Versatile Broadcast Contribution Receiver and Decoder Solution

Haivision StreamHub is a versatile solution for receiving IP video streams over mobile networks and the internet. StreamHub can decode live video from Haivision Pro and Air mobile transmitters, and Haivision Rack encoders using the two-time Emmy award winning SST technology for network aggregation. StreamHub can also receive live video from the Haivision MoJoPro mobile application, LiveGuest browser-based interviews, and SRT streams from Haivision Makito encoders as well as from third party sources. Its intuitive web user interface enables users to easily control and manage remote field units, optimize configurations, and monitor video transmissions with video thumbnails and advanced statistics.

StreamHub has been designed to meet the demanding requirements of broadcasters deploying video contribution systems over mobile and IP networks. Supporting both H.264 and HEVC with resolutions up to 4K UHD, StreamHub can be deployed on-premise or in the cloud for low latency transcoding and decoding to SDI, NDI, SRT and other IP outputs.

Key Features

Mobile Video Receiver and Decoder StreamHub can receive up to 16 concurrent incoming SST streams from remote Haivision mobile encoders and transmitters or third-party sources and supports a rich set of IP protocols including RTMP, RTSP/RTP, SRT, NDI, HLS, and TS/IP. Up to 8 live video streams can be simultaneously decoded to 8 SDI outputs with genlock for multi-camera synchronization. StreamHub also features video transcoding capabilities for adapting incoming feeds to desired output formats.

IP Distribution StreamHub supports multiple streaming protocols including SST, RTMP, RTMPS, RTSP/RTP, HLS, TS/IP, SRT, and NDI so that video content can be easily distributed over IP networks for all types of destinations. Up to 32 outputs are supported, included duplicate streams, for sharing live content over LANs, WANs, CDNs, cloud platforms, Social Networks, and to other StreamHub receivers.

Video Recording And File-based Transcoding StreamHub combines video recording functions with a file-based video transcoder that enables media professionals to adapt content formats and resolutions for each destination.

Story Centric Workflows & Metadata StreamHub can be used to manually or automatically manage projects & metadata for smooth integration with news production workflows. Using the highly intuitive user interface, broadcasters and media producers can quickly and easily identify recorded content and live sources.

IP Data Bridge The StreamHub Data Bridge feature provides direct access to the Internet from a field unit. Optimized for remote production workflows, it also allows for remote control of IP based devices such as PTZ cameras.

IFB and Video Returns StreamHub includes a two-way IFB or audio intercom that enables broadcasters to communicate in real-time with up to 16 remote field unit operators. StreamHub can also manage video returns for providing remote operators with studio feeds, confidence monitoring, and teleprompters.

Multiviewer Monitoring The grid view includes preview thumbnails of video sources that can be assigned to a multiviewer output displaying up to 16 video sources on a single monitor. Broadcast professionals can define audio sources, output standards, and add information overlays for each source.

PLATFORM
Physical
 1 RU server platform
Software
 Linux 64-bit server
Virtualized
 Available as a virtual machine or Docker Instance
 Deployable on AWS, Azure, Google or other cloud platforms

VIDEO
Resolutions
 4K/UHD: 25/29.97/30/50/59.94/60
 HD: 1080p 25/29.97/30/50/59.94/60
  1080i 50/59.94/60
  720p 25/29.97/30/50/59.94/60
 SD: PAL, NTSC, 480p, 576p
Decoding
 Codec: H.264/AVC (4:2:0 8-bit), H.265/HEVC (up to 4:2:2 10-bit)
 Bitrates: 100 Kbps up to 160 Mbps
 Regulation mode: VBR and CBR
 Up to 8x HD or 1x 4K decoding
Encoding
 Codec: h.264/AVC 4:2:0 8bits
 Bitrates: 100 kbps up to 20 Mbps
 Regulation mode: CBR
 Up to 8 HD live encoding
Processing
 Video Down-scaling & Upscaling
 Deinterlacing

AUDIO
Decoding
 AAC-LC, AAC-HE v2, MPEG-1 L2, OPUS
Encoding
 AAC-LC, MPEG1-L2, OPUS

STREAMING PROTOCOLS
Inputs
 TS/IP (SPTS), RTSP/RTP, RTMP push and pull,
 HLS, SRT, SST (IP and cellular bonding), NDI
 IGMPv3 & SSM for TS multicast input
Outputs
 TS/IP (SPTS), RTSP/RTP, RTMP, RTMPS push and pull
 HLS, SRT, SST (IP and cellular bonding), NDI

ADVANCED FEATURES
 Metadata support for Live and Forward
 Time Code Ancillary Data passthrough
 SIP-based and legacy intercom
 SST protocol
 IP Data Bridge Gateway
 Video return AES encryption
 MPEG2-TS and MP4 recording
 Transmuxing stream processing
 Streaming to social media platforms including YouTube, Facebook, and Twitch
 Multi-view output
 Video Return Management

PHYSICAL INTERFACES
StreamHub Lite
 Dual GigE network interfaces
 1x 3G-SDI or 1x HDMI output
StreamHub Standard
 Dual GigE network interfaces
 4 x 3G-SDI outputs (SD/HD) with genlock
StreamHub Ultra
 Dual GigE network interfaces
 Up to 8 x 3G-SDI outputs or 4 x 12G-SDI outputs with genlock

MONITORING
 Web-based GUI
 Comprehensive REST API for third-party management system integration
 Integrated with Haivision Manager

POWER
 Redundant power supply

System Overview

Routing   Transcode   Statistics   Alerts   Geolocation   Remote   IFB   Multiview

HAIVISION
Hub MCR

CONTRIBUTE   **TRANSMIT**   **RECEIVE**   **DISTRIBUTE**

HAIVISION Pro   HAIVISION Makito X4   3G/4G/5G   Internet   HAIVISION SRT Gateway   HAIVISION StreamHub   Social Networks   Internet

HAIVISION Air   HAIVISION Rack   Satellite   BGAN/GX   HAIVISION Makito X4   HAIVISION Play 2000   IP Streaming   SDI/HDMI

MoJoPro   LiveGuest   LAN/WAN   WiFi   HAIVISION Play Pro   ST 2110   NDI®