envivio.®

4Coder Broadcast Series
Offline MPEG-4 Encoders for Standard Definition and High Definition Digital Television

4Coder HD

- **High Definition (HD) and Standard Definition (SD) video compression support**

- **MPEG-4 AAC and HE AAC audio compression support**

- **Full support of MPEG-4 AVC (H.264) video including CABAC, loop filter and MBAFF**

- **Pre-processing and pre-filtering features**

- **Produce high quality MPEG-2 Transport Streams or MPEG-4 files compatible with most video servers**

- **Optimized codec for multiprocessor platforms**

- **OEM codec available for HD-DVD authoring tools and compression suites**

- **Transcode from any input video format, including MPEG-2, MPEG-1, AVI, and DV**

4Coder™ Broadcast series is a product family of offline MPEG-4 (including AVC/H.264) encoding systems that create Standard Definition (SD) and High Definition (HD) programming. The encoding systems feature dual-pass encoding with preview and batch modes, MPEG-4 HE AAC audio, and an optimized codec for multi-processor platforms. The 4Coder series incorporates pre-processing and pre-filtering and the most advanced implementation of the MPEG-4 specification to provide the best audio and video quality at the lowest possible bit rate. This series is ideal for broadcast and production facilities, network service providers and professional media archivists who want to maximize their storage servers and optimize throughput over their distribution networks while expanding their service offerings.

Supports MPEG-4 Advanced Video Coding (AVC/H.264), Advanced Simple Profile(ASP), and Simple Profile (SP) video encoding: From contribution through distribution, transmitting digital television content as MPEG-4 streams minimizes bandwidth requirements while delivering the highest quality video at the lowest possible bit rates.

MPEG-4 High Efficiency Advanced Audio Coding (HE AAC) Support: Provides highly optimized audio at low bit rates for applications in digital broadcasting.

Workflow optimization with preview and batch mode: Enables users to easily preview encoding sessions, select the optimal speed and quality settings and then batch encode multiple videos simultaneously.

Codec optimized for multiprocessor platforms: Maximize encoding efficiency.

Available in either a two rack unit hardware configuration or as software only: Provides the ease of a turnkey system or enables the flexibility of custom configuration.

4Coder Applications
Media Archiving: Maximize storage space with high-quality, high efficiency SD and HD digital video.

Digital Dailies: Easily distribute high resolution, low bandwidth content any where in the world over IP

Video On Demand: Distribute low bit rate, broadcast quality HD and SD content on-demand to subscribers over DSL and Cable networks.

Technical Specifications

	4Coder HD SE	4Coder HD	4Coder SD SE	4Coder SD
Input				
Video	File import (AVI, MOV, DV, MPEG-2*) * with appropriate third-party plugin			
Video	Supports PAL, NTSC, 720P and 1080I resolutions		Supports PAL, NTSC	
Video				Video capture: analog composite (PAL/NTSC) S-video, SDI, IEEE1394
Audio	File import (AVI, MOV, DV)			Audio capture: analog Balanced (XLR), analog unbalanced (RCA), digital AES/EBU, SDI embedded
Output	Raw elementary Stream, MPEG-4 file, MPEG-2 TS file			
Encoder				
Video	MPEG-4 ASP levels 0-5 (HD resolution) H.264 Main profile level 1-4 Data rate: 20 kbps to 20 Mbps		MPEG-4 ASP levels 0-5 (SD resolution) H.264 Main profile level 1-3 Data rate: 20 kbps to 6 Mbps	
Audio	MPEG-4 Advanced Audio Coding (AAC-LC) MPEG-4 HE-AAC with Parametric Stereo Data rate: 8 to 384 kbps			
Supported Standards	ISMA version 1 Profile 1			
Supported Standards	ISMA version 2 Profile 1-3		ISMA version 2 Profile 1-2	
Supported Standards	DVB			
Advanced Processing	Video adjustments (brightness, contrast), frame resizing, frame subsampling, noise filtering, inverse Telecine/deinterlacing, cropping, scene change detection with adaptive GOP, advanced output rate control with bandwidth smoothing, various Aspect Ratio handling, support for Interlaced mode encoding, double-pass encode			
Advanced Features	Optimized for multiprocessor platforms, fast/high quality encoding modes, netadata insertion, batch mode / Preview mode, encoding/filtering preview panes, command-line, presets and advanced configurations, encoding statistics, advanced codec parameters for fine quality tuning			
Control				
Local	Windows GUI			
Remote	SNMP monitoring			
Supported OS	Windows XP			
Recommended Hardware Requirements	Intel Bi-Xeon, 3 GHz, 1 GB RAM	N/A	Intel Pentium 4, 2.4 GHz, 256 MB RAM	N/A
Hardware Configuration	N/A	Bi-Xeon 3.6 GHz, 1 GB RAM, 500 GB Storage	N/A	Bi-Xeon 3 GHz, 1 GB RAM, 500 GB Storage
Physical/Power				
Dimensions	N/A	483mm (W) x 508 mm (D) x /90 mm (H) 19" (W) x 20" (D) x 3.5"(H)	N/A	483mm (W) x 508 mm (D) x /90 mm (H) 19" (W) x 20" (D) x 3.5"(H)
Weight		8 kg (18 lb)		8 kg (18 lb)
Power Supply		100-240 VAC auto-ranging, 150 W maximum		100-240 VAC auto-ranging, 150 W maximum
Operating Conditions		Ambient temperature Operating temperature: 0 to 50° C (32 to 122° F) Non-operating/storage -40 to 70° C (-40 to 158° F) Relative humidity Non-operating: 95% at 30° C (86° F) no-condensing		Ambient temperature Operating temperature: 0 to 50° C (32 to 122° F) Non-operating/storage -40 to 70° C (-40 to 158° F) Relative humidity Non-operating: 95% at 30° C (86° F) no-condensing