

# SYPHA:news

## NONLINEAR VIDEO :: DIGITAL AUDIO :: CAMERAS

### NLE Trends

In this highly competitive market, manufacturers are having to find ways of adding value to their products and encouraging customer loyalty, while opening their products to interoperation with third parties. Many are also finding ways of widening their reach, be it through products that cover all aspects of the market, from turnkey high-definition systems, to software-only packages, or through acquiring product lines to broaden their portfolios.

In terms of hardware, the most significant developments are the increasing number of products that support video ranging from 10-bit uncompressed standard definition to 2k, and increasing support for realtime multistream capabilities. While fine-tuned and super-charged platforms are still a must for high-resolution and time-critical applications,

off-the-shelf host computer manufacturers are joining with card and/or software companies to offer some competent NLE-specific packages.

As the industry matures, manufacturers are addressing not only markets that have specific needs, such as news, finishing and DV editing, to name a few, but on wider workflow issues. More are offering media networks, and a growing number are joining the AAF initiative ([www.aafassociation.org](http://www.aafassociation.org)), with the aim that users will no longer be held hostage to proprietary file formats, and so can choose the best tool for a given stage of the job.

### DAW Trends

The digital audio workstation market has been consolidating for a number of years, and has always been a logical partner for the NLE market with its greater marketing muscle. Avid set the trend some years ago by purchasing Digidesign, and more recent ventures have seen Pinnacle acquire Steinberg, and Apple acquire Emagic.

As with makers of NLE systems, an increasing number of DAW manufacturers are also looking at allowing projects to be interchanged and worked on using different makes of system. Our latest count shows that more than twenty DAW manufacturers have either already implemented, or are planning to implement AES31 ([www.aes.org](http://www.aes.org)).

While developments in hardware usually result in more tracks and faster

operation, much of the development in the past year has been in terms of precision tools for specific applications. These include audio design, sound restoration and treatment, synchronisation, mixing and mastering to an ever-increasing range of formats including surround sound for TV and theatrical film, DVD and SACD.

### Camera Trends

With the development of digital cinema and high definition television, the camera market has seen a real boost. An increasing number of high-definition cameras are available, with the ability to output formats ranging from 480p to 1080i, to raw 4:4:4 RGB.

Standard definition cameras are also offering more bang for your buck, with greater on-board processing, and an increasing ability to switch between 4:3 and 16:9 aspect ratios, and whether aimed at SD or HD applications, more cameras in general, are offering features that assist with post production. These include good shot marking, support for 24p or 25p frame rates, and digital interfaces such as SDI, HD-SDI and IEEE-1394.

Tapeless acquisition has been threatening to take off for some time, but it is only now that we are seeing the beginnings of a real trend. There are a growing number of cameras supporting disk packs, removable hard drives, DVD, optical discs, and other tapeless media, so the final bottleneck between acquisition and editing looks set to be overcome.

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Other resources at [SYPHAonline.com](http://SYPHAonline.com) include the NLE Buyers Guide, the DAW Buyers Guide and the Pro Digital Camera Guide.

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# NLE:news

## NONLINEAR VIDEO EDITING NEWS

### High Definition

On a theme of high-definition media including digital cinema, Discreet will showcase its new digital colour grading system, along with key innovations in 2k, HDTV and video content creation with its recently released inferno 5, flame 8 and flint 8 visual effects systems, and smoke 5.2 and fire 5.2 editing/finishing systems.

Quantel will be demonstrating the full generationQ range, including the iQ resolution co-existent media platform capable of realtime 2k performance, the eQ platform for HD editing, and the new QEdit Pro mainstream editor.

DVS will show a new editing workstation for high-end post. It will be compatible with most Windows and Linux software, and offers a format-independent timeline, with no pre-converting of clips required, plus dissolves, wipes, finishing and mastering of SD to 2k, all in realtime.

The AJA Systems Kona-HD now supports Mac OSX and 10-bit, uncompressed HD video using QuickTime-compatible programs such as Final Cut Pro. It supports most HDTV formats including 1080i50/59.94/60, and 1080p at 23.98/24fps for film.

### New Products & Releases

New entry-level NLE products include the software-only Apple Final Cut Express for Mac OSX that is optimised for the DV format, and the Avid Free DV free DV-only editing software for Mac OSX and Windows XP. Meanwhile, Adobe Systems

has announced a free Adobe Premiere 6.5 plug-in that supports the new Sony DSR-DU1 portable video disk unit so that users may edit video directly from a DSR-DU1-equipped DV camera.

Version 6.0 of the Sony XPRI SD and XPRI HD adds support of SD/IMX realtime effects on the DWM-RT02 card, realtime SD/IMX with the DMW-RT01 PCI card, and MXF file exchange with the Sony e-VTR, MAV-555A server or the new Sony optical disc system (see Camera news).

The new Canopus EDIUS platform works with the DVRex RT and DVStorm. It has a new user interface and offers unlimited video and audio tracks, unlimited graphics and title layers, 3 and 4-point editing, multi-format conversion capabilities and realtime output.

Among the multistream packages on offer are the Leitch dpsVelocityQ multistream NLE that now includes OMF/AAF options, and the new Targa 3000-based Liquid Chrome NLE from Pinnacle Systems that supports four realtime video streams.

### News, Sports & Media Servers

Aimed at journalists, the new Omnibus Systems HeadLine editor is available in three versions for browse editing; higher-quality editing and audio crafting; and field-based DV capture and editing. Another field-based editor is the new Panasonic AJ-DE10 ruggedised laptop. Based on QuickCutter/newsBYTE NLE

functionality, the AJ-DE10 ingests 25Mb/s DVCPRO and DV via IEEE-1394 and can transfer files in the field or studio.

For tapeless sport production, EVS offers a system that covers capture of cameras and feeds, editing and playout, with near-instant backup of all clips. Its CleanEdit news and sport system is available in Gigabit-based online and 100baseT browse editing configurations.

Other announcements for news include the Leitch VRNewsNet integrated digital newsroom solution for ingest, editing, browsing and multichannel rundown, new tools for the Leitch NEWSFlash editor and BrowseCutter, and a new software-only version of the Thomson Grass Valley NewsEdit. Thomson Grass Valley has also announced the Network Attached Storage system, enhancements to NewsEdit and the NewsQ manual playback and NewsBrowse Web-based browser/editor systems, and the new PVS 3000 Profile Media Platform that supports SD and HD in the same timeline.

Making its NAB debut, the Gee Broadcast Systems Geevs family of broadcast video servers offers affordability to broadcasters of all sizes, and can be standalone, networked to NLEs or incorporated with a SAN. Meanwhile, new tools for the Omneon Media Server System include the program Delaytool for realtime program delay capability, the Viewertool for viewing video elementary streams, and the Transfertool for viewing, copying, transferring and managing media.

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# DAW:news

## DIGITAL AUDIO WORKSTATION NEWS

### Alliances

Steinberg will showcase Nuendo 2.0, with advances in its networking and sync capabilities, as a partner to the Pinnacle CinéWave NLE. Steinberg has worked with Microsoft to incorporate the WMA9 Pro codec into Nuendo 2.0, which allows Nuendo users to deliver high-quality surround content via Windows Media Player, and stream it at low data rates over the Internet. The company is also showing its new Timebase universal synchroniser and Wavelab 4.0 editing software.

Adding to its proprietary and third party plug-ins, the AMS Neve AudioFileSC now supports Cedar Audio Auto Declick that provides fast scratch and click removal, and Auto Decrackle that performs transparent restoration of the most severely damaged material. It also eliminates buzzes and electrical interference, and reduces the effects of distortion.

### New Systems

Making its NAB debut, the SADiE Series 5 product range comprises four new models that embrace both PCM and DSD technology, and offer increased processing power, full support for realtime DirectX plug-ins and standard Windows networking. The DSD8 supports all high-resolution formats including 64fs multichannel processing and 8-channel PCM editing. The DSD2 is an upgradeable 2-channel model. The PCM4 and PCM8 replace the entry-level RADiA, and the 24•96 system respectively.

### Enhanced Performance

The Merging Technologies Pyramix V4.1 software offers new direct project interchange formats including AES31, an IEEE-1394 video solution, new MIDI, synchronisation, and control features, a multichannel timestretch and pitch-shift option, timestretch between 24fps and 25fps, and a loop scrub capability. The company has also announced a 16-channel Pyramix DSD system.

Version 6 of the Emagic Logic Platinum provides greater processor efficiency, extensive enhancements to editing and mixing functions, new setup and file management solutions, improved facilities for film scoring, a newly-developed EQ, MP3 import and export features, and optimisation of the automation system.

Among recent announcements by Digidesign are Pro Tools 5.3.3 for Windows XP that offers Pro Tools|HD users true simultaneous sharing of media assets, and Pro Tools 6.0 for Mac OS X that features an all-new look, improved performance and dual-processor Mac G4 support.

### Mixing & Mastering

The eight-channel Mackie Designs Mackie Control touch-sensitive control surface is now compatible with Digidesign Pro Tools, and offers an affordable, studio-grade, moving-fader interface for mixing sessions. Having reduced the price of the SX-1 digital production environment, Tascam has released v1.10 operating software that provides new features including visible

event names in the waveform display, new DSP power for reverbs and effects, and new automation functions.

For CD mastering, the 2-track TC Works SPARK XL 2.7 for Mac OSX now features direct CD burning from inside the Spark XL playlist. Even complex playlists that include crossfades and pauses can be turned into a CD, and several regions can be used to create one track without the need for rendering.

### Portable Recording

The NAGRA V is now available with a selection of hard disk capacities, and new PC-based software. The two-inch drives range from 20GB supporting more than 20 hours of 24-bit 48kHz stereo, to 60GB or larger. The new NV-COM software offers machine control, data entry, machine setup and visual monitoring of the NAGRA V via a simple PC platform.

The new Zaxcom Deva III, IV and V range from a 6-track model designed for basic recording, to a 10-track designed for multitrack, high bitrate applications. Simultaneous recording of different file types and sample rates to internal hard disk, optional internal DVD/CD writer and external FireWire drive is supported, and DVDs and CDs are directly readable on Macs and PCs.

HHB has an operational version of its 8-channel 24-bit/96kHz Portadrive location recorder. It records AES31 or Pro Tools V5 formats on removable hard drive for direct transfer to Mac or PC workstations.

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# CAM:news

## CAMERA & CAMCORDER NEWS

### Tapeless Media

Panasonic will reveal its future news acquisition strategy using alternatives to traditional tape media.

Options for the JVC GY-DV5000 camcorder now include the DR-DV5000 disk recorder that uses standard removable 2.5 inch 80GB hard disk for over 6.5 hours of recording, and the KA-DV5000 MPEG-4 encoder that has a built-in unicast server for Web streaming.

Sony has previewed camcorders and decks from its new professional optical disc system. The system records both the high-resolution original and a lower-resolution proxy that can be transferred to laptop editors or back to the studio at up to 30 times faster than realtime. The high-resolution DVCAM or MPEG IMX footage can be sent as video or as a data file over IP networks.

The Ikegami line of hard disk-based Editcam II cameras, the DNS-21W/DNS-201W, will be joined by a new stand-alone recorder, the DNE-31. Recording to a nonlinear medium means that Editcam II brings features such as retroloop, timelapse recording and random access editing to field production.

The Hitachi Z-3000/CR-D10 professional DVD-RAM camcorder records digital video from the Z-3000 series cameras directly as computer files, storing one hour of full-motion MPEG-2 video on a DVD-RAM or DVD-R disc. Video can be edited in the camera, allowing users to mark good clips and re-order scenes, and

the DVD-VR specification used is also compatible with Windows, Mac OS/X, Linux and Unix, allowing direct reading of video files by third party software.

### High Resolution

The new DALSA camera for cinematography incorporates a 35mm film-sized, scientific-grade, CCD image sensor for eight million pixel-resolution (4k x 2k) that offers four times the resolution of HDTV. It can operate at variable frame rates at full resolution and full image quality for slow-motion, and also incorporates standard 35mm PL mount cinema lenses and a precision reflex viewing system.

The new Sony HDC-F950 captures a full 1920(H) x 1080(V) digital image, which is output as uncompressed 4:4:4 digital RGB for direct connection via dual HD-SDI to Sony's new family of HDCAM SR recorders or third-party hard disk recorders. Sony also announced specially formulated BCT-SR series videocassettes capable of recording full-resolution RGB digital HD component video.

### Compact HD

The new Ikegami HDK-79EX compact HD camera weighs just under 12lbs, includes a fibre adapter that is compatible with any Ikegami fibre base station, and has improved studio support via the SE-79EX system expander. This uses only integral connectors, with no cables between any of the pieces, resulting in a sturdier design.

JVC is premiering a professional hand-held camcorder with full HD recording to MiniDV tape. The JY-HD10U is a 1-CCD camcorder that records HD at 720/30p and SD at 480/60p using MPEG-2, or 480/60i using DV. It can up-or down-convert to 1080/60i and other formats, and its MPEG-2 footage can be frame-accurately edited using a new software package.

Designed for economy of scale, the new Sony HDC-910 studio camera conforms to a subset of the ITU 709 HDTV standard, and captures HD 1920(H) x 1080(V) interlaced images at 60, 59.94 and 50fps, making it useful for international co-productions.

### 24p

Among the cameras supporting 24p is the Thomson Grass Valley LDK 6000 mk II. While the Standard version offers 1080i and 720p modes at 59.94 and 50fps, the Worldcam version additionally supports 23.98, 24 and 25Hz digital cinematography frame rates in 1080p and 720p. It also has a built-in frame rate converter.

In addition to the AG-DVX100 24p DV camera, which will be supported in future Avid products, Panasonic is promoting the AJ-SDX900 standard definition camcorder. Aimed at cable, local news and professional use, it supports 4:2:2 sampled DVCPRO50 or 4:1:1 sampled DVCPRO recording, as well as native 16:9 or 4:3 aspect ratios, and also offers broadcasters film-like 480/24p acquisition, in addition to 480/30p and 480/60i capture.

# All will be revealed

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