

Lightspeed Live Capture C2+

(second generation C2)

Product Sheet



Lightspeed Live Capture 4-Channel Video Capture and Processing

Telestream® Lightspeed® Live Capture C2+ adds a flexible four channel Live Capture solution to the Telestream portfolio of professional enterprise-class video products.

Lightspeed Live Capture C2+ server can operate as a standalone capture device, a multiple server capture farm or be seamlessly added to a Vantage domain of any size.

Overview

Lightspeed Live Capture C2+ server is a flexible and scalable video capture solution supporting four (4) SD/3G-HD SDI inputs, one (1) QuadLink 3G UHD input as well as numerous IP formats such as Transport Streams. Live Capture ingests into multiple video formats, creating high-resolution mezzanine concurrent H.264/AVC proxy files, and storing them to a large local media RAID or to external shared storage such as a NAS or SAN.

Standalone, Capture farm or integrated into Vantage

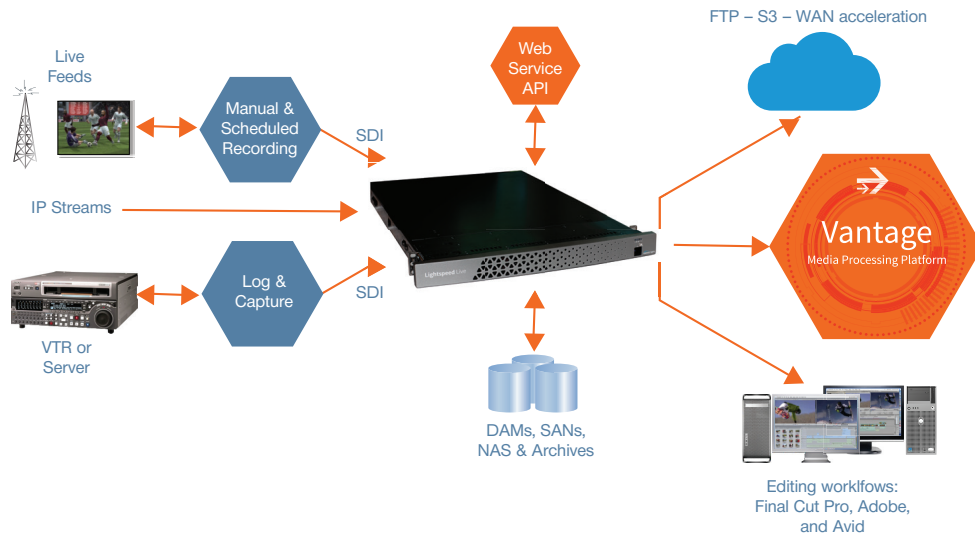
Live Capture can operate as a standalone capture device, a multiple server capture domain or be integrated directly into a Vantage domain of any size. Expanding the system is easy: to increase the channel count, simply add additional Lightspeed Live Capture servers, add their services through a common database and control them via common user interfaces. The integration of Lightspeed Live Capture servers with Vantage allows for unlimited workflow possibilities which makes this solution the most scalable, flexible and powerful media processing platform available today.

More choices, more flexibility

Lightspeed Live Capture servers offers six easy ways to capture your video: 24/7/365 scheduled recording of live feeds, RS-422 controlled capture from a VTR, manual record including Gang control, DAI (SCTE-104) triggering, Recurring Segment creation, and automated control through a simple Web Service REST API. Lightspeed Live Capture provides direct support for capturing into MXF OP1a, QuickTime or Telestream's TIFO. For those wishing to maintain closed captions and other ancillary data, Lightspeed Live Capture can preserve this data via MXF, QuickTime, TIFO and Avid/Apple proprietary schemes.

Media platform friendly

The Lightspeed Live Capture system creates growing files that directly support 3rd party media edit solutions, including Avid Interplay, Avid Media Composer, Adobe Premiere, DaVinci Resolve and Apple Final Cut Pro.



Capture files into any workflow or editing system, for automated turnaround.

Fast, Parallel Open Media Processing

When joined with a Vantage domain, Lightspeed Live Capture workflows support Vantage Open Workflows. This allows for transcoding, packaging, and deployment to occur through the Vantage domain while the media is being captured. This means advanced media processing workflows can complete within seconds following the end of media capture.

System Features

- Flexible codec and container support
- Highly scalable solution - standalone or multi-server systems
- Captures SD or HD up to 1080p60
- Capture UHD up to 2160p@30fps²
- Four (4) 3G-SDI input channels or two (2) SDI input channels with loop-through.

Workflow Features

- Seamlessly integrated with Vantage including Open Workflows
- Output multiple resolution files from any input
- Capture to Local RAID or external shared storage
- Direct support for Avid Media Central | Production (Interplay), Media Composer and ISIS/NEXIS shared storage
- Wide range of delivery options – FTP, object storage (S3), Aspera, Signiant and other WAN acceleration products
- Browser based control interface

Designed for demanding enterprise-class broadcast and professional video capture applications, Lightspeed Live Capture offers premium features and exceptional performance. Powered by the latest generation of Lightspeed Live server, Capture excels at performing demanding video ingest from similar or mixed format sources, while simultaneously creating multiple high resolution and proxy files from any of its inputs. Files are written directly to the Live Capture server's local RAID storage or to NAS/SAN shared storage. Live Capture also offers a wide range of delivery choices such as FTP, object storage (S3), Aspera, Signiant and other WAN acceleration products.

As a standalone system, Lightspeed Live Capture C2+ server acquires SDI video from 4 independent input channels or through IP connections. Multiple Live Capture servers can be joined together to create a multiple server capture domain under a common control interface. In addition, Live Capture can be seamlessly integrated directly into a Vantage domain enabling unlimited workflow possibilities through Vantage's Media Processing Platform.

Lightspeed Live Capture software offers a broad range of control methods (Lightspeed Live Capture Web Application, Lightspeed Live Capture Web Service (API)) plus enterprise class system management tools including IPMI, SNMP and Windows Active Directory integration.

Lightspeed Live Capture C2+ Technical Specifications

SDI Input Sources:

- 4 SD/HD/3G-SDI inputs - Supports up to 1080 @ 50/60p (3G-SDI LEVEL A and B)
- 2 SD/HD/3G-SDI outputs for inputs and outputs when configured for loop-through
- 1 UHD QuadLink 3G input up to 2160@30p
- Up to 16 channels embedded SDI audio 48Khz/16/24bit / Uncompressed

IP Input Sources:

- MPEG-2 Transport Stream (SPTS, MPTS) with MPEG-2 or AVC (h.264) Video
- SMPTE 302M, MPEG Layer2, AAC, AC-3, EAC3 Audio
- RTMP TCP protocol support for source input- including support for Wirecast RTMP input
- NDI³
- SRT³

VTR Machine Control for each SDI Input¹

- RS-422, 9 pin Sony Protocol
- VTR control for each input channel

External API Control

- Web service

Time code sources

- Source SDI input (VITC/VBI)
- RS-422¹
- Analog LTC
- Computer Clock

Edit solutions

- Adobe Premier Pro CC
- Apple Final Cut Pro 7 and X
- Avid Media Composer 7 or later
- Many others!

Primary output file formats

- Apple ProRes – 422HQ, 422SQ, 422LT, 422 Proxy, 444
- DNxHD - 444, HQX, HQ (220/185 Mbps), HQ TR (145/120 Mbps), SQ (145/120 Mbps), SQ TR (100 Mbps), LB (45/36 Mbps)
- AVC Intra - 50 Mbps 4:2:0, 100 Mbps 4:2:2, 200 Mbps 4:2:2
- AVC Baseline, Main, High. Bit Rate - 50 Mbps
- XDCAM HD - 18 Mbps CBR, 25 Mbps CBR, 35 Mbps VBR
- XDCAM HD422 - 50 Mbps CBR
- XDCAM EX - 35 Mbps VBR
- IMX – 30, 40, 50Mbps
- HEVC (software encoding only) Bit Rate - 50 Mbps
- XAVC – Class 50 420, 100Mbps 4:2:2, Class 200 422
- DV - DV 25 Mbps, DVCPRO 25 Mbps, DVCPRO 50 Mbps, DVCPROHD
- x264 Baseline, Main, High, High 10, High 4:2:2, max Bit Rate 50Mbps
- x265 Main, Main 10, Main Intra,
- MPEG-2
- Uncompressed 10-bit (SD/HD V210)

Browser based control UI

- Manual Recording options
- 24/7/365 Scheduling
- Log and Capture with VTR control via RS-422¹
- Web Service API
- Multichannel Gang recording
- DAI (SCTE Trigger)

Container Wrappers

- MXF OP1a including RDD9 and RDD25 variants
- Avid MXF OPAtom via Avid option
- QuickTime
- MP4 - complies with IEC-14496-14
- MPEG Transport Stream (with MPEG2 essence) and Manzanita multiplexing (optional purchase)
- Telestream TIFO

Proxy Output Formats

- MP4
- RDD25 MXF
- HLS (4 variant)
- TIFO (including support for Avid proprietary proxy formats via Vantage Media Creation action)
- ProRes Proxy
- DNxLB Proxy

Hardware

- 1 RU chassis
- Dual hot swap Power Supplies
- 4 x 10GBase-T Ethernet ports
- Up to 6.2TB of local RAID storage

Hardware options

- 8Gb and 16Gb FibreChannel HBA for SAN access
- 10Gb Ethernet over Fibre (SFP+)
- 4 channel RS422 Kit

Software options

- Avid Integration
- Live Edit sub-clipping
- Live Play playback of files and playlists
- Live Schedule can schedule capture events

Environment

- Management console and system monitoring via SNMP
- Size: H 1.7" (43mm) x W 17.2" (437mm) x L 27.8" (707mm)
- Weight: 32 lbs
- AC Input: 100-127Vac, 50-60Hz; 200-240Vac, 50-60Hz
- Power Consumption Idle: 160 Watts
- Power Consumption In Rush: 323 Watts
- Power Consumption Full Load: 520 Watt
- Operating Temperature: 5°C to 40°C (41°F to 104°F)

¹ Requires optional RS422 kit

² Consult latest User Guide for exact formats and framerates supported.

³ Technology Preview release.

