

# Audio

## Comprehensive A/C Codec Library

Largest video codec libraries on earth, supporting nearly every major format in use today in both consumer and professional markets.



The Audio Codec Package consists of various audio encoders and decoders for Low Level and DirectShow (Windows only) supporting different formats, such as MPEG, PCM, AAC, HE AAC, LPCM, MP3, AMR and WMA.

- **MPEG Audio Encoder/Decoder:** Supports audio encoding into MPEG-1 (ISO/IEC 11172-3) and MPEG-2 (ISO/IEC 13818-3) streams. The corresponding decoder additionally enables you to play back MP3, MPEG-2.5 and LPCM audio streams. MP3 (MPEG-1/2 Layer 3) is the most widespread format for audio playback currently on the consumer market. It is supported by almost every mobile player, cell phone etc. The MP3 format owes its great success to the internet, because due to its architecture it can be easily distributed and is supported by almost every media player on every platform. MP3 is based on the ISO/IEC 11172-3 standard. The Package only supports MP3 decoding.
- **PCM Audio Encoder:** Supports DVD LPCM, AES3 PCM's and HDMV PCM (for AVCHD and Blu-Ray). The PCM audio encoder can be used with the muxer to put PCM audio tracks into DVD, MPEG-2 transport and MXF streams. It also supports AES3 382 for XDCAM HD and AES3 311 for IMX. The PCM Audio Encoder is only available as Low Level component. For PCM audio decoding, DVD LPCM, AES3 302M (defined for general transport streams), AES3 331M and 382M (MXF files only), HDMV (AVCHD and Blu-ray) streams are supported.
- **AAC Encoder/Decoder:** Enables you to encode and decode MPEG-2 (ISO/IEC 13818-7) and MPEG-4 (ISO/IEC 14496-3 including Amd.1:2003 – HE AAC v1 and Amd.2:2004 – HE AAC v2) AAC audio streams. The AAC (Advanced Audio Coding) format is predominantly used with H.264/AVC and MPEG-4 Part 2 video streams that are muxed into the MP4 container, which is required for mobile devices, such as Sony PSP, Apple iPod and various cell phones. Besides the MainConcept AAC Encoder that is mostly suited for file based use-cases, the package also contains a Fraunhofer AAC Encoder which optimized for adaptive bitrate streaming formats. The AAC Encoders as well as the AAC Decoder support up to 7.1 channels.
- **AMR Encoder/Decoder:** Allows software-only AMR encoding and decoding. They are available as narrow and wide band versions. AMR (Adaptive MultiRate) is a speech codec with variable bitrates which has been standardized by 3GPP and ETSI. It is predominantly used for mobile devices, such as cell phones together with MPEG-4 Part 2 or AVC/H.264 video streams.
- **WMA (Windows Media Audio) Encoder/Decoder:** Enables you to encode and decode audio streams into a WMA compliant file format. By using the MainConcept ASF (Advanced Systems Format) Muxer, the WMA streams can be muxed with VC-1 video streams. The components are only available as Low Level component.

# MAINCONCEPT AUDIO SDK PACKAGES

## AUDIO ENCODER SDK

Set of audio encoders to generate MPEG Layer 1/2, PCM, AAC, WMA and AMR audio.

## AUDIO DECODER SDK

Set of audio decoders to generate MPEG Layer 1/2, MP3, PCM, AAC, WMA and AMR audio.

## COMPONENTS

### AUDIO ENCODER SDK

MPEG Audio Encoder  
Fraunhofer AAC Encoder  
AAC Encoder  
AMR Encoder  
WMA Audio Encoder (LL)  
PCM Audio Encoder (LL)

### AUDIO DECODER SDK

Media File Importer (LL)  
MPEG Audio Decoder  
AAC Decoder  
AMR Decoder  
WMA Audio Decoder (LL)

## TECH SPECS

- Microsoft Windows 10 (64-bit, x86 and ARM)
- Apple macOS 10.11 and newer (64-bit x86), macOS 11 and newer (M1)
- Linux Ubuntu 14.04 LTS, CentOS 7.9 (64-bit, x86), Ubuntu 18.04 (64-bit, ARM)

For Windows, Mac OS X and Linux, the codec package consists of a Low Level API (in the C programming language). Under Windows, it additionally includes DirectShow® filters for decoding and encoding.

**MORE INFORMATION:**  
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**REQUEST YOUR DEMO SDK:**  
[WWW.MAINCONCEPT.COM/LICENSING-FORM.HTML](http://WWW.MAINCONCEPT.COM/LICENSING-FORM.HTML)