MAINCONCEPT

VC-3 FOR AVID DNXHD/DNXHR

Simplifying integration with Avid professional production formats

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.

PROFESSIONAL PRODUCTION FORMAT COMPLIANCE

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.

PACKAGES

VC-3 Encoder SDK for Avid DNxHD/DNxHR

Complete VC-3 Encoder with Avid DNxHD and Avid DNxHR profile support, including audio encoder and multiplexer.

VC-3 Decoder SDK for Avid DNxHD/DNxHR

Complete VC-3 Decoder with Avid DNxHD and Avid DNxHR support, including audio decoder and demultiplexer.

STREAM TYPES & FORMATS

Elementary Stream: Generic VC-3e Elementary Streams

MXF: Avid DNxHD, Avid DNxHR

PROFESSIONAL ENCODING AT ITS BEST

BENEFITS

- Professional production format
- High-resolution capabilities
- Wide chroma sampling support

KEY FEATURES

- Compliant with Avid production tools like Media Composer and Interplay
- Ready-to-use Avid DNxHD and DNxHR profiles
- Up to 8K resolution support
- MXF file format support
- Improved colorimetry handling

OPTIMIZE WITH MAINCONCEPT PROFESSIONAL SERVICES

SYSTEM REQUIREMENTS

	x86	ARM
Windows	Windows 10, Windows 11	Windows 11 ARM
Linux	Ubuntu 20.04 LTS – 22.04 LTS, Rocky Linux 8.9	Ubuntu 20.04 LTS – 22.04 LTS
macOS	macOS 10.15 – 12.x	macOS 11.x – 12.x

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ENCODER FEATURES

- 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

- Accelerated color conversion routines

- MXF multiplexing support, incl. the ability to set the colorimetry at container level

DECODER FEATURES

- Full compliance with AVID production tools and professional cameras recording DNxHD/DNxHR media

- Real-time decoding / playback support

- MXF Demultiplexing of DNxHD / DNxHR media, plus correct return of colorimetry information

ABOUT MAINCONCEPT

MainConcept provides audio and video codec solutions that fuel creativity and business across the globe—from professional video production, multimedia, broadcast, digital signage, and gaming to the medical and security verticals. Our software development kits, transcoding applications and plugins deliver the simplicity you need with the customer experience you deserve. Since 1993, MainConcept codecs have been used by hundreds of organizations including Adobe, Autodesk, Corel, Dalet, Encoding.com, Endeavor Streaming, Grass Valley, Intel, MAGIX, Nikon, PlayBox Neo, Soliton and Wowza. For more information, visit www.mainconcept.com.

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