



XVD™ Professional HD-TX2500 HD/SD Video and Audio Encoder

Achieve robust and reliable HD-SDI 1080i 4:2:2 real-time low-latency feeds over traditional standard definition video microwave/satellite links or inexpensive IP networks

Proven by broadcast leaders to outperform all other systems.



The HD-TX2500 provides DVB/ASI and IP network output for highly efficient, low-cost live streaming of XVD-HD/SD data packets. Designed for DENG and other live mobile applications, it supports HD-SDI and SD-SDI as input and output (with its associated HD-RX2500 decoder), making it compatible with digital studio and post-production facilities. Users can select from HDTV (1080i or 720p) and SDTV (NTSC or PAL) standards. Compact (80% smaller than conventional HD encoders) and versatile, the HD-TX2500 offers real-time compression of HDTV video at 3-15Mbps and SDTV video at 500 Kbps to 5.0 Mbps, and support 4:2:2 or 4:2:0 chroma format in all resolutions. Stream HD video at SD bitrates, or stream SD video at sub-T1 bit-rates.

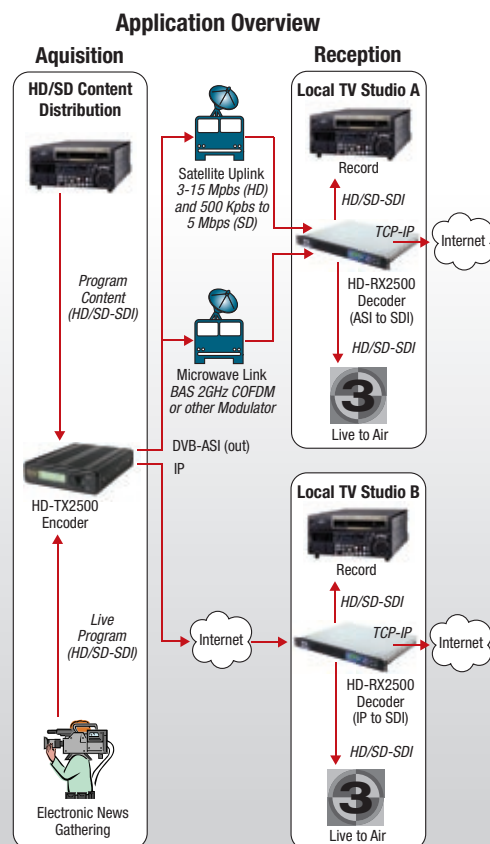
The XVD audio/video streaming system consists of the HD-TX2500 Encoder and the HD-RX2500 Decoder. This high-performance system offers increased operational flexibility by providing exceptional quality A/V streaming where bandwidth permits, and high quality A/V streaming where bandwidth is limited. Front panel and web-based command and configuration extend operational flexibility even further.

In addition, the XVD Professional HD-TX2500 is built into the new second-generation NewsHound IISM backpack DENG encoder and RF transmitter.

Full HD-SD 4:2:2 contribution quality video for DENG and other live mobile applications, plus broadcast post-production and digital studios.

XVD HD-TX2500 Encoder At-A-Glance

- Realtime HDTV/SDTV encoding
- HD/SD-SDI input
- DVB/ASI and IP network outputs
- 1/5th the size of conventional HD encoders
- AC/DC power options
- ProXVD FEC
- Network Analysis Tools
- Low power consumption
- Light weight (1.3 Kg/2.8 lbs)
- Optional rackmount kit



XVD™ Professional HD-TX2500 HD/SD Video and Audio Encoder



SPECIFICATIONS

General				
Video Inputs	HD-SDI: SMPTE 292M, supports 1080i (@ 50/60 Hz), 720p (@ 50/60 Hz) and 1080p (@ 24 Hz) SD-SDI: SMPTE 259M-C, supports PAL (625 @ 50 Hz) and NTSC (525 @ 60 Hz) (with automatic format detection)			
Video Pre-processing	Noise reduction, adaptive spatial filtering, adaptive motion-compensated temporal filtering			
Video Encoding	Proprietary XVD video codec; automatic scene change detection; object motion estimation, CBR/VBR data-rate control			
Chroma Format	Support 4:2:0 and 4:2:2 chroma format for all resolution			
Audio Input	Balanced Analog (2 ch, 600 ohm XLR), SDI embedded (4 ch), HD-SDI embedded (8 ch)			
Audio Encoding	Proprietary XVD audio codec			
Audio Data-Rate	32 Kbps – 128 Kbps for each stereo pair			
Network Interface	One 10/100 Mbps Ethernet port (RJ45 – lockable)			
Network Protocol Output	XVD-HD/SD over TCP, RTP, Unicast and Multicast support; real-time network analysis (RTP only); ProXVD One- or Two-Dimensional FEC			
DVB/ASI Output	DVB/ASI stream compliant (BNC – female); configurable PID; packet size			
Power Connector	12 VDC (XLR 4)			
Adaptive Performance Control (APC)	Improved display smoothness over complex frame sequences			
Power (AC adaptor)	100-240 VAC @ 50/60 Hz, auto-sensing, 12 VDC output			
Power Consumption	25 Watts (typical)			
User Interface				
Power Indicator	LED			
Web-Browser Control	Interface to a complete set of HTML pages for all control parameters and status			
System Management	Software upgrade via Ethernet			
Front Panel Display: 2 line/16 character LCD	User Configurations: Video resolution, video data rate, audio data rate, source format, other advanced configurations Status Display: Video format, current data rates			
Video Performance				
	Source Format	Encoding		Data-rate Range
		Resolution	Frame Rate	
Standard Definition (SD)	NTSC	720 x 480	59.94i/29.97p	500 Kbps – 5.0 Mbps 300 Kbps – 3.0 Mbps 100 Kbps – 1.0 Mbps
		352 x 480 352 x 240		
	PAL	720 x 576	50i/25p	500 Kbps – 5.0 Mbps 300 Kbps – 3.0 Mbps 100 Kbps – 1.0 Mbps
		352 x 576 352 x 288		
High Definition (HD)	1080i @ 60 1080i @ 59.94 1080i @ 50 1080p @ 24	1920 x 1080	60i	3.0–15.0 Mbps
		960 x 1080	59.94i 50i 24p	
	720p @ 60 720p @ 59.94 720p @ 50	1280 x 720 640 x 720	60p 59.94p 50p	3.0–15.0 Mbps
Environmental/Physical				
Operating Temperature	0°C to 50°C (32°F to 122°F)			
Operating Humidity	0–95%, RHG non-condensing			
Storage Temperature	–20°C to 70°C (–4°F to 158°F)			
Weight (Installed)	1.3 Kg (2.8 lb)			
Dimensions (W x D x H)	160 x 210 x 46 mm (6.3 x 8.3 x 1.8 in)			
Warranty	1 year limited warranty			

XVD is the world's most advanced real-time video compression technology. Years of development and field testing supports the XVD codec design, providing much higher performance and efficiency than other block-based real-time video compression systems. XVD's patented video codec is optimized for the human visual system, and adds several unique features including: Automatic Scene Change Detection; Object Motion Estimation; plus CBR/VBR data rate control to improve video quality at dramatically lower data rates. The XVD audio codec also provides high performance at significantly lower data rates, allowing more audio channels to be carried in any chosen bandwidth.

LOW LATENCY

Enjoy both high performance and encode-decode system latency of only 200-300 milliseconds.

BANDWIDTH EFFICIENT

Provides a competitive alternative to VC1 and AVC at a more affordable price

NO ROYALTIES

Unlike other compression standards, users of XVD products never pay a royalty of any kind.

For Information Contact

XVD Corporation

Tel: +1 888-680-3808

Fax: +1 650-204-6180

info@xvdcorp.com

www.xvdcorp.com

© 2007 XVD Technology Holdings Ltd. All rights reserved. XVD and the XVD logo are registered trademarks of XVD Technology Holdings Ltd. (XVDTH) in the U.S. and other countries. All other trademarks are the property of their registered owners. All product and application features are subject to change at XVDTH's sole discretion at any time without notice.



Simply Better