



Streambox® SBT3-9500 HD/SD Compact Encoder



Integrated HD/SD Newsgathering and Broadcast Video

The innovative Streambox® SBT3-9500 HD/SD Video Transport Encoder enables broadcasters, government agencies, and enterprises to do live and file-based newsgathering, video transport and acquisition in HD and SD. The integrated HD/SD solution facilitates the capture and encoding of stunning, full frame 1080i/720p HD and NTSC/PAL video and audio.

The SBT3-9500 encoder is integrated into one light-weight and compact chassis making it ideal for live and file-based mobile newsgathering and video transport in HD and SD. The encoder is optimized for fast transmission and play-out of HD and SD video streams over low latency and low data rate IP networks.

Performance, reliability, and high-quality video is part and parcel of all Streambox solutions, including the ground-breaking small form factor SBT3-9500 HD/SD Encoder. User defined presets enable the user to select either HD or SD mode for encoding and transmitting the video signal over a variety of packet-based networks.

Solution Overview

The SBT3-9500 HD/SD Encoder is compatible with all ACT-L3™ video management and play-out solutions. It features advanced networking capabilities including robust forward error correction, burst error protection, and bandwidth shaping technologies.

The encoder's ability to encode and transmit both HD and SD video streams as well as its flexible video capture options, including SDI and HD-SDI, sets it apart from other encoding solutions and makes it ideal for a variety of mission-critical broadcast and enterprise applications.

The integrated Streambox HD/SD encoder enables users to leverage the Streambox® Store and Forward option which provides enhanced storage, management, and transmission of HD/SD video streams over IP-based networks. The encoder also features a web-based interface facilitating seamless control and integration with other Streambox video management and play-out solutions.

Streambox® ACT-L3™ Codec

The ACT-L3™ codec features an advanced proprietary video compression technology optimized for interlaced and progressive video. It is developed specifically for

broadcast video and provides more efficient compression than MPEG and H.264. ACT-L3™ is highly adaptable to differing data rate requirements.

The robust family of ACT-L3™ Video Transport solutions features innovative error correction and bandwidth shaping technologies which enable users to manage, control, and mitigate packet loss and correct irregularities common to video delivery over packet-based networks.

Solution Features

- Live and file-based HD and SD video over low data rate IP connections
- 1080i/720p HD video at data rates ranging from 512 Kbps to 20 Mbps
- NTSC/PAL SD video at data rates ranging from 64 Kbps to 12 Mbps
- 4:2:0 and 4:2:2 color profiles
- Light-weight, small form factor chassis
- Integrates seamlessly with the breadth of Streambox HD and SD management and play-out systems
- 2 1/2+ hours of battery life, can run on a car battery
- Mitigate packet loss, network jitter, and buffering with robust forward error correction

Target Markets and Applications

- Live and file-based newsgathering
- Event broadcasting
- Video transport and acquisition
- Video post production
- Telemedicine
- Surveillance and security
- Multi-site video worship

Streambox Platform Solutions

- Streambox® Portable Encoders
- Streambox® Rackmount Encoders
- Streambox® Decoders
- Streambox® Broadcast Server
- Streambox® Media Player
- Streambox® Distribution Server
- Streambox® IFB Server
- Streambox® IFB Client
- Streambox® Store and Forward Server
- Streambox® Store and Forward Client
- Streambox® Media Station
- ACT-L3™ for Apple QuickTime®

- Adaptable to user defined data rate requirements
- Accelerated bandwidth recovery
- Cost effective 24/7 HD newsgathering and HD broadcast video
- Superior performance and reliability with advanced networking features
- Seamless local or remote system management via an easy-to-use web interface
- User configurable presets for quick and flexible setup

Technical Specifications

Video Formats: HD Mode:
1080i/59.94, 1080i/50, 720p/59.94, 720p/50,
1080psf/23.94
SD Mode:
525i/59.94, 576i/50

Video Encoding: HD Mode:
1920, 1440, 1280, 960 x 1080
1280, 960, 800, 640 x 720
SD Mode:
720, 528, 480, 352 x 480
320 x 240
720, 528, 480, 352 x 576
320 x 288

Audio In: AES/EBU XLR x 1
110 ohm, Balance, ch1, ch2
1,2,4,6 channel embedded SDI audio, 24 bit

Audio Out (IFB): x1 unbalanced mono

Audio Encoding: Codec: AAC, GSM, CELP
Sampling: 44Khz, 48Khz

Video In: HD/SD SDI-IN x1
Composite x1

Video Out: HD/SD SDI-OUT x1

Color Profile: 4:2:0, 4:2:2

Closed Captioning: EIA-708

Video Post Filtering: Advanced interlaced/progressive post filtering, including de-blocking, de-mosquito, and anti-aliasing

Encoding Latency: Adjustable from 200 ms to 8 seconds

Bandwidth: HD Mode:
Adjustable from 512 Kbps to 20 Mbps
SD Mode:
Adjustable from 64 Kbps to 12 Mbps

VANC: Path through of VANC, EIA-608/708, SMPTE-334. Time code etc.

Meta-data: End-user selectable

IFB audio support: Voice from studio to reporter

Web Interface: Control and Maintenance via network

Network: LAN 1+2: RJ-45
Ethernet 10/100/1000 Mbps

Network Protocol: Unicast or Multicast streaming
One-way streaming or multiplex modes for dual streaming

Forward Error Correction: Adjustable, 0% to 50%

Power: AC Adaptor or Battery
11A at 12V, 9.5A at 14V

Console Interface: USB Keyboard, USB Mouse, 15-pin Analog Monitor

Utility: VGA: D-SUB 15 pin

Dimensions: 2.5"H x 12"W x 13"D
6.35cm H x 30.48cm W x 33.02cm D

Weight: 11 lbs, 5 kg

Accessory: DC cable x1
ACT-L3 manual x1

Power Supply: DC power unit: (IA-300a) (special version) (IDX)
Power Terminal: (EB-4) (special version) (IDX)
Battery: Power CUBE (IDX)

Battery Life: 2, IDX E-10 batteries, 1 hour
4, IDX E-10 batteries, 2.5 hours
4, IDX E-7 batteries, 1.5 hours



About Streambox, Inc.

Streambox provides a single platform for live and file-based video transport and acquisition over IP. The platform comprises clients - from small form factor mobile devices and laptops - to rule-based video management and play-out systems.

The company's scalable solutions, based on the innovative ACT-L3™ codec, can be integrated into all IP-centric broadcast and broadband operations.

Learn more at www.streambox.com.



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