

# EDIUS SP

Outstanding Real-Time  
Editing System for  
Analog, DV, and HDV



## Key Features

- Real-time, mixed-format editing of HD, HDV, DV, MPEG-2, uncompressed, and lossless video using EDIUS Broadcast editing software
- Real-time SD/HD resolution, aspect ratio, and frame-rate conversion and output, including 16:9 to 4:3 and NTSC to PAL
- Real-time HD/SD effects, keyers, transitions, and titles
- High-quality proprietary software codecs, including award-winning Canopus HQ codec
- Extensive analog and digital video equipment inputs/outputs, including RS-422 control and external reference sync input
- Hardware-based line scaling for pristine HD video output
- Real-time, full-resolution, full-quality component HD and SD video output
- Filtering and noise-reduction technology for analog input
- High-speed HDV timeline export, built for dual-core CPU technology
- Complete I/O support for DVCPRO 50, DVCPRO HD, P2, VariCam, and XDCAM cameras and decks

Our Grass Valley™ EDIUS® family supports the real-time editing of all popular standard-definition (SD) and high-definition (HD) formats, including Canopus® HQ, Canopus Lossless, DV, DVCAM, HDV, MPEG-2, and uncompressed video.

### Outstanding Real-Time Editing for Analog, DV and HDV

Our EDIUS SP solution is a software/hardware system that is the most advanced professional nonlinear editing system in its class, one that seamlessly integrates into existing studio environments.

On the software side, the system uses our EDIUS Broadcast software to deliver true real-time editing and full-quality, full-resolution output of HD and SD materials—as well as multi-track, mixed-format editing, compositing, chroma keying, titling, and timeline output capabilities. In addition to the standard formats of the EDIUS family, the software supports DVCPRO, Infinity JPEG 2000\*, P2, VariCam, SMPTE 360M (GXF)\*\*, and XDCAM video. It also supports all DV and HDV cameras and decks.

On the hardware side, the EDIUS SP system features hardware-based video overlay and high-quality video I/O circuitry. It interfaces with professional and consumer video equipment including HDV, DV, and all analog cameras and decks. And it supports professional video equipment with component video and XLR balanced audio I/O, as well as frame-accurate RS-422 VTR control and external reference sync input connections.

### Ready For HD When You Are

With EDIUS Broadcast software, you can move from SD to HD whenever you're ready. It can edit DV content in HD resolutions, providing automatic, real-time upscale conversion from SD to HD—and apply all project titles, graphics, and effects in HD resolution. Ensuring a painless transition to the world of HD, you can work in and output HDV content to hard disks or DVD-R drives without the need for an HDV camera or deck.

\* Infinity JPEG 2000 support available Q3 2007.

\*\* GXF output only.

### Player/Recorder Monitor View

Player side controls capture and source trimming.  
Recorder side controls timeline operation and trimming.

### Jog/Shuttle Control

Jog/shuttle control via slider, mouse scroll-wheel, or mouse motion.

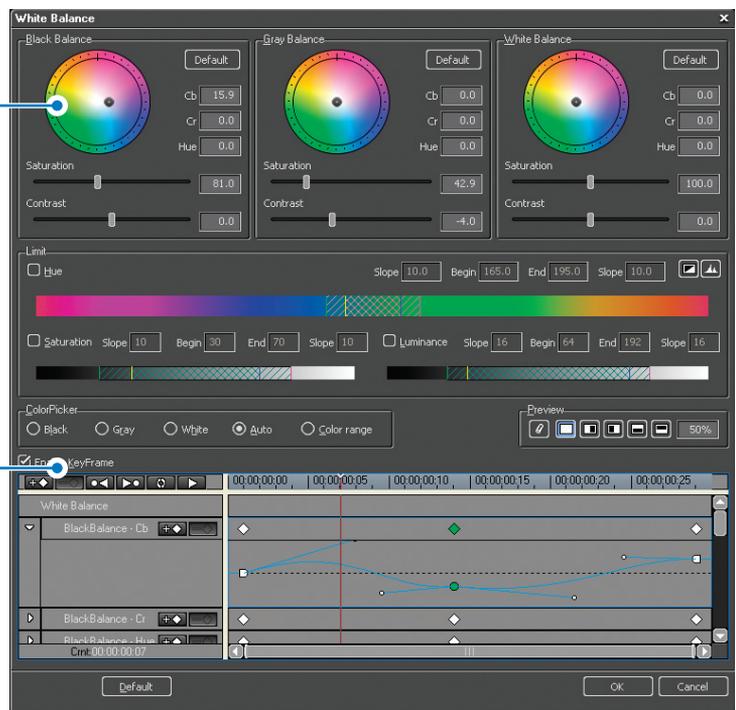
### Unlimited Video, Audio, and Title Tracks

Edit with unlimited video, audio, and title tracks.



### Real-Time Color Correction

Use real-time color correction with an interactive split-screen display and secondary controls. Stack multiple filters for even greater control.



### Keyframeable Color Correction

Color correction filters are keyframeable for precise, subtle changes over time.

## Exceptional Mixed-Format Editing

Featuring unrivaled real-time video transcoding technology, EDIUS Broadcast software converts between HD and SD resolutions, aspect ratios and frame rates—all in real time. You can edit 1080i on a 4:3 SD timeline, use NTSC and PAL sources, or combine them all into a 720/24p project without wasting a single moment on conversion or rendering.

EDIUS Broadcast software also features real-time playback and DV output of all effects, keys, transitions, and titles, and can export projects to any format or medium required including DVD-video.

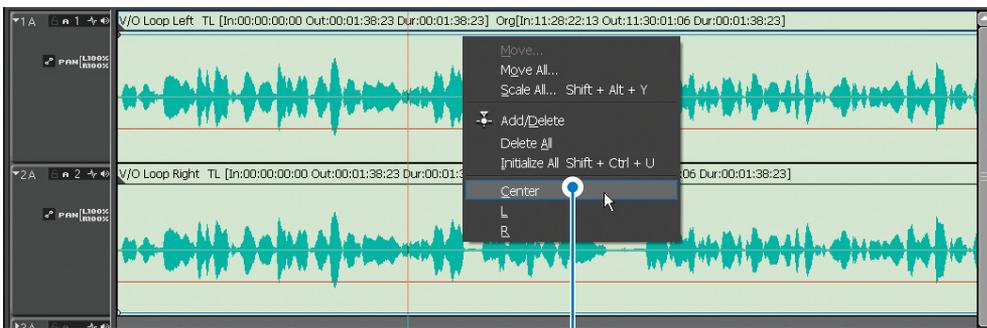


### Flexible Bin Structure

Organize, search, and manage assets with folders and dynamic search results.

### Real-Time Audio Mixer and Waveform/Vectorscope

Use the real-time audio mixer for audio adjustments and the real-time waveform/vectorscope to ensure legal output.

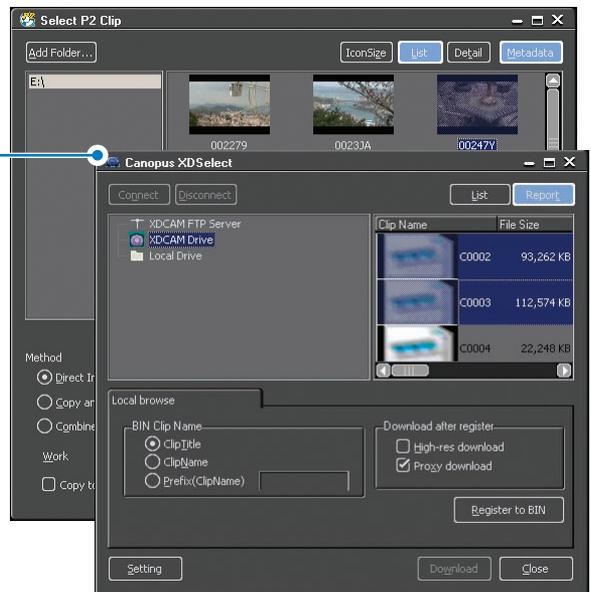


### Adjust Audio Volume and Pan

Add control nodes to make volume and panning adjustments to audio.

### Tapeless Workflow Support

Support for tapeless workflows with metadata preservation for modern file-based workflows.



### Unsurpassed Image Quality and Performance

EDIUS Broadcast software features the revolutionary Canopus HQ codec. Designed with scalable technology, this innovative codec offers the highest image quality and performance available in any HD editing platform. The Canopus HQ codec not only provides superior luma and chroma sampling of HD video, but features an adjustable bit rate for increased video quality when capturing and encoding on high-performance systems.

# Specifications

## Video Capture Formats

- Canopus DV: 720x480/59.94i (NTSC), 720x576/50i (PAL)
- YUY2 (uncompressed): 720x486/59.94i (NTSC), 720x576/50i (PAL)
- Canopus Lossless: 720x486/59.94i (NTSC), 720x576/50i (PAL)
- HDV/Canopus HQ: 1080/59.94i (NTSC), 1080/50i (PAL), 1080/30p (NTSC), 1080/25p (PAL), 1080/24p, 720/30p (NTSC), 720/25p (PAL), 720/24p, 720x480/60p (NTSC), 720x576/25p (PAL), 720x576/50p (PAL)
- Canopus HD: 1280x1080/59.94i, 1280x1080/60i, 1280x1080/50i, 1280x720/59.94p, 1280x720/50p

## Video Output Formats

- DV/DVCAM: 720x480/59.94i (NTSC), 720x576/50i (PAL)
- HDV: 1080/59.94i (NTSC), 1080/50i (PAL), 1080/30p (NTSC), 1080/25p (PAL), 1080/24p, 720/30p (NTSC), 720/25p (PAL), 720/24p, 720x480/60p (NTSC), 720x576/25p (PAL), 720x576/50p (PAL)
- S-Video, composite: 720x480/59.94i (NTSC), 720x576/50i (PAL)
- BNC component: 1080/59.94i (NTSC), 1080/50i (PAL), 720x480/59.94i (NTSC), 720x576/50i (PAL)

## Digital Video I/O

- 1 x 4-pin FireWire

## Analog Video Input

- 1 x component (BNC Y, Pb, Pr)
- 1 x S-Video (4-pin miniDIN)
- 1 x composite (BNC)
- 1 x ref input (BNC)

## Analog Video Output

- 2 x component (BNC Y, Pb, Pr)
- 1 x S-Video (4-pin miniDIN)
- 1 x composite (BNC)

## Analog Audio Input

- 2 x XLR-3-31 female (1-gnd 2-hot 3-cold, balanced)
- 1 x stereo (RCA, unbalanced)

## Analog Audio Output

- 2 x XLR-3-32 male (1-gnd 2-hot 3-cold, balanced)
- 2 x stereo (RCA) (unbalanced)

## Device Control

- 9-pin D-sub RS-422A
- IEEE 1394 FireWire

## Options

- 19-inch 1 RU breakout box

## Minimum System Requirements

EDIUS SP is capable of editing SD and HD content in real time. However, the system requirements for real-time HD editing are significantly higher than for SD editing. The PC components listed here assume real-time an HD editing requirement.

- Dual Intel Xeon 2.8 GHz processors or faster
- 1 GB RAM
- One free PCI 64-bit/66 MHz slot (rev. 2.2)\*
- One free PCI 64-bit or 32-bit/66 MHz slot (rev. 2.2)
- 800 MB free disk space
- DVD-ROM drive for software installation
- ATA100/7200 RPM or faster hard disk, capable of sustaining at least 20 MB/s data transfer. A RAID stripe set of two or more hard disk drives is required for multiple HD stream output
- Graphics card with at least 128 MB of video RAM and hardware-based DirectDraw overlay and 32-bit color display at a 1024x768 resolution
- Windows XP Home or Windows XP Professional (Service Pack 2 or later)
- DirectX 9.0 or later
- One free USB (1.1 or higher) port for security key
- Sound card

## Service and Support

- Software: 90-day limited warranty
- Hardware: 1-year limited warranty

\* The EDIUS SP baseboard can also be used in a 32-bit PCI slot for editing in SD resolution; however, in this configuration, HD hardware acceleration and HD component output will be disabled.

# Package Contents

- EDIUS SP PCI bus card
- EDIUS SP HD component output card
- 1 x FireWire cable (4-pin to 4-pin)
- 1 x multi-I/O cable
- 1 x 6-pin connector cable for HD component card
- 1 x 4-pin internal video connector cable
- 1 x 4-pin internal audio connector cable
- EDIUS Broadcast installation DVD-ROM
- TitleMotion Pro Installation CD-ROM
- USB security dongle
- EDIUS installation guide
- EDIUS hardware setting guide
- EDIUS user guide
- EDIUS Broadcast user guide



Grass Valley products from Thomson provide comprehensive, multi-format support for a wide range of professional video uses, from those in corporate media centers and educational institutions to those in concert and sports arenas, convention centers, and houses of worship.

A key component of these video solutions is the EDIUS family of hardware and software. Built on reliable and highly robust Canopus technology, these craft-editing solutions provide maximum performance and reliability for high-demand professional video production environments.

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