

# Network video capture and playout

A better way to ingest HD/SD-SDI video from tape or live sources

Telestream Pipeline HD Dual™ is a network-based video capture and playout device for moving HD and SD video and audio in and out of any file-based workflow. This solution offers users more choices for fast, robust, reliable video capture.



Schedule record



Log and capture

# Sits on your network, so anyone can access it

Pipeline HD Dual provides freedom from the hassles, limitations and expense of traditional capture-card solutions on a dedicated workstation. Common network protocols, RS-422 deck control and frame-accurate ingest/playout make the Pipeline HD Dual a smart choice for any video workflow.

#### More choices, more flexibility

Pipeline HD Dual offers four easy ways to capture your video: schedule recording of live feeds, log and capture from tape, manual record and control through a simple automation API. Pipeline provides direct support for MXF workflows, creating OPAtom and OP1a media. For those wishing to maintain closed captions and other ancillary data, Pipeline offers methods of achieving this via MXF, TIFO and Avid/Apple proprietary schemes.

In addition to capture, we offer an easy Print to Tape and controlled playout interface for those wishing to insert edit, assemble edit back to tape, or use Pipeline as a virtual VTR.

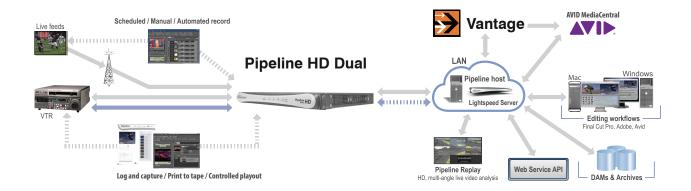
We offer a choice of encoding formats in a single box to handle your changing format needs. Pipeline HD Dual encodes to DV25/50, DVCPRO25/50/HD, IMX 30/40/50, 10-bit Apple ProRes 422 SD/HD and 8-bit/10-bit Avid DNx-HD® up to 220Mbit.

Extend your workflow to virtually any additional format with Telestream's Vantage.

# Edit or transcode while capture for quick turnaround

Pipeline HD Dual allows you to edit or transcode your media files while they are being captured. No need to wait for the complete file to arrive. Batch ingest from an EDL file allows you to encode multiple clips from a single tape. Plus, real-time reliable hardware encoding removes capture card/workstation operating system and driver incompatibilities.





## Cost-effective network import/export station

Pipeline enables any machine on the network to act as a dedicated, network import/export station — making it very cost effective. In addition, Pipeline offers support for direct extraction and preservation of ancillary data and a wide variety of time code sources. Powerful web service API makes it easy to develop an application that will automate control of multiple Pipeline systems.

#### Multi-channel scalability

Pipeline HD Dual offers exceptional encoding density in a compact 1RU box – and includes dual power supplies for critical workflows. Pipeline HD Dual offers flexibility and can be scaled to an unlimited number of channels...

Ideal for real-time video capture into a variety of broadcast, post-production and other professional workflows.

#### Ingest into editing workflows

Pipeline saves significant time and costs over traditional ingest solutions by importing media directly into your editing workflow. A single workstation or server can handle the demands of ingesting multiple SD or HD streams.

Captured files can be accessed immediately for editing in Final Cut Pro, Adobe Premiere Pro, or Avid MediaCentral environments, allowing incoming events and breaking news to be edited while they are being captured. External encoding allows you to use your edit workstation for editing – instead of waiting for clips to be fully captured.

#### Ingest into transcoding workflows

Use Pipeline for high-quality baseband ingest into your Vantage workflow. Telestream's systems can simultaneously create a high-res file for storage while creating a low-res proxy or create any number of additional file formats in near-realtime.

Transcoding can begin immediately while ingesting media, saving you time and money. Pipeline also preserves important metadata, such as closed captions, throughout your transcoding workflow.

#### Playout to Tape or Monitor

Pipeline can be used to playout QuickTime or MXF OP1a files back to tape or a monitor for quality checking. In addition a Pipeline system can be turned into a virtual VTR, allowing it to be controlled via Sony 9-pin commands via RS422.



#### Pipeline is qualified on the following systems

# Telestream transcoding solutions

- FlipFactory v7.0 or later
- Vantage v4.0 or later

#### **Edit solutions**

- Apple Final Cut Pro 7 or later
- Adobe Premier Pro
- Avid Media Composer 6 or later
- Others

# Video I/O (per channel)1

HD/SD SDI

- SMPTE 259M-C (270Mb/s, 480i/576i) 625/50, 525/59.94
- SMPTE 292M (1.5Gb/s, 720p/1080i/ 1080p/1080@24Psf)

#### Audio I/O (per channel)

Up to 16 channels embedded SDI audio 48Khz / 16/24bit / Uncompressed

#### SDI Sync Reference Input

Looped output

# VTR Machine Control (per channel)

RS-422, 9 pin Sony Protocol

# Pipeline External API Control (capture/playout)

Web service RS-422 (BVW/Sony 9-pin)

# Video Encode/Decode Formats (NTSC/PAL)<sup>1</sup> All models

- DV/DVCPRO (25/50Mbps), DVCPRO HD
- IMX 30, 40, 50
- Apple ProRes 422 SD/HD
- Avid DNxHD® codec (VC-3 compliant)

#### Media Format Wrappers

- OPAtom MXF/AAF<sup>2</sup> & generic OPAtom
- OP1a MXF (generic and XDCAM)
- QuickTime MOV
- TIFO

#### Time code sources

# Input signal VITC, RS-422

 SDI Sync reference VITC/VANC, host computer, zero based

#### **Network Connection/Protocols**

1000 Mbps Ethernet port for each channel Protocols – TCP/IP, UDP, RTSP, RTP, Apple® Bonjour compliant (device discovery/control)

#### Dimensions, Weight and Power:

- Size: 439mm / 17.9" W x 336mm / 13.25" D x 44mm / 1.73" H
- Actual weight: 4.9 kg / 10.8 lbs;
  Shipped: 7.71 kg / 17 lbs
- Power: 68 watts

## Minimum two channel HD System Requirements:

- Operating Systems Windows 7 Pro or Windows 2008 R2 (64bit recommended)
- CPU Intel Quad core i7 or equivalent
- RAM 16GB minimum
- Additional hardware:
  - Dedicated media storage drive (2 drive 7200RPM SATA - RAID0)
  - Intel based 1Gb Ethernet adapter

**Note:** See the "Pipeline Configuration and Setup Guide" for details on additional system configuration requirements.





