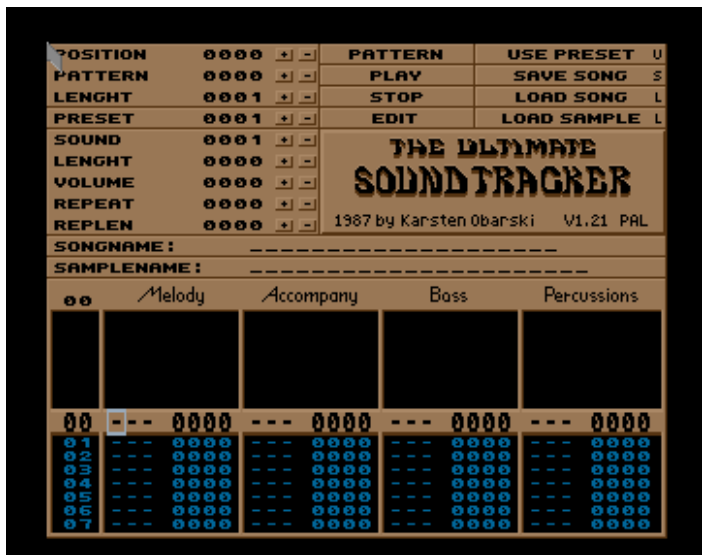


Tracker

## ByteNoise

### Tracker



The Ultimate Sountracker, the first tracker

A tracker is a piece of software used to create and play back modules, which are computer files consisting of sound samples and musical notation that together make complete pieces of [music](#). A tracker is also someone who uses such software.

### The lead up to the tracker

The [sampler](#) is arguably the most versatile musical instrument there is. It can reproduce any [sound](#) fed into it, at any desired pitch.

In the early 1980s, Fairlight released the CMI, the first digital sampler capable of simultaneously playing several different sounds (technically known as being multitimbral). It also has a feature that has since been largely overlooked: a built in [step sequencer](#).

The step sequencer is a device used to play electronic instruments in much the same way as a player piano works. It allows musicians to type in, store, and play back sequences of notes. Although it is quantised, giving the resulting music a mechanical feel that lacks personal style, it is relatively simple to use. It's also arguable that robotic precision is a style of playing in its own right, even an important part of the techno aesthetic.

A multitimbral sampler and a step sequencer to control it are a match made in heaven. More than just an interesting instrument, this combination can be considered a complete studio in its own right. Using nothing more than this single tool, a musician can create full compositions.

The Fairlight brought a completely original style of music into existence when it was embraced by artists like The Art of Noise, but its price tag of roughly £20,000 left it far out of reach of the masses. The integrated sampler and step sequencer combination only became popular in 1987, when Karsten Obarski wrote Ultimate Soundtracker for the Commodore Amiga personal computer. Although it was designed to help musicians write computer game soundtracks, its affordable price tag made

it accessible to many people, from unsigned producers of electronic music to people merely toying with the idea of composing songs.

It wasn't long before other hackers improved upon Ultimate Soundtracker, and there was a flood of programs that combined a sampler and step sequencer in a single package with a similar look and feel, many of them released in the public domain. The musicians who use them, as well as the programs themselves, became known as trackers. Some of the most popular trackers include Fastracker, ScreamTracker and Impulse Tracker, all of which run in DOS. As of writing (2006), the tracker community is still alive, with many people swapping their compositions with each other.

## **The mod file format**

Trackers create module files, or mod files for short. These files contain both the samples of various sounds used by a piece of music, and the sequences of notes. This enables a whole composition to be conveniently contained in a single file.

For comparison, [MIDI](#) files, which were popular at about the same time, contain only the notation of music. This means that whenever someone listens to a MIDI file, they hear the same notes being played on vastly different instruments, so they don't hear what the original composer had intended. Mod files, on the other hand, let everyone hear the composition exactly as it sounded to the original composer.

Another comparison might be made to the popular MP3 format, which also offers songs in relatively small single files. However, while MP3 files let you play a song, they don't let you dissect it

or tinker around with it like mods do. A mod doesn't contain the finished recording, but all the ingredients and instructions to create it from scratch, enabling anyone with the appropriate tracker software to see exactly how its effects are achieved, and hopefully admire the composer's unique style and any cunning tricks used to push the format to its limits.

## **The tracker community**

Due to the open nature of the mod file format, and the hacker spirit, a whole community exists consisting of musicians who create, share, and listen to mods. Although it is not what it once was, it is still worth looking into.

In light of the recent attempts by the recording industry to make their songs difficult to copy, and to sue their customers for sharing them, the tracking community is a refreshing sight. The dichotomy between artists selling music and fans buying it is eschewed in favour of everyone being equal, free to build upon everyone else's work. Tracker etiquette encourages everyone to use each other's samples and study each other's compositional ideas and techniques, slowly improving the state of the art with every new piece of music.

In short, the tracking community is fully aware of how culture works: by taking existing ideas (and in this case, the sounds themselves) and building upon them. I'd encourage anyone interested in making music to look into tracking. In many ways, this amateur music community has more to offer musicians than the professional music industry - everything except the unlikely possibility of fame and fortune. If you're more interested in actually making and sharing music, it's ideal.

## References

- [Scream Tracker V3.21](#)
- [Impulse Tracker V2.14 Patch #5](#)