

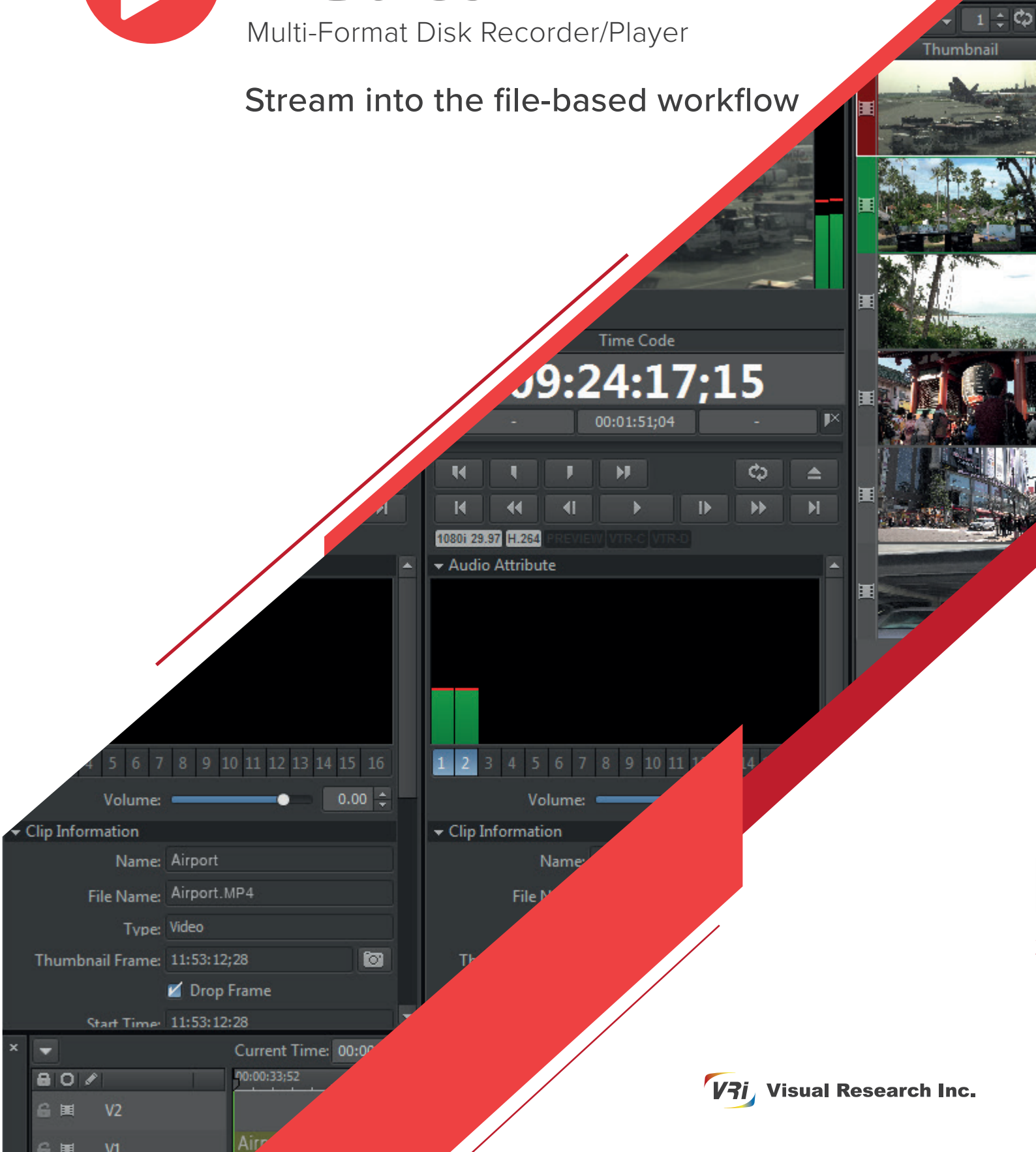


Karisma

D-Stream

Multi-Format Disk Recorder/Player

Stream into the file-based workflow



Overview

D-Stream is a multi-format disk recorder/player that is able to edit/playout/record video. Users can make files with SDI input signals or playout video files as SDI. Current VTR users can easily transfer to a file-based workflow with D-Stream's user interface that is similar to VTR. Built-in sequence edit, CG mixing and sequence linkage to external NLE system will simplify the workflow and save user's creating time.

Features

MULTI-CHANNEL DEVICE

D-Stream can simultaneously record and playback from one device. It gives users the same effects as using multiple VCR, simplifies their workflow and increases utilization per device.

Multi-channel video recording and playback

D-Stream supports 4 input/output channels and can configure various input and output. Users can use up to 2 recordings/2 playbacks or single recording/playback. This feature helps to reduce hardware cost and use it for multiple purposes.

Various input/output formats

D-Stream supports input/out formats such as 1080i, 1080p, 720p, NTSC, PAL, and etc.

10-bit recording/playback

D-Stream supports 10-bit process internally to support high definition video recording. Using codecs like Avid® DNxHD, Apple® ProRes 4444, users can record high definition video with minimized quality loss and file size increase in the workflow.

16 audio channels

D-Stream can record/playback 16 audio channels and input/output to SDI embedded audio or AES/EBU as user's setting.

FLEXIBLE RECORDING METHODS

D-Stream can record and playback with accurate timecode using various actual codecs in broadcasting field.

Various video file formats

D-Stream supports recording/playback with various codecs (MPEG-2, DVCPPro, XDCAM, AVC-Intra, DNxHD, ProRes, XAVC, H.264, etc). It allows users to use various video files without trans-coding and export them via these codecs which reduce creation time.

Preview output during recording/playback

Timecode/ countdown TC can be mixed into the original video and playout. Also, the signal input during recording is displayed via the selected SDI output. The playout preview is available via PC monitor and SDI output.

Diverse timecode types for recording

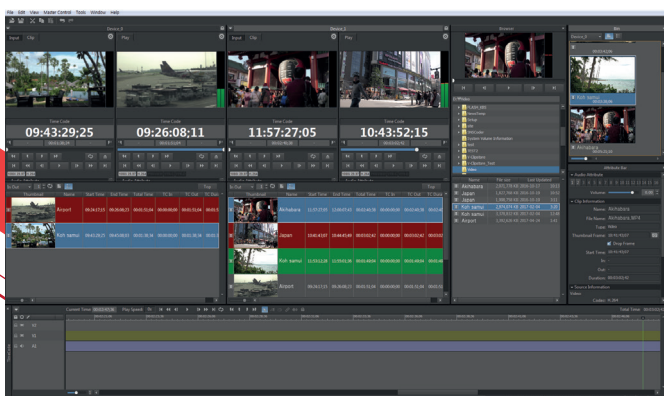
D-Stream can select the timecode among EMB LTC/EMB VITC/external LTC for recording. It supports drop/non-drop timecode.

Simultaneously creating proxy

D-Stream simultaneously records proxy when recording original high definition video.

Editing during capture

Users can edit video from other NLE device while recording input video to a file so that users don't need to wait for video recording to be completed. Recording files are saved on the network and can be used by NLE device or other file-based devices.



Key Features

- Multi-channel input/output
- Support various I/O formats
- Support various codecs
- Video sequence editing
- Playout list
- Sony 9-Pin control interface
- CG playback and mix

ADAPTING TO LINEAR WORKFLOW

Current existing linear editor users with Sony® 9-pin control can switch gradually to a file-based environment by replacing the tape-based VCR with D-Stream. Their original edit environment can be kept.

Playlist list

Up to 2 channels of video can be played. Video, audio, CG and sequence can be listed in the playlist.

Timeline-based sequence editing

D-Stream supports timeline based editing function, so users can easily edit video track by placing video and audio in the timeline. Also, users can save the final edited project as a file, send it to a monitor or connect it to an external VCR for tape output.

Track control

Users can play, pause, rewind, fast-forward and bidirectionally playback at double speed up to 300%. Jog, shuttle, and slow motion controls are also available.

Built-in functions for linear editing

D-Stream supports following editing functions as below.

- Assemble/insert editing
- Split editing
- Pre-read editing
- Support drop/non-drop frame
- Audio editing
- Field recording
- Hardware EE mode

GPI control

START/STOP, NEXT, BACK, REC/STOP can be controlled by external GPI. For monitoring, PLAYING/RECORDING/-GOING NEXT/GOING BACK are available.

NON-LINEAR MASTERING DEVICE

D-Stream can be used as a mastering device by importing the sequence processed from NLE. Mixing subtitles without a switcher/editor and rendering the final video using various codecs are also available.

Sharing sequence between D-Stream and NLE

Users can import video, audio, and CG editing data(XML) created in a NLE into the timeline of D-Stream in the form of a sequence. Also, edited sequence of D-Stream can be exported to NLE.

Exporting video file to NLE

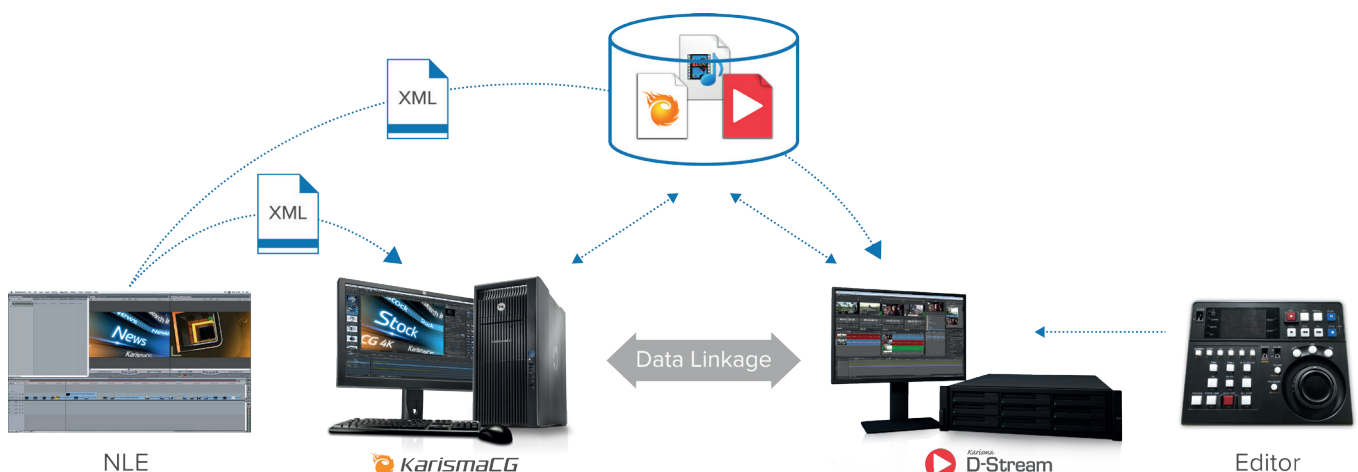
The edited sequence of D-Stream can be exported as a video file with various codecs. D-Stream can create a file in a shorter time than the actual play time of the video even for the multi-track timeline rendering.

CG mixing and real-time playback

D-Stream can playback the scenes created by KarismaCG in real-time without rendering. In addition, scenes can be placed in the timeline and be mixed with the video. If the scene file is shared on the network, the edited data of KarismaCG is reflected immediately on the D-Stream, which is very convenient.

Real-time trans-coding playback

Video files of different video sizes and frame rates can be trans-coded and playback in real-time according to the playback video format.



Supported Media File Formats

	HD	SD
AVI	DVCPPro HD MPEG-2 I-Frame 4224/422 MPEG-2 IBP 420/422	MPEG-2 IBP 420/422 DVCAM 420(PAL)/411(NTSC) DVCPRO 411 DVCPRO50 422
MOV	DVCPPro HD XDCAM 50/35/25 ProRes 4444/422/422(HQ)/422(LT)/proxy H.264	DVCAM 420(PAL)/411(NTSC) DVCPRO 411 DVCPRO50 422 ProRes 4444/422/422(HQ)/422(LT)/proxy H.264
MXF	MPEG-2 DVCPPro HD AVC-Intra 100/50 DNxHD 220/220x/145/100 XDCAM 50/35/25 XAVC Intra Class 100 CBG XAVC Long GOP 50/35/25	DVCAM 420(PAL)/411(NTSC) DVCPRO 411 DVCPRO50 422
MXF	H.264	MPEG-2 H.264
Graphic File	PNG, TGA, JPG, VRi Video KarismaCG project(T2P) KarismaCG scene(T2S)	

System Requirements

	Description
OS	Windows® 7 Pro x32/x64, Windows® 10 Pro x32/x64
CPU	Intel® Core™ i7-7700K 4.2GHz or higher
RAM	DDR4 8GB 2,133MHz x 2(16GB) or above
VGA	Intel® HD Graphics 630 or above
Display	1920x1080 or larger
Video I/O Board	Matrox® DSX LE4™ (L/FH) 4 100/500/550 or Matrox® X.mio3™ (L/FH) 4 100/500/550

Video I/O Specification

	Description
I/O Channel	2 x SDI program output - 4:2:2 SMPTE 259M/292M 1 x SDI input - 4:2:2 SMPTE 259M/292M
Video I/O Format	1920 x 1080i @ 25, 29.97, 30fps 1920 x 1080p @ 23.98, 24, 25, 29.97, 30fps 1920 x 1080psf @ 23.98, 24fps 720p @ 50, 59.94, 60fps 576i @ 25fps 486i @ 29.97fps
Reference	HD/SD input or black burst/tri-level sync
Audio	AES/EBU, Sampling rate @ 48khz 8 stereo embedded audio I/O