
Houston

Chipzel

# The Demoscene

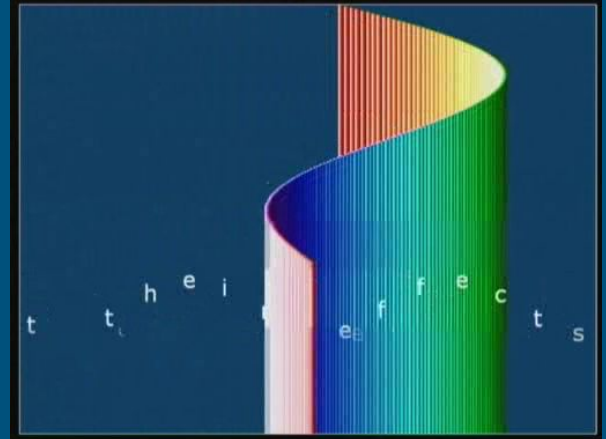
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Assembly 2004



fr-021: D (Stands For) - Farbrauch



Mooncheese - Shingebis

How do we make chiptune?

# Requirements

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→ creativity

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→ retrocomputer, console...



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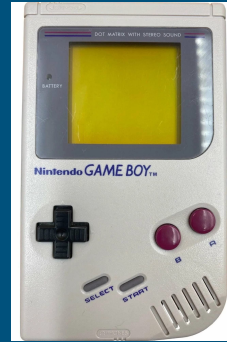
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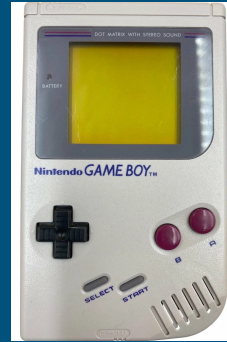
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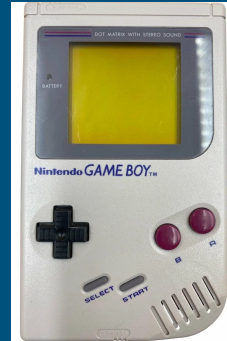
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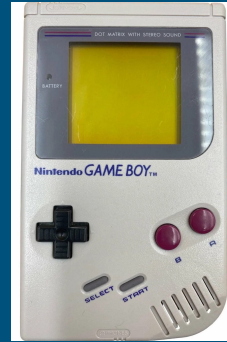
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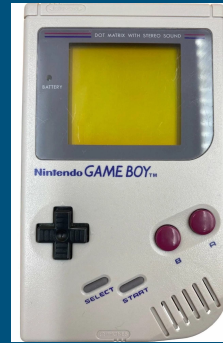
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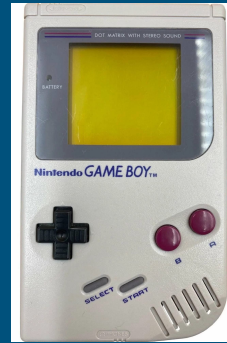
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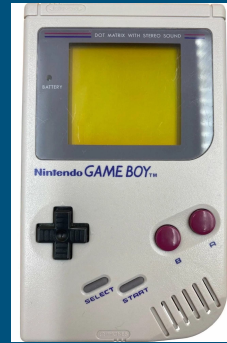


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**ANYTHING IS FINE, JUST START**  
(yes, even and especially emulators)



**“Creativity is Just Connecting  
Things”**

**- Steve Jobs**

# Different approaches

This screenshot shows a digital synthesizer interface with a large, stylized red 'V' graphic overlaid. The interface includes a piano roll on the left with notes for 'LITTLE SOUND DJ V4' and '128'. The main area displays a complex arrangement of notes and parameters for various channels. A keyboard view is visible at the bottom, and a 'MIDI INFORMATION' window is open on the right side.

This screenshot shows a digital synthesizer interface with a large, stylized red 'S' graphic overlaid. The interface includes a 'CONTROLS' section with tabs for 'MODULATION', 'MIXER', 'EFFECTS', and 'SETTINGS'. The 'WAVE SEQUENCER' and 'CHIP SETTINGS' sections are visible, showing parameters like 'Preset: minor6th', 'Sync: BPM 120.00', and 'Wave Channel Preset: 4Bit Thingy'. An 'OSCILLOSCOPE' window is also present, displaying a waveform.

# Different approaches - Pros & Cons

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	Tracker	VST
MIDI support	✓ (😞)	✓
Learning Curve	✗	✓ **
Effects	✓	✓
Sounds come from chips	✓	✗
Samples support	✓ (😞)	✓
Backwards compatible	✓	✗ (😞)
Hardware availability	😞	✓

# Take-home lesson

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- **Chiptune**: music generated from **chip-based audio hardware**. From "chip" (microchip) and "tune" (melody). Usually **made with trackers**.
- **Cracktro**: a brief **introduction** presented **before a cracked program**, typically highlighting the pirate group's name along with key details
- **Demoscene**: a form of **digital art** where audiovisual productions are crafted by specialized groups, pushing the limits of the hardware.

# Thanks for your attention!



<https://dag7.it>  
with all my contacts

Email, Mastodon, Instagram, Youtube, Twitch... WHATEVER!  
Pretty much everything's there in the left sidebar!

This is a list of useful links, feel free to fiddle with:

- LSDJ (GB) <https://www.littlesounddj.com/> probably the best way to get started with a tracker. Limited by 4 channel, you probably don't want to fiddle too much
- [modarchive.org](http://modarchive.org) cracktro and chiptune music, you can open these files using furnace or milkytracker and carefully study the track. It's like a track's source code.
- Pouet.net <https://pouet.net> most of the demoscene and cracktro scene has passed here
- THE Chiptune Forum [chipmusic.org](http://chipmusic.org)
- Furnace tracker: [furnace: a multi-system chiptune tracker](#) an awesome modern tracker, with MIDI support and multi-chip emulation
- Protracker 2 (Win/Linux/Mac): [ProTracker 2 clone - 16-bits.org](http://ProTracker2clone-16bits.org) probably the most classic and icon tracker ever
- Micromusic Italy: [Micromusic Italy - YouTube](#) they also have a Twitch channel with live streaming of performances

For everything else or know more, just throw me an email or message me in some way!