NAB 2007 Highlights

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Overview

Lower priced HD technology, content conversion solutions, and bigger, faster storage were prevalent on the NAB 2007 show floor. As content creators and aggregators are forced to contend with a myriad of changing delivery formats, solutions providers are scrambling to offer them software and hardware that will accept "anything in" and deliver "anything-out" with minimal compromises to quality and speed.

If exhibit square footage is any litmus test, the top ten exhibitors in order were **Sony, Apple, Harris, Avid, Grass Valley, Panasonic, Canon, Evertz, JVC**, and **Adobe**. Despite the "new media" revolution(s), it is interesting to note that eight of these ten are legacy companies, having been players well before the transition to digital production (i.e. non-linear disk-based post) began around twenty years ago. They have managed to survive and thrive, largely through mergers and acquisitions, during these years of tumultuous technological change. **Avid** was a harbinger of things to come when they made their largely unnoticed appearance at NAB 1987. Only **Adobe** and **Apple** are the newbie's, but certainly are deserving of their large spaces on the exhibit floors.

Starting with **Apple…** their massive exhibit focused primarily on the introduction of **Final Cut Studio 2**. It's a complete overhaul of Final Cut Studio, and will be available in May for $1299.
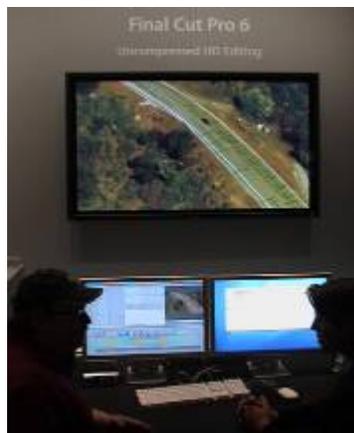
New features in **Final Cut Studio 2** include: **Motion 3**, the latest version of Apple's motion graphics software; a new version of **Soundtrack Pro** that enables editors to create stereo and 5.1 surround sound mixes in the same project; **Compressor 3** with an improved encoding tool and simplified workflows; and most significant—a brand new color grading component, simply called *Color*. **Color** is the progeny of Apple's purchase of Final Touch software from Silicon Color last October.

A number of companies introduced hardware and software solutions to complement the new Final Cut Studio 2 features. **JLCooper Electronics**, a longtime manufacturer of control, synchronization and interfacing products, introduced **Eclipse CX**, an integrated colorist command center well suited for Final Cut Studios' new *Color* grading system.

Priced at $6999.95, I found it to have a well thought-out ergonomical design. If functionality is not enough, it also has RGB colored lights in each transparent tracker ball that modulate as you roll them. An added feature to impress clients.

Sony's NAB 2007 theme was "HD for All: Real Systems, Right Now." To support their egalitarian slogan they unveiled a flash media version of the XDCAM, the **XDCAM EX**, due out this fall at a list price of "under $8000."

The **XDCAM EX** camera records to **ExpressCard** high speed flash media. Sony and SanDisk announced that they have agreed to a "memorandum of understanding" to develop the SxS memory card specification. This is Sony's answer to Panasonic P2 flash camcorders, which are already celebrating five years in production.

Sony also introduced its first LCD critical evaluation monitor, the **BVM-L230**. They also upgraded their line of **LUMA** LCD production monitors with features like 1920x1080 resolution, 1080/60P input, backlight control and waveform and audio level monitoring.

Other monitoring solutions included **Wohler's** line of professional-grade LCD video monitors including their **Touch-It** digital touchscreen system for convenient video source switching (right). Wohler also introduced the **TouchStone** TSG handheld battery powered audio/video test-signal generator. It features a color OLED screen and 32 video test patterns.


The most impressive larger format LCD display on the floor was the **Astro DM-3400** 4K x 2K 56 inch LCD monitor. It provided a stunning image, especially when sourced from **DSC's** prototype **Clipster 4K server** streaming uncompressed 4K imagery (right). 4K digital cinema has arrived.

For high end command/control centers, **Harris** led the pack with the introduction of the **Centrio** multi-image processor (single projected image at right). It unites routing and monitoring applications with a graphics engine, all integrated into a configurable display. It displays a dizzying array of video images, meters and real time data in a single video stream.
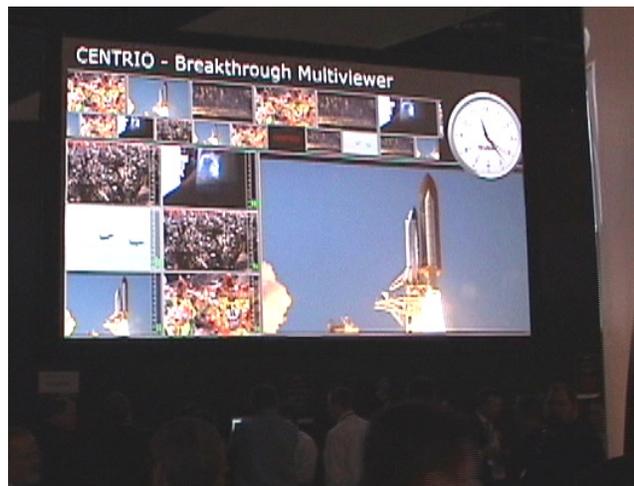
Complementing **Grass Valley Group's** EDIUS turnkey editing workstations is **REV PRO**, yet another new portable media format. Developed jointly with Iomega, the REV PRO uses multi-segmented cache optimization to make concurrent editing and recording directly on REV PRO possible. REV PRO disks are also certified for use in greater temperature ranges and altitudes up to 14,700 ft. (during a trek in the Sierras I learned the hard way that standard hard drives are unreliable above 10,000 ft.). A REV PRO disk in a REV PRO drive sustains a 110Mbps transfer rate for a single stream and 55Mbps per stream for two streams. Each disk has a 35GB capacity, and drives are available in ATAPI, SCSI, USB and FireWire versions.

TASCAM launched the **FireOne** – an inexpensive DAW FireWire Interface (List $399.00) The unit has a large, weighted, backlit jog wheel, which allows the user to zip through a composition, while the backlight provides useful feedback such as a visual metronome. It also has transport keys and eight shortcut keys to control functions in most popular DAW applications. I found it to be well designed and intuitive; however I would add a foam pad below the jog wheel to support my hand and wrist.

It seems like just yesterday that **Abekas** was an industry heavyweight, having changed everything in the 1980's with their revolutionary DDRs. Not anymore. Their entire product line now fits on two folding tables. However they do have an interesting product: **AirCleaner**, a system for seamlessly eliminating costly "content violations." Those unexpected "wardrobe malfunctions, spoken profanities

and obscene gestures" are bypassed by switching to an auxiliary "safe" source, internally generated luminance matte, or a built-in effects engine that produces a defocused image to blur out visual obscenities. Note the large red and yellow emergency buttons for the broadcast censor to whack at that special moment.

One of **Blackmagic Designs** new offerings is **HDLink Pro** ($795.00). It's touted as the first solution for the new high speed 3 Gb/s SDI standard for 4:4:4 RGB and 2K film monitoring. It allows 4:4:4 RGB video to be connected using a single SDI connection. 3 Gb/s SDI also allows full resolution 2K feature film quality 2048 x 1556 video to be connected via SDI. It also adds features such as 3D lookup tables and 6 channel audio.

Videoframe introduced their newest **VNODE** interfaces for IP control of broadcast machines. The boxes are powered over their Ethernet connections (no external power supplies), and are available in three different models to control RS-422/232 devices, GPI triggers and up to twelve TTL relays. The smaller 3.5" x 4" x 1" sizes and optional mounting hardware are new offerings.
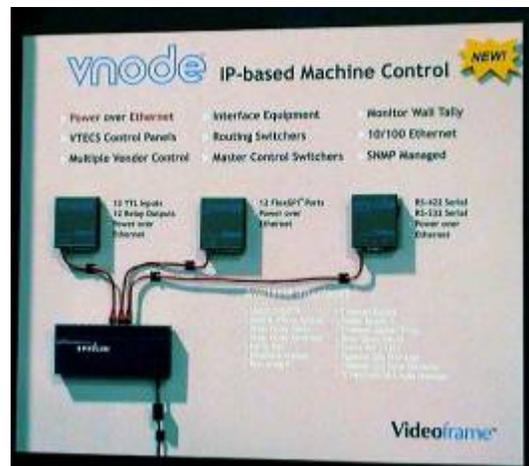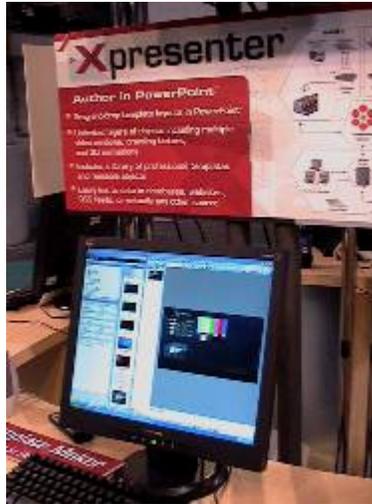
After **Miranda Technologies** acquired **VertigoXmedia** last May, the founders departed to start **X2O Media**, a provider of technology and services for digital signage. Their debut product is the **Xpresenter**, a PowerPoint based application for developing and managing broadcast quality digital signage applications at a fraction of the cost of current broadcast-based systems. It does simultaneous tickers, clocks, and custom graphics while displaying multiple video streams. Most interesting is the ability to quickly create/revise graphics and then render them while on-air, and with multiple real time video streams running on screen. This could be an effective tool for a variety of presentation applications. They also provide turnkey systems that include the authoring tool, IP-based content and network management, and payout platforms.

GVG-Thompson is trying to develop new dockable storage solutions for the huge data files generated by their **Viper FilmStream** digital cinematography camera system. Their current **Venom FlashPak** solid state recorder holds only 10 minutes of data in FilmStream mode. The Thompson research group showed this much larger prototype "Vampire" disc pack that is capable of recording more than 30 minutes across more than a dozen SATA drives.

Other **Grass Valley Group** innovations include the **LCD-400** PDA software for remote control of all functions on their **Infinity DMC** camera. The Window Mobile Media application mirrors everything on the camera's display, and transmits via Blue tooth. The user not only has access to all camera adjustments, but also sees the audio/video meters on the pda screen.

Panasonic highlighted two models from their Professional HD Plasma Display Series:

The **TH-103PF9UK 103" HD Plasma** is the world's largest high definition plasma display. Features include an Advanced Dual Picture mode to overlay a video image onto a full-screen PC image, and expanded configurations for multi-screen displays and the ability to enlarge an image up to 4X vertically and horizontally. The display is currently shipping for $69,999 list.

The TH series uses plug-in modules to provide several options depending on the application. Shown here is the **TH-PF9UK 50" HD Plasma** ($5,995 list) with the **TY-TP50P8S Touch Panel Module**. The add-on touch panel ($3,200 list) uses IR ray interruption, and is intended primarily for use with a pen-stylus.
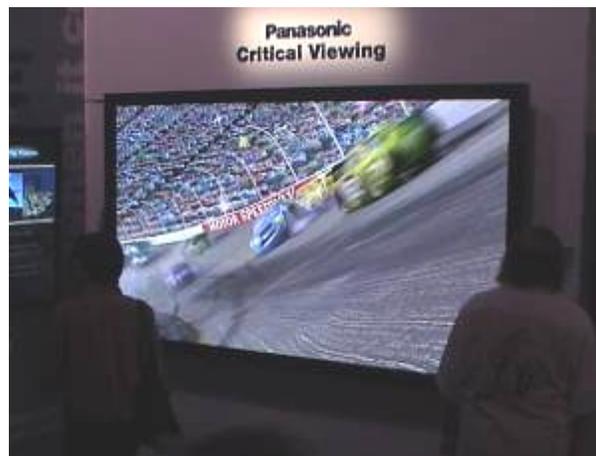
And lastly, **Avid**'s slogan this year was "pure passion for media." Nearly half their exhibit was dedicated to Independent Production, under the sub-theme "pure determination." Avid appears to be pursuing Apple Final Cut users by highlighting the cross platform capability of Intel Macs to concurrently run both companys' apps.

Avid demonstrated offline and online workflows with third-party applications running on an Avid **Unity MediaNetwork 5.0** system. Demonstrations included Final Cut Pro and Adobe Production Studio systems accessing and editing the same content in real-time, and a color-grading workflow utilizing **Symphony Nitris** and **Digital Vision's Film Master** application. In the audio area **Digidesign** previewed **Pro Tools 7.4** by demonstrating direct Avid **Interplay** and Avid **Unity ISIS** integration. **§**