

VC-3 for Avid DNxHD / DNxHR

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 MainConcept VC-3 SDK Packages for Avid DNxHD and Avid DNxHR are software-only solutions which enable application developers to integrate with production tools like Avid Media Composer and Avid Interplay storage solutions or cameras which store media in either of these formats. Avid DNxHD and DNxHR are based on the SMPTE 2019-2006 (VC-3) specification.

DNxHD allows 8-bit and 10-bit depth with 4:2:2 chroma sampling of 1920x1080 and 1280x720 pixels at bitrates up to 220 Mbps. DNxHR extends the range of resolutions up to 4k (3840 x 2160 pixels) with chroma sampling up to 4:4:4 and 12-bit depth. The SDKs support wrapping and unwrapping DNxHD / DNxHR content in and from MXF containers.

FEATURES

ENCODER:

- Full compliance with Avid production tools
- Resolution up to HD (DNxHD) and 4K (DNxHR)
- Profiles for all formats defined by Avid
- Internal frame buffering for accelerated encoding
- MXF multiplexing support

DECODER:

- Full compliance with AVID production tools and professional cameras recording DNxHD/DNxHR media
- Real-time decoding / playback support
- MXF Demultiplexing of DNxHD / DNxHR media

STREAM TYPES & FORMATS

Elementary Stream:

Generic VC-3 Elementary Streams

MXF:

Avid DNxHD, Avid DNxHR

COMPONENTS

VC-3 ENCODER SDK
FOR AVID DNXHD / DNXHR

VC-3 Video Encoder
MXF Multiplexer
PCM Audio Encoder

VC-3 DECODER SDK
FOR AVID DNXHD / DNXHR

VC-3 Video Decoder
MXF Demultiplexer

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.