matrox axio™ LE

Realtime HD and SD editing for broadcast and post

Matrox Axio LE provides a complete post-production solution that lets you get the best from the Adobe CS4 Production Premium software. It gives you the most comprehensive realtime feature set, the highest quality native codec technology, and complete file-based workflows – totally integrated with the Adobe software.

Matrox Axio LE goes far beyond the capabilities of systems that combine Adobe Premiere Pro CS4 and a simple I/O card. The additional benefits you get include:

- Many more realtime layers of video and graphics in HD and SD
- Realtime mixed-format timelines
- More effects in real time including color correction, chroma/luma keying, speed changes, blur/glow/soft focus, and much more
- Broadcast-quality, realtime 3D effects with soft edges, and realistic shadows
- Realtime native editing of Panasonic P2 and P2 HD and Sony XDCAM, XDCAM HD, and XDCAM HD422 clips (MXF files)
- Realtime native editing of Sony XDCAM EX clips (MP4 files)
- Support for Omneon media servers via native MXF file transfers
- Matrox EZ-MXF utility for native MXF file support in video for Windows (AVI) applications
- Native support for additional codecs including: DVCPRO HD, MPEG HD, MPEG HD422, offline HD, MPEG-2 I-frame in HD and SD, IMX, DVCPRO, and DVCPRO50

- Realtime playback of 32-bit compressed and uncompressed AVI with alpha
- Support for Panasonic VariCam
- Realtime mixed-format multi-cam
- Simultaneous HD and SD output
- Realtime MPEG-2 IBP capture from analog, DV, and SDI sources for DVD authoring
- WYSIWYG for Adobe After Effects, Encore, and Photoshop; Autodesk Combustion; and NewTek LightWave 3D (32-bit versions) with dynamic Alt+Tab switching
- Audio VU meters on capture

Key features

- Full-resolution, mixed-format, multi-layer realtime editing of HD and SD video, graphics, and effects
- Realtime Matrox Flex CPU and Flex GPU effects
- Realtime native editing of Panasonic P2 and P2 HD and Sony XDCAM, XDCAM HD, and XDCAM HD422 clips (MXF files)
- Realtime native editing of Sony XDCAM EX clips (MP4 files)
- Support for Omneon media servers via native MXF file transfers
- Extensive native codec support in HD and SD – uncompressed 8- and 10-bit, MPEG-2 I-frame, DVCPRO HD, MPEG HD, MPEG HD422, HDV, IMX, DVCPRO50, DV, DVCPRO, DVCAM
- Realtime playback of 32-bit compressed and uncompressed AVI with alpha
- 24 fps editing in HD and SD with pull down, reverse pull down, and Panasonic VariCam support
- Realtime high-quality downscaling from HD to SD
- Realtime MPEG-2 IBP capture from analog, DV, and SDI sources for DVD authoring
- WYSIWYG for Adobe After Effects, Encore, and Photoshop; Autodesk Combustion; and NewTek LightWave 3D (32-bit versions) with dynamic Alt+Tab switching
- Native MXF and HDV AVI file support in Video for Windows applications such as Adobe After Effects via Matrox EZ-MXF and EZ-HDV utilities
- DV-1394, composite, Y/C, HD/SD analog component, and HD/SD SDI input and output
- Simultaneous HD and SD output
- 2-in/6-out AES/EBU audio, 2-in/6-out XLR audio, 8-in/8-out SDI embedded audio, 1/4" output jack for stereo monitoring

Specifications

Capture/editing formats

HDV 1080i
HDV 1080p
HDV 720p
DVCPRO HD
DV, DVCPRO, DVCAM
DVCPRO50
P2 MXF – DVCPRO50, DVCPRO HD
XDCAM MXF – DVCAM, IMX
XDCAM HD MXF 18, 25, 35 mbps Slow & Quick Motion
XDCAM HD422 MXF 50 mbps Slow & Quick Motion
XDCAM EX HQ-mode (1080i/p and 720p) Slow & Quick Motion
XDCAM EX 1080i/p SP-mode (1440x1080) Slow & Quick Motion
MPEG-2 4:2:2 I-frame SD — 10-50 mbps*
Uncompressed 8- and 10-bit SD*
Uncompressed 8- and 10-bit HD*
MPEG-2 4:2:2 I-frame HD at 1440 horizontal resolution — 50-300 mbps*
MPEG-2 4:2:2 I-frame HD at 1920 horizontal resolution — 50-300 mbps*
MPEG-2 4:2:2 I-frame HD at 1280 horizontal resolution — 50-300 mbps*
Compressed HD for offline
Playback of legacy Matrox DigiSuite AVI files
Playback of legacy RT series AVI files

* Also available as 32-bit AVI with alpha.

Realtime video effects**

Three-way primary color correction
Three-way secondary color correction
Super smooth field- or frame-blended slow motion
Advanced 3D DVE
Chroma/luma keying
Dissolve, wipes
Surface finish
Blur/glow/soft focus
Shadow
Transitions
Page curls
Mask, mask mosaic, mask blur
Pan & Scan
Four-corner pin
Track matte
Native Adobe transitions
Accelerated shine
Crystallize
Old movie
Lens flare
Move & scale
Cube
Ripple
Twirl
Impressionist
Garbage matte
Sphere
Timecode

** Certain complex effects at certain resolutions using certain codecs may not playback in real time, but they still benefit from hardware acceleration. Matrox Axio LE relies on the power of your system CPU and GPU to process realtime Matrox Flex effects. Please visit our website for system configuration guidelines.

Video editing

Ultra high performance editing with Adobe Premiere Pro
Realtime mixed-format timelines
EDL import and export
AAF export for interoperability with other systems
Waveform and vectorscope monitors for color correction and broadcast safe output
User customizable keyboard
Multiple nestable timelines for managing multi-layer effects and complex timelines
WYSIWYG for compositing and graphics applications
Realtime mixed-format multi-cam
Closed captioning support in NTSC

Audio editing

Support for multi-channel 5.1 surround sound mixing and monitoring
Sub-frame audio editing
Audio sweetening with VST plug-in support
Voiceover recording in the timeline
VU meters on capture

Video inputs and outputs

Simultaneous HD and SD output
Realtime high quality downscaling from HD to SD
SD
1394
Composite
Y/C
Analog YPbPr component
SDI – SMPTE 259M
Analog genlock
HD
1394
SDI HD – SMPTE 292M
Analog YPbPr component
Tri-level genlock

Supported editing resolutions

720p @ 23.98, 25, 29.97, 50, 59.94
1080i @ 25, 29.97
XDCAM EX 1080i (1920 x 1080) @ 50, 59.94
XDCAM EX 1080p (1920 x 1080) @ 23.98, 25, 29.97
XDCAM EX 1080i (1440 x 1080) @ 50, 59.94
XDCAM EX 720p (1280 x 720) @ 23.98, 25, 29.97, 50, 59.94
HDV 1080i (1440 x 1080) @ 25, 29.97
HDV 1080p (1440 x 1080) @ 23.98, 25, 29.97
1080p @ 23.98, 24, 25
NTSC
PAL
486p @ 23.98, 29.97
576p @ 25

Audio inputs and outputs

XLR audio (analog) 2-in/6-out
AES/EBU audio 2-in/6-out
SDI embedded audio 8-in/8-out
1/4" output jack for stereo monitoring

www.matrox.com/video

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