

XD4000 Professional Decoder for Ultra HD



Complete your Ultra HD contribution chain with Xylostream's Professional HEVC Decoder

If you're launching an Ultra HD service and would like to deliver live events with HEVC efficiency then you will need a decoder that supports 4:2:2 with a 4 x 3G-SDI output to feed your video play-out chain.

The Xylostream XD4000 for Ultra HD as it's meant to be

The XD4000 has been developed for use in a broad range of applications where a rack-mounted Ultra HD decoder is required. The unit uses industry standard transport stream inputs on either IP or ASI and outputs baseband Ultra HD on a 4 x 3G-SDI interface.

The primary application for the XD4000 is as a contribution decoder to enable HEVC to be used to contribute live events instead of the makeshift use of four synchronised HD encoders and decoders. That approach has proved to be fraught with quadrant synchronisation issues and can now be replaced by a more efficient HEVC approach using standard encoders feeding the Xylostream XD4000 decoder to create an end to end contribution solution.

The XD4000 is Xylostream's second generation decoder which now has support for 4:2:2 chroma sub-sampling and features hardware based decoding to ensure low latency. The unit supports bit rates of up to 100Mbps for Ultra HD formats up to 3840x2160 p60. While 12-bit colour depth might still be beyond the full production chain the XD4000 is future proofed with the ability to decode all profiles up to Main-12.

With Ultra HD becoming an increasingly important part of any broadcaster's premium offering using HEVC for contribution or distribution is now possible by using the Xylostream XD4000 decoder.

Product Highlights

- Professional decoder which handles 4:2:2 video at high bit rates of up to 100 Mbps
- Support for Ultra HD formats up to 3840x2160 p60, Main-12
- IP and optional ASI inputs
- Output over 4 x 3G-SDI
- Range of audio options from single stereo output up to 8 stereo pairs
- Intuitive GUI providing controls for unit configuration and service selection



Ultra HD as it's meant to be

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Key Benefits

Efficient live decoding of Ultra HD HEVC video

- Broadcast quality output with industry standard interconnect
- Interoperability with HEVC compressed HD and Ultra HD video feeds for frame rates up to p60 and at bit rates up to 100Mbps
- Support for 4:2:2 chroma sub-sampling
- Hardware based decoding for very low latency

Interoperates with Xylostream's Excel 4000 or other Ultra HD HEVC encoders in a number of applications:

- 4:2:2 Contribution links
- As a broadcast feed that requires a 4 x 3G-SDI interface
- Off-air monitoring
- As part of your lab test environment

Very simple to operate

- Minimal user configuration required
- Intuitive GUI allows rapid set up

Optional Functionality

Get more from your XD4000 with the following optional add-ons:

- Additional audio up to 8 stereo pairs of embedded audio, useful for working with next generation multichannel and object-based sound
- Optional ASI input
- Support for HEVC Main 4:2:2 12

XD4000 Decoder Specification

INPUT

Transport Inputs	MPEG-2 TS over UDP/IP 2 Ports, GbE electrical <i>Optional ASI</i>
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PROCESSING

Video	HEVC 4:2:0 : Main, Main-10 profiles HEVC 4:2:2 : Main-10, Main-12 profiles HD resolution 1920x1080 and 1280x720 @ 59.94p & 50p, 1920x1080i Ultra HD resolution 3840 x 2160 24, 25, 30, 50, 60 fps (including x1000/1001 variants) Bit rates up to 100Mbps
Audio	AAC stereo LPCM stereo <i>Optional support for up to 8 stereo pairs</i> <i>Optional DOLBY support</i>
Ancillary Data	Future support for HDR and colorimetry metadata pass-thru

OUTPUT

Video Output	4 x 3G-SDI (SMPTE 424M/425M) Level A and B, 4:2:2 Output <i>Optional Genlock</i>
Audio Outputs	Embedded in 3G-SDI

CONTROL AND SYSTEM MANAGEMENT

Control Modes	Standalone web-based user interface RESTful API
Control Interface	2 x IP Ports

POWER, PHYSICAL, ENVIRONMENTAL

Input Voltage	100-240VAC, 50/60 Hz Redundant hot swappable power supplies
Physical	1RU x 19" width x 429mm depth Front to back airflow

Contact us to find out more about Ultra HD:

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