

Audio for programmers

1. [Audio formats for programmers](#)
2. [General information, theses, mathematics and physics of pitch recognition](#)
3. [Audio XML formats](#)
4. [Links](#)

1. Audio formats for programmers

A good source for file formats is www.wotsit.org/. Among them there is a collection of [music formats](#).

[Ogg Vorbis](#) seems to be an important format in the future.

See also my collection of [music notation formats](#).

2. General information, theses, mathematics and physics of pitch recognition

I recommend to read the short introduction [What is Music Recognition](#) by [AKoff Sound Labs](#), that holds for all such programs.

[Solo Explorer](#) is also available as DLL Library. (Click on Products -> technology licensing). There you find a comprehensive library on the topic. (Click on research -> bibliography).

[Musical Signal Parameter Estimation](#), a thesis by [Tristan Jehan](#).

[The Journal of the Acoustical Society of America Online](#)

Detection of Signals in Noise by Robert N. McDonough, A. D. Whalen Hardcover - 495 pages 2nd edition (April 1995) Academic Pr; ISBN: 0127448527

3. Audio XML formats

3.1. MIDI XML Specifications

Music Notation - www.music-notation.info - Copyright 1997-2012, [Gerd Castan](#)

[MIDI XML Specifications](#) by the MIDI Manufacturers Association.

3.2. XMidi

[XMidi](#) by Peter Loeb is a representation of MIDI in XML.

3.3. 4ML

[4ml](#) aka fourml is a simple open source audio XML application that is simple and a little more abstract than MIDI.

4. Links

Recognisoft maintains a [link list](#) (click on links).