



SoundTouch Audio Processing Library

SoundTouch

[About SoundTouch](#)
[SoundStretch utility](#)
[Download](#)
[Source codes](#)
[Audio Examples](#)
[Readme](#)
[F.A.Q.](#)
[License](#)

Do you like SoundTouch? Then please support SoundTouch development and maintaining by a donation!

[Make A Donation](#)

Unrestricted Royalty-free license also available for commercial purposes, please contact us for more information!

COOL! Tempo / Pitch control tool **Audioshift** now available for **Android** mobile phones & tablets running Android OS v2.3-3.2! Click icon below for **FREE** install:



About the SoundTouch library

The SoundTouch Library Copyright © Olli Parviainen 2001-2014

SoundTouch is an open-source audio processing library for changing the Tempo, Pitch and Playback Rates of audio streams or audio files

- **Tempo (time stretch):** Changes the sound to play at faster or slower tempo than originally without affecting the sound pitch.
- **Pitch (key) :** Changes the sound pitch or key while keeping the original tempo (speed).
- **Playback Rate :** Changes both tempo and pitch together as if a vinyl disc was played at different RPM rate.

The SoundTouch library is intended for application developers writing sound processing tools that require tempo/pitch control functionality, or just for playing around with the sound effects.

The SoundTouch library source kit includes also an example utility [SoundStretch](#) that uses SoundTouch library for processing .wav audio files from command-line interface.

More information:

- [Example sound clips](#) of each control mode
- [List of applications that use SoundTouch library](#)
- [Frequently Asked Questions](#)
- Theory behind how SoundTouch works - [read tutorial on audio time/pitch scaling basics](#)

SoundTouch library Features

- Efficient C++ implementation of time-stretch, pitch-shift and sample rate transposing routines.
- **Full source codes** available for both the SoundTouch library and the example application.
- Clear and **easy-to-use** programming interface via a single C++ class.
- Support **16bit integer and 32bit floating point mono/stereo/multi-channel** audio formats
- Capable of **real-time audio stream processing**:
 - input/output latency max. ~ 100 ms.



- Processing 44.1kHz/16bit stereo sound in realtime requires a 133 Mhz Intel Pentium processor or better ;-)
 - **Portable** implementation: The SoundTouch library compiles for any processor and OS platform supporting GNU C compiler (gcc) or Visual Studio, for example Win32, Mac OSX, Linux & other *nixes, Android...
 - MMX & SSE instruction set optimizations for x86 processors
 - Compiled **executable binaries** supplied for Windows & Mac OS
 - Released under the [**GNU Lesser General Public License \(LGPL\) v2.1**](#)
-

Contact Information

[Author contact information.](#)

SoundTouch WWW page: <http://www.surina.net/soundtouch>

Copyright © Olli Parviainen