



Streambox® SBT3-7400 Full Duplex Video Transport



Full Duplex Video Transport

The Streambox® SBT3-7400 system delivers stunning full-motion, full frame interlaced broadcast video and audio over satellite and IP-based networks, all in real-time.

The core feature of the SBT3-7400 system is its full duplex mode which enables each unit to operate as an encoder and a decoder at the same time. The solution facilitates simultaneous transmission and receiving, making it ideal for real-time video conferencing purposes, including video depositions, interactive learning, telemedicine, factory monitoring, and bidirectional video worship.

Streambox ACT-L3™ encoders excel over low bandwidth while providing unrivaled video compression and quality. Streambox® ACT-L3™ Video Transport solutions have been specifically developed to meet the performance, compression, and quality requirements of broadcasters, government agencies, and enterprises. Our products are highly reliable and flexible, making them the video transport solution of choice for customers around the world.

Solution Overview

The SBT3-7400 encoder/decoder system provides best-of-class performance and reliability due to its unrivaled video compression and error correction technologies.

Streambox® ACT-L3™ Codec

The ACT-L3™ Codec features an advanced proprietary video compression technology optimized for interlaced display systems. ACT-L3™ matches MPEG-2 video quality up to a 75% lower data rate and it is up to 50% more efficient than MPEG-4. The ACT-L3™ Codec is adaptable to differing data rate requirements with constant bit rate and variable bit rate modes.

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 inherent in video delivery over satellite and IP/T1/E1 networks.

Solution Reliability

The SBT3-7400 solution is designed for 24/7 unattended use over years of operation. Reliability features include:

- Video and audio signal re-connect upon signal loss
- Encoder/decoder restart in case of video/audio irregularities, large packet loss or extended signal loss.
- Immediate system restore, upon power outage or system reset

Solution Features

- Full duplex mode enabling simultaneous transmission and receiving
- Unrivaled video compression and quality at low data rates
- 4:2:0 and 4:2:2 color profiles
- Best-of-class performance and reliability with advanced networking features
- Advanced forward error correction and burst error protection.
- Low end-to-end latency. Provides adjustable latency for video conferencing or broadcasting

Target Markets and Applications

- Video conferencing
- Interactive learning
- Video depositions and law enforcement
- Bidirectional video worship
- Armed forces operations
- Surveillance and security
- Point-to-point and point-to-multipoint video distribution
- Telemedicine

Solution Package and Options

- ACT-L3™ Encoder(s) and Decoder(s)
- Streambox® Broadcast Server
- Streambox® Distribution Server
- Streambox® IFB Server
- ACT-L3™ Full Duplex

- Cost-effective newsgathering and video conferencing
- Seamless local or remote system management
- Optional store and forward feature for enhanced storage, management, and transmission of video over packet based networks
- User configurable presets for quick and flexible setup

Technical Specifications

Video Formats:	NTSC/60i, PAL/50i
Video Encoding:	Resolution: D1, 3/4, 2/3, 1/2, CIF, QVGA Frame rate: full, 3/4, 1/2, 1/3, 1/4, 1/5, 1/10
Audio Codecs:	AAC, GSM, and CELP
Streaming Rate:	User selectable from 64 kbps to 6 Mbps
Audio Inputs:	Balanced XLR, AES, embedded 6-ch SDI
Audio Outputs:	Balanced XLR, AES, embedded 6-ch SDI
Closed Caption:	Line 21 encoding, transmission, and decoding
Video System:	D/A and A/D. Time-Base Correction for analog video. Genlock. Audio embedding de-embedding
Video Inputs:	Composite, SDI (SMPTE-259M), Genlock
Video Outputs:	Composite, SDI (SMPTE-259M), Genlock
Encoding Latency:	Adjustable from 200 ms to 10 seconds
Video Post Filtering:	Advanced interlaced/progressive post filtering, including de-blocking, de-mosquito, and anti-aliasing
Video Pre-filtering:	Noise pre-filter, adjustable de-interlacing
Network Protocol:	Multicast/unicast UDP for IP
Setup & Control:	Front access LCD panel and keypad. Solid-state Compact Flash storage for reliability and upgrades. VGA output, USB ports
Forward Error Correction:	Adjustable, Off or On from 1% to 50% Reed-Solomon, Parity, Shuffle
Dimensions:	2 RU 3.5"H x 16.75"W x 16.25"D 8.9cm H x 42.5cm W x 41.3cm D
Weight:	25 lbs, 11.3 kg

About Streambox, Inc.

Streambox manufactures a complete line of video transport and newsgathering solutions used by broadcasters, government agencies, and enterprises worldwide.

We provide best-of-class encoding, decoding, and transmission over IP and satellite networks for all real-time and store and forward applications.

Learn more about our products and solutions at www.streambox.com.

Customers Include:

AOL
American Red Cross
Bell Canada
BELO
British Sky Broadcasting
CBS
CNN
Comcast
Department of Homeland Security
DIRECTV
Gannett
Japan Leisure Channel
Media General
MBC Korea
NASA
NBC Universal
NOAA
PCCW
PBS
Time Warner
Tribune
Turner Broadcasting
Univision

