

Streambox® Chroma™

4K Encoder & Decoder

The new modular, low latency 4K Rackmount Encoder / Decoder with integrated reliable LDMP video transport technology simplifies video streaming workflow over Internet and MPLS networks. Streambox's 4K real-time transport provides in an efficient process for broadcasting, post production collaboration, and streaming live events. Upgrade options include 2K Video Stereo, 12G-SDI ready video system, and 8-Bit, 4:4:4 RGB with ACT-L5 codec.



ACT-L5 Video Quality & Delivery

- High-quality, 8-bit* RGB, 4:4:4 , 8 or 10-bit 4.2.2 video over public and private IP networks
- Scalable bitrates from 2 to 120 Mbps
- Streambox ACT-L5 compression
- Lower monthly operating cost with wired and wireless IP networks
- Up to 120 Mbps for near lossless quality
- No fiber or MPLS required
- Adaptive bitrate encoder / decoder supporting UHD (3840 x 2160) at 23.98, 24, 29.97, and 30 fps *
- Bitrates from 4 to 80 Mbps



Security Options - Protect Your Intellectual Property

- One-to-one or one-to-many encrypted collaboration via private network or Streambox Cloud
- A protective shield around the transport of valuable video content
- AES 256-bit encryption is available with added restrictions•
1-2 second end-to-end latency over public networks
- End-to-end AES 128-bit video encryption
- Payout on software Media Player
- No increase in stream latency
- The proprietary ACT-L5 codec



Simplified Workflow & LDNP Playback

- Low Delay Multi-path Protocol (LDMP) reliable video transport
- Simplified 4K workflow from capture to playback on either hardware decoder or 4K media player
- Works with Enterprise Server (ES) and Streambox Cloud Services for video routing and archiving of live UHD streams
- Supports file-based UHD streaming from Enterprise Server or Cloud Services to 4K Decoder or 4K Media Player
- UHD-optimized 1-Click presets
- Stream high quality UHD 30p live video over the Internet connection and MPLS networks

* requires 12G-SDI option

** HDMI is supported with decoder only



Streambox Chroma™ Technical Specifications



Encode

→ Encrypted

→ Playout

VIDEO INTERFACE

- Video IN/OUT: BNC 6G/3G/HD SDI 1x10-bit 2K or HD - with embedded SDI audio
- REFERENCE: BNC Tri-sync for HD or 1080

VIDEO FORMATS

- 4K DCI (4096x2160) for 23.98 and 24 fps
- UHD (3840 x 2160), for 23.98 ,24 fps, 29.97 and 30 fps
*Additional non-film formats available out of specs
RGB-4:4:4 and 4:2:2 are supported in 10 and 12 bit**

COMPRESSION

- Video Codec: Streambox ACT-L5 and ACT-L3 AP 2017
- Audio Codec: PCM and AAC up to 8-ch, CELP, GSM up to 48 KHz
- Bitrate: 4 to 80Mbps
- Encoding Latency: adjustable from 200 ms to 8 seconds
- Color: 4:4:4* in 2K modes, 4:2:2 and 4:2:0 in all modes
** requires 12G-SDI option*

PHYSICAL

- Size: 1 Rack Unit: W48.2cm x D28.2cm x H44.0cm (19in x 11in x 1.7in)
Larger unit with greater capacity is available
- Weight: 4.7kg (10.5lbs)
- Power: 100-240 VAC, 160 W

OPERATING SYSTEM

- Linux

VIDEO TRANSPORT

- Streambox LDMP 2.0 with network bonding
- UDP unicast, broadcast or multicast
- Adjustable Forward Error Correction
- Correction Embedded Metadata
- Compatible with Streambox Cloud and Enterprise Servers

ENCRYPTION

- AES 128-bit encryption with symmetric key
- HTTPS option for web control available
AES 192-bit and AES 256-bit options available option with additional restrictions

MANAGEMENT CONTROL

- Web UI for secure local or remote access
- Customizable presets
- Live Video preview via Web UI
- Front LCD with keypad
- USB and video ports

NETWORK INTERFACES

- Two Ethernet ports RJ45: 1G/100M/10M

POST PROCESSING

- Advanced post filtering