

VELOCITY ESX™

NX3000VESX/NXA1000VESX
On-SAN Editor



Velocity ESX™ is a full-featured HD/SD high-resolution news, sports and production editing system for the NEXIO™ storage area network (SAN). The editor operates directly on the SAN, utilizing the robust NEXIO architecture, a powerful user interface and Harris® Media ID™ technology to deliver the industry's quickest way to minimize time between content access and air. Velocity ESX™ can start editing HD and SD media the moment ingest begins. The system also integrates fully with newsroom computer systems such as AP's ENPS® and Avid's iNEWS® — enabling a truly collaborative newsroom.

The Velocity ESX user interface provides access to a comprehensive editing and effects tool set. Real-time keyframeable effects such as PIP and color correction, the ability to employ mixed resolutions and aspect ratios on the same timeline, and essential audio controls and plug-ins come standard. The interface is completely customizable, with a broad range of user options for increasing productivity, including user-definable hot keys, flexible window layouts and an optional external jog/shuttle controller. This flexibility makes Velocity ESX™ an ideal choice for news operations that require NRCS integration and the fastest time to air; sports applications that need highlight editing and slow-motion server output; and production environments that demand advanced editing tools along with true shared storage.

Using sophisticated software codecs with CPU and GPU processing, Velocity ESX™ integrates seamlessly with NEXIO™ NX3601-, NX3600- and NX4000-series servers via Gigabit Ethernet or Fibre Channel. Multiple Velocity ESX editors can reside on the SAN, creating a completely interactive, shared storage environment.

Velocity ESX™ is part of the comprehensive NewsForce™ HD/SD news platform. The editor is available either as a hardware-based turnkey system (NX3000VESX) or software only (NXA1000VESX).

Features

- Access to all shared storage material on the SAN via the NEXIO™ MediaBase™ content management system
- NRCS integration with AP ENPS and Avid iNEWS
- On-SAN editing, local ingest and shared projects, settings and user profiles
- Create and modify MediaBase™ metadata
- Manage and protect media and projects
- Create index marks and sub-clips
- Software-only or hardware-based turnkey options
- DV and HDV I/O via FireWire™
- Integrated codecs and viewers for Panasonic® P2, DVCPRO HD and AVC-Intra, and Sony® XDCAM and XDCAM HD formats
- Import of EDL, AAF, OMF and Apple® Final Cut Pro® XML files
- Export of EDL, AAF, OMF and multimedia files
- User profile-based, customizable window layout, hotkeys and settings

Editing Tool set

- Precise insert-and-overwrite three-point editing; intuitive drag-and-drop-style editing
- NRCS script-based editing with audio VO and read rate-based prompter
- Editing of ingesting clips
- Media ID™ technology for immediate playback and Edit ID for faster than real-time output
- Interactive editing and effects creation without stopping playback
- Optional jog/shuttle and audio fader controllers
- Mixed HD and SD on the same timeline with global and clip-based up/down/cross conversion and aspect ratio conversion
- Advanced multicamera editing
- Audio VU levels, mixing, fades, rubber banding, track patching, bussing, mute, solo
- Import graphics, animations, video and audio directly to the SAN
- Pass-through handling of closed-caption, Dolby®-encoded audio and other metadata
- Sophisticated multilayer editing and effects

Video Transitions and Effects

- More than 375 customizable 2D and 3D transitions
- Dozens of keyframeable video effects, including PIP and color correction
- Third-party audio VST filters, video effects and transitions; integration with Adobe® After Effects®
- Slow/fast motion speed change, reverse playback, strobe/stutter
- Freeze frame/stills
- Title rolls, crawls and animations using bundled Inscrber® TitleMotion™ and third-party CG plug-ins

Specifications

Specifications and designs are subject to change without notice.

TURNKEY SYSTEM (NX3000VESX)

| | |
|-----------|---|
| Mainframe | Two dual-core AMD Opteron™ 64-bit processors PCIe platform 8 GB RAM Dual mirrored SATA boot drives |
| | Dual-channel 4 Gb/s Fibre Channel host bus adapter |
| | Two 10/100/1000Base-T Ethernet adapters |
| | Dual-head DVI-I monitor interface |
| | Five USB 2.0 ports (one front, four rear) |
| | One FireWire (IEEE 1394) port (front) |
| | USB custom keyboard and mouse |
| | Windows® XP Professional x64 Edition |

VIDEO

| | |
|-------------------|---|
| HD Formats | 1080i @ 25 fps and 29.97 fps 720p @ 50 fps and 59.94 fps |
| SD Formats | 525 @ 29.97 fps 625 @ 25 fps |
| Input | HD Mode: One HD-SDI BNC 1080i/720p 4:2:2 @ 1.48 Gb/s (SMPTE 292M) SD Mode: One SDI BNC 525/625 4:2:2 @ 270 Mb/s (SMPTE 259M) |
| Input Features | 10-bit 4:2:2 serial digital video Adaptive cable equalization for optimized performance Input loop out |
| Genlock Reference | Bi-level and tri-level sync support Reference loop out SDI input as reference |
| Outputs | HD Mode: Four HD-SDI BNC 1080i/720p 4:2:2 @ 1.48 Gb/s (SMPTE 292M) SD Mode: Four SDI BNC 525/625 4:2:2 @ 270 Mb/s (SMPTE 259M) |

VIDEO COMPRESSION

| | |
|----------------------|---|
| SD Encoding/Decoding | MPEG-2 I-frame: 4:2:0 (4-15 Mb/s); 4:2:2 (10-50 Mb/s) MPEG-2 long-GOP: 4:2:0 (4-15 Mb/s); 4:2:2 (10-50 Mb/s) MPEG IMX (30, 40 & 50 Mb/s) DVCPRO, DVCPRO50 DVCAM (625 only) |
| HD Encoding/Decoding | MPEG-2 I-frame: 4:2:0 (50, 80 & 100 Mb/s); 4:2:2 (50, 80, 100, 120 & 150 Mb/s) MPEG-2 long-GOP: 4:2:0 (50, 60, 70 & 80 Mb/s); 4:2:2 (50, 70 & 80 Mb/s) HDV (25 Mb/s) XDCAM HD (17.5, 25 & 35 Mb/s) DVCPRO HD (100 Mb/s) |
| HD Decode/Edit Only | AVC-Intra (50 & 100 Mb/s) XDCAM HD (50 Mb/s) XDCAM EX MXF (25 & 35 Mb/s) |

AUDIO

| | |
|----------------------|---|
| Channels & Formats | Four AES/EBU pairs per video I/O Four pairs embedded per SDI I/O |
| Inputs | Four pairs BNC, unbalanced (AES/EBU) One BNC (SDI embedded) |
| Outputs | Four pairs BNC, unbalanced (AES/EBU) Four BNC (SDI embedded) |
| Processing & Storage | 16-, 20- or 24-bit PCM, 48 kHz |
| Compressed Audio | Dolby® Digital (AC-3) and Dolby® E pass-through |

VIDEO STORAGE

| | |
|-----------|--|
| Options | 8 or 16 drives per chassis Up to 96 drives (146 GB or 300 GB) per SAN |
| Interface | Dual-port, redundant 4 Gb/s Fibre Channel |

RAID REDUNDANCY

| | |
|-------------------------|---|
| Controller | RAIDsoft™ software RAID management system |
| RAID Protection Schemes | RAID 3 (single drive parity, single drive failure protection) ECC (multiple drive parity, dual drive failure protection) |

TIMECODE CONNECTION OPTIONS

| | |
|--------------|--------------------------------------|
| Input/Output | RS-422 (VTR) TCP/IP (time of day) |
|--------------|--------------------------------------|

EXTERNAL MACHINE CONTROL

| | |
|--------------|--------------------------|
| Input/Output | RS-422 (RJ-12 connector) |
| Protocols | Sony 9-pin |

DIMENSIONS

| | |
|--------|----------------------|
| Height | 5.25" (13.4 cm), 3RU |
| Depth | 19" (48.3 cm) |
| Width | 28" (71.4 cm) |
| Weight | 47 lbs. (27.3 kg) |

POWER

| | |
|-------------|---------------------------------------|
| Supply | Dual hot-swappable, dual load-sharing |
| Voltage | AC 115-120 V, 200-240 V, auto select |
| Frequency | 60/50 Hz |
| Consumption | 650 W |

SOFTWARE ONLY (NXA1000VESX)

| | |
|--------------------------------|--|
| Minimum System Recommendations | Intel® Core™ 2 Duo or AMD Opteron™ processor (2 GHz dual core, 4 MB L2 cache, 800 MHz FSB) 4 GB RAM NVIDIA Quadro FX 1700 512 MB graphics card @ 1440x900 (WSXGA or WXGA+) 200 GB, 7,200 RPM Ultra ATA, SATA or SAS hard drive Gigabit Ethernet port IEEE 1394 and USB 2.0 ports 48 k, 16-bit sound card with mic input Windows® XP Professional x64 Edition |
|--------------------------------|--|

For more information please visit www.broadcast.harris.com/newsforce.

Harris is a registered trademark of Harris Corporation. Trademarks and tradenames are the property of their respective companies.