

# EDIUS NX EXPRESS

Seamless Real-Time  
Workflow Handles  
Any Mix of HD/SD



## Key Features

- Real-time, mixed-format editing of HD, HDV, DV, MPEG-2, uncompressed, and lossless video using EDIUS Pro 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 SD/HD effects, keyers, transitions, and titles
- High-quality proprietary software codecs, including the award-winning Canopus HQ codec
- High-speed, hardware-based SD MPEG-2 and MPEG-4 timeline export
- High-quality analog and digital inputs/outputs for DV, S-Video, composite video, and unbalanced audio
- Hardware-based line scaling for pristine HD video output

\* Upgrade to EDIUS Broadcast available.

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.

### EDIUS NX Express – Handle Any SD/HD Mix

Designed for multi-core CPUs and motherboards with PCI Express slots, our groundbreaking EDIUS NX Express turns your desktop PC into a real-time, multi-format nonlinear editing system.

The EDIUS NX Express system can handle any mix of HD and SD video content; unlimited video, audio, title, and graphics layers; and any combination of real-time effects. It offers real-time, full-resolution, full-quality component HD and SD video output; bi-directional analog/DV conversion using our ADVC® technology from within any Windows-based nonlinear editing software; and lets you edit HD video output from a timeline.

Most important, the EDIUS NX Express system can preview your work in progress in high quality and full resolution—in real time—on the type of video monitor on which it is intended to be displayed, including HD.

### Real-Time Display Streamlines Workflows

Unlike systems that compromise video quality to provide real-time editing, the EDIUS NX Express system delivers genuine real-time, HD-resolution editing—including full-quality, full-frame-rate HD output to an HD video monitor from the timeline. No rendering is required to preview edited sequences; the system displays them instantly on HD video monitors.

### Exact Video/Audio Format Preservation

The EDIUS NX Express system preserves your original video and audio data at every step of the editing process. The format you start with is exactly what the system delivers. This capability eliminates any guesswork when it comes to applying the system's many real-time effects.



### Player/Recorder Monitor View

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



### Jog/Shuttle Control

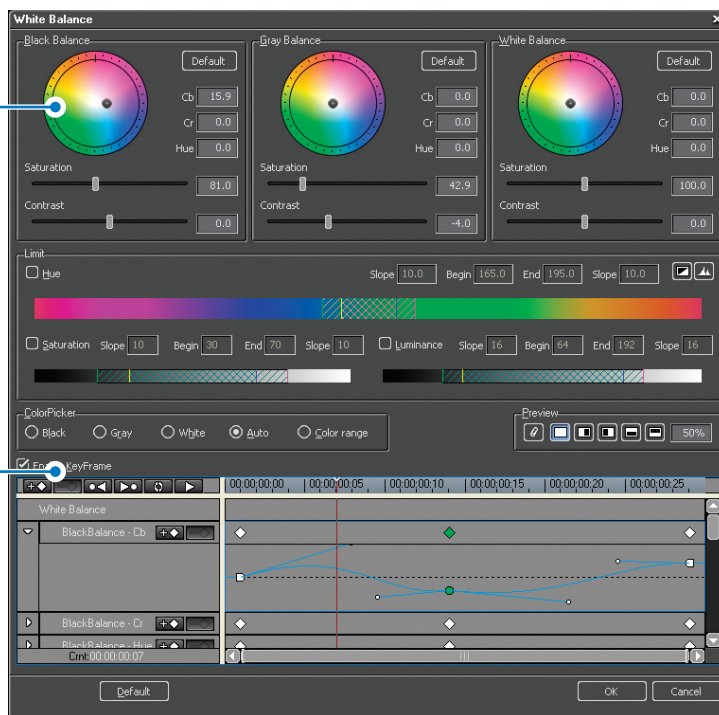
Jog/shuttle control via slider, mouse scroll-wheel, or mouse motion.

### Unlimited Video, Audio, and Title Tracks

Edit with unlimited video, audio, and title tracks.

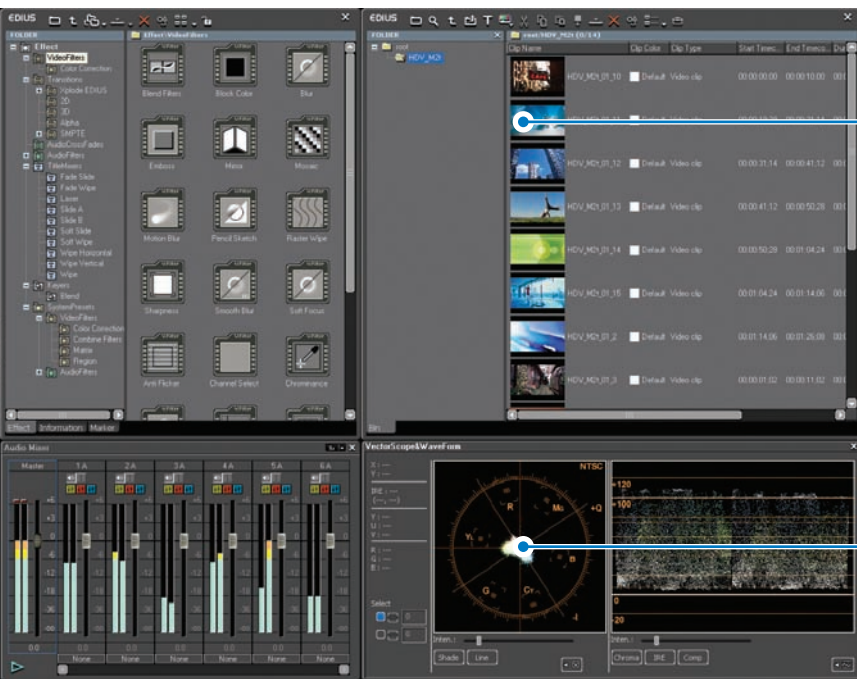
### Real-Time Color Correction

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.

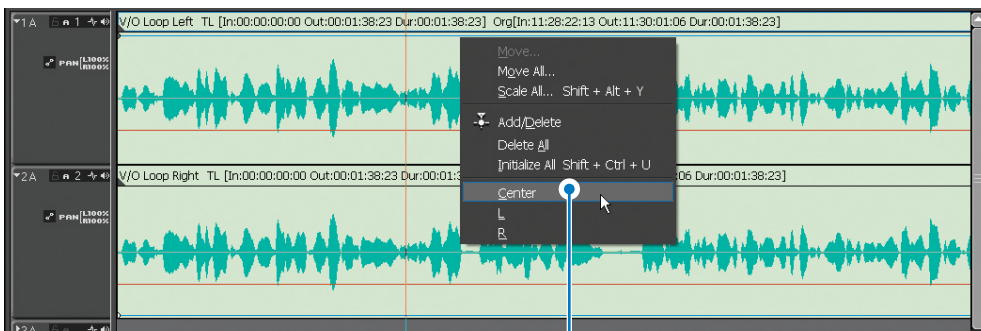


**Flexible Bin Structure**

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.

Performance,  
pure and  
simple.



# Specifications

## Video Formats (Capture)

- 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@60p (NTSC), 720@50p (PAL), 720@30p (NTSC), 720@25p (PAL), 720@24p, 720x480@60p (NTSC), 720x576@25p (PAL), 720x576@50p (PAL)

## Video Formats (Output)

- 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@60p (NTSC), 720@50p (PAL), 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 Input/Output

- 1 x 4-pin FireWire
- 1 x 6-pin FireWire

## Analog Video Input/Output

- 1 x S-Video and composite combined (7-pin miniDIN) input
- 1 x S-Video and composite combined (7-pin miniDIN) output
- 1 x component (BNC Y, Pb, Pr) output

## Analog Audio Input/Output

- 1 x stereo (3.5 mm, unbalanced) input
- 1 x stereo (3.5 mm, unbalanced) output
- 1 x stereo (RCA, unbalanced) output

## MPEG-2/MPEG-4 Export Video Resolutions

- MPEG-2: 720x480, 720x576, 704x480, 640x480, 480x480, 352x480, 352x576, 352x240, 352x288, 320x480, 320x240, 176x120
- MPEG-4: 720x480, 720x576, 704x480, 640x480, 480x480, 352x480, 352x576, 352x240, 320x240, 176x120

## MPEG-2/MPEG-4 Export Video Frame Rate

- MPEG-2: 29.97 fps (NTSC), 25 fps (PAL)
- MPEG-4: 15 fps (NTSC), 30 fps (NTSC), 25 fps (PAL)

## MPEG-2/MPEG-4 Export Video Compression

- MPEG-2: (ISO/IEC 13818-2) Main Profile @ Main Level (I, B, P frames) I-frame support only
- MPEG-4: (ISO/IEC 14496-14)

## MPEG-2/MPEG-4 Export Video Bit Rate

- MPEG-2: 128 kb/s – 15 Mb/s
- MPEG-4: 32 kb/s – 8 Mb/s
- Variable (one-pass) and constant bit-rate support

## MPEG-2/MPEG-4 Export Audio Sampling Rates

- MPEG-2: 32-, 44.1-, 48 kHz
- MPEG-4: 24-, 48 kHz

## MPEG-2/MPEG-4 Export Audio Compression

- MPEG-2: MPEG-1 Layer 2
- MPEG-4: AAC

## MPEG-2/MPEG-4 Export Audio Bitrates

- MPEG-2: 96 to 384 kb/s
- MPEG-4: 32-, 48-, 64-, 96-, 128-, 144-, 182-224-, 256-, 288 kb/s

## Minimum System Requirements

The EDIUS NX Express is capable of editing both SD and HD content in real time; however the system requirements for real-time HD editing are significantly higher than those for SD editing. The requirements shown here are for real-time HD editing and will provide a very pleasant real-time editing experience in SD as well.

- Intel Pentium D 3.0 GHz or higher (multi-processor and hyper-threading technology supported)
- 1 GB RAM
- Two free PCI Express x1 slots
- 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 speeds. 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
- Sound card

## Service and Support

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

# Package Contents

- EDIUS NX Express (NHX-E2) PCI Express x1 bus card
- SD/HD component output and SD MPEG-2/MPEG-4 encoder PCI Express x1 bus card
- 1 x FireWire cable (4-pin to 4-pin)
- 1 x board connection cable
- EDIUS software installation DVD-ROM
- TitleMotion Pro installation CD-ROM
- USB security dongle
- EDIUS installation guide
- EDIUS hardware setting guide
- EDIUS 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 this solution set 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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