

# TV

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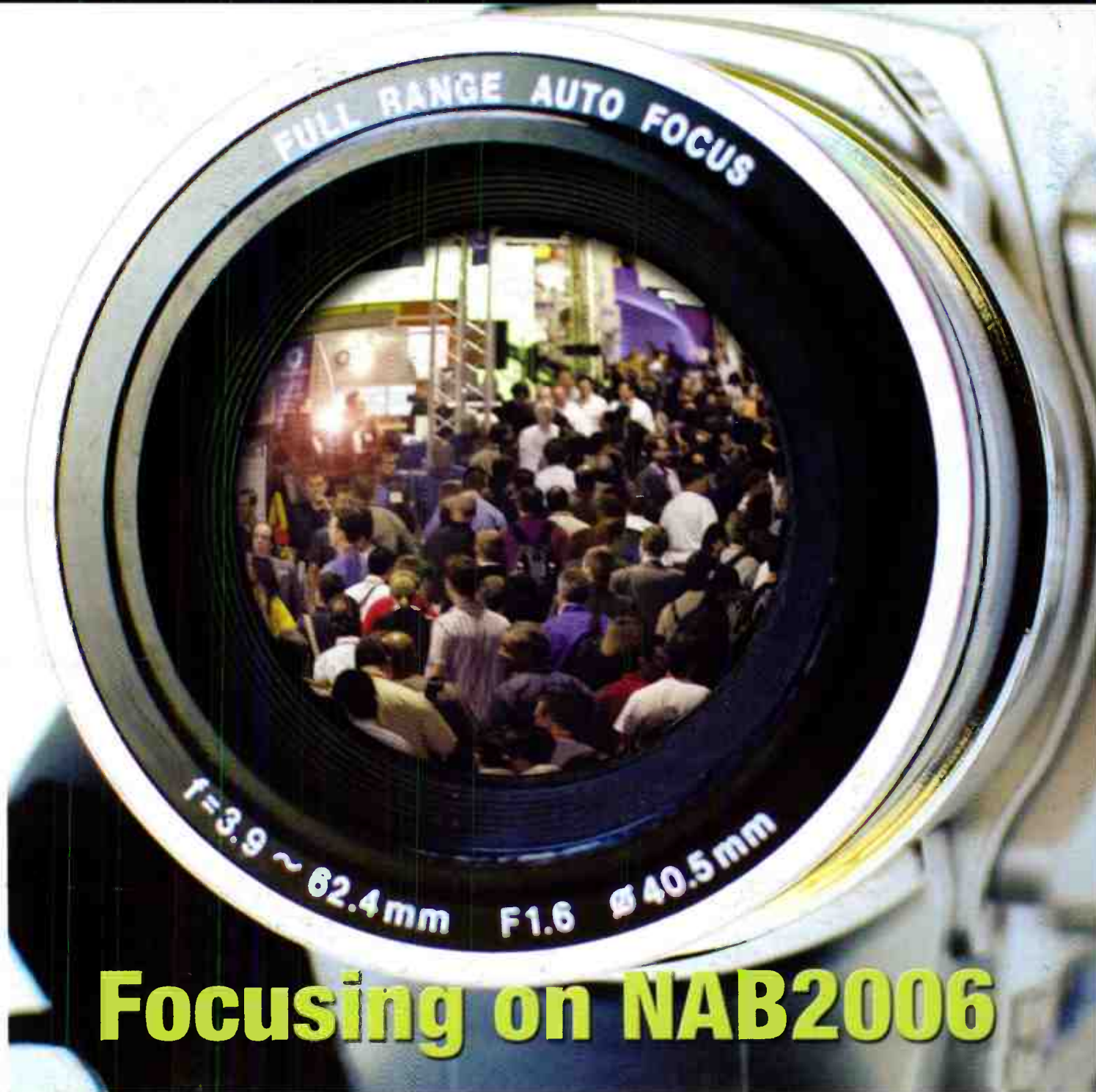
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## Focusing on NAB2006

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**Video FCP Editor Wanted** - working production company to cut boring commercial spots for clients. Long hours. Good rates. Code EP067

## VIDEO PRODUCTION

**Film** - 100% HD - 24p HD with... Code TV001

**Video** - how needs... hurricane... travel... Code TV002

**Video** - Shooting... government project... Code TV003

**DP for Indie Feature** - 24p, Need over 10Mbps HD... shooting... Code TV005

**HD Sports Special for Major Cable Channel** - Shooting 720p at 60fps, experience with slo-mo & special effects a big plus. Code TV006

**Cameraperson for Birthday Party** - It's my kid's 10th; need videographer for one afternoon. Cake included. Code TV007

**Extreme Sports Videographer** - Second camera needed for VariCam shoot. Experience in fast-action shooting a must. Code TV008

**Cinematographer for Wildlife Production** - 60-minute HD documentary on Peru's Humboldt penguin. Shooting 720p/24 on DVCPRO HD. Code TV009

**Short Film/HD shoot** - HDCAM second camera. Shooting 1080p at 24. Own jib and camera needed. Code TV010

**News Photos for Cable News Channel** - Experience in shooting DVCPRO50 for news magazine show, shooting DVCPRO for news. Code TV011

**HD "B" Roll for Stock House** - Shooting 1080p/24 or 720p/24 on DVCPRO HD, in-camera editing necessary. Code TV0102

**We Buy Your Video Footage** - We take your personal videos and sell as stock footage. You make money! Code TV013

**SD Reality Adventure** - Shoot from 60i to 24p to deliver different looks, be ready for unpredictable weather. Code TV0014

**HD Music Videos** - Shooting 720p/24. Must be familiar with variable frame rates to create special effects. Code TV015

**News Stringer** - Looking for shooters to be on scene first, fast turnaround. Own camera required. Code TV016

**HD Television Special** - Cameraman/Editor wanted. Shooting 1080i at 30fps on DVCPRO HD. P2 cards. Code TV018

**New Reality Show** - Shooting 720p/24/30fps, experience in HD and variable frame rates required. Code TV019

**HD Commercial Production Co.** - Looking for cameraman with HD experience. Shooting 24/30fps. Must be capable of IT work. Code TV020

**Filmmaker to Join Faculty** - Must have latest digital tech. Instruct in fits of multiple formats, variable frame rates, solid-state memory. Code TV021

**Shoot Video in Alaska** - Juno TV Network needs cameraperson to follow and document Iditarod in HD. Harsh conditions, but rewarding. Code TV022



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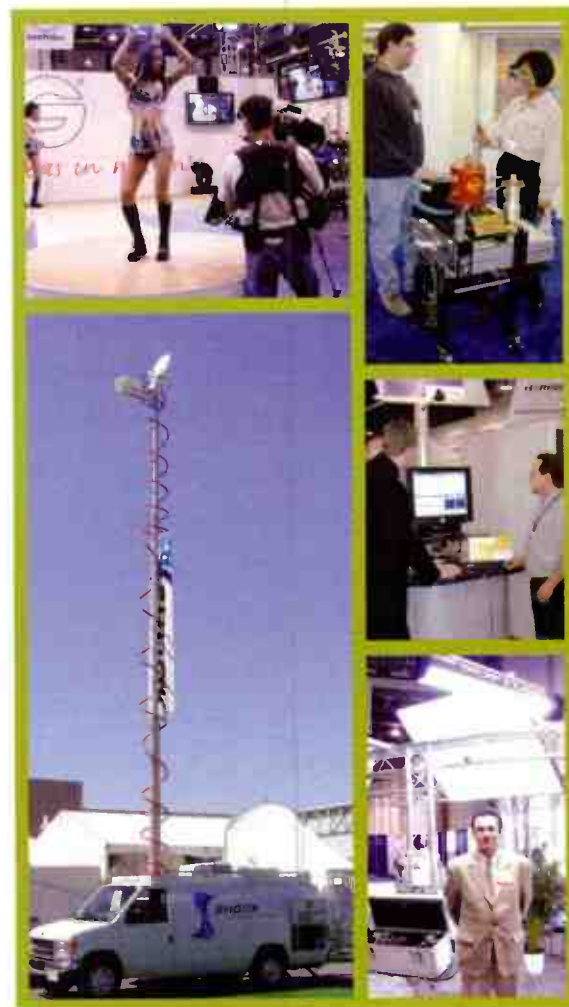
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# NAB 2006

## CONTRIBUTING WRITERS

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The Masked Engineer



You might not have noticed that NAB stands for National Association of Broadcasters, and it's pronounced N. A. B. These days, folks go to Las Vegas to attend a "nab" show on account of they want to nab a deal... Page 12

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Tuning in



Introducing a new camera at a Las Vegas tradeshow is de rigueur.... Depending on which Strip cocktail parties you attend, you'll probably hear plenty about storage and rights management and maybe sports production techniques... Page 10

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SBE Report



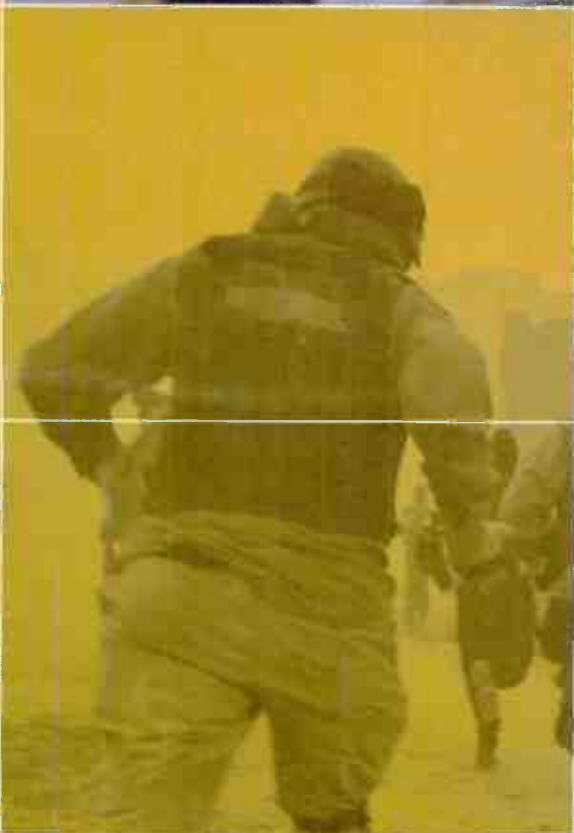
SBE's Ennes Educational Foundation Trust, along with PBS and NAB, will once again present a full-day intensive tutorial... on Saturday April 22 in Room S226, in the South Hall of the Las Vegas Convention Center... Page 16





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## FROM THE EDITOR

# Changing Times



Industry consolidation. Disruptive technologies. Fractured audiences. Competition from new companies and service providers.

Think I'm talking about 2006? Actually I was referring to 1996. Or I could have been talking about 1986.

The point is, every 12 months, when the industry assembles in Las Vegas, issues like the ones I just described dominate the discussions in the conference rooms and on the show floor. So what can the industry expect to be the buzz this year?

Video over IP, for one. Advanced compression codecs and increased processing power have coalesced to make IPTV a viable technology, not only for telcos delivering video to the home but for stations looking for more efficient methods of managing and distributing content. Many of the quality control issues that concerned broadcasters at the outset have been tamed, making IP

technology an attractive option.

Tapeless acquisition and production will continue to progress. Along with new HD versions of tapeless systems from Sony, Panasonic and Ikegami now shipping, Grass Valley will mark the U.S. debut of its Infinity platform, which it touts as the first truly open standards-based system for tapeless production.

The effects from recent mergers and acquisitions in our industry will certainly impact the show floor. In the past 12 months, Grass Valley has purchased Canopus and Thales, Harris purchased Leitch, Evertz bought Quartz, and Avid has added Pinnacle to its line of production gear. What will this mean for the acquirers and the acquirees? Time will tell, but certainly companies and their customers will be talking about the implications these changes will bring.

The recent explosion in mobile video services and devices will be the basis of many discussions and debates. Whereas

broadcasters used to concern themselves about competition from satellite and cable, now they face an equally daunting challenge from the on-demand world. Whether this is a challenge or an opportunity, however, is up to broadcasters.

NAB2006 will also mark the debut of a new leader for the organization. During former NAB President Eddie Fritts's tenure, the industry saw the NAB show evolve from a relatively small annual gathering of broadcasters to an exhibition that encompasses the vast world of multimedia that influences the entire production industry worldwide. And while David Rehr, the new NAB president, aims his focus on Capitol Hill, we hope that he takes some time to check out the show floor and get a taste of "TV technology."

Tom Butts  
Editor  
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## LETTERS

Send to Editor, TV Technology at e-mail [tvtech@imaspub.com](mailto:tvtech@imaspub.com)

### The Deal on Diesel

#### Dear Editor:

I found the article "Save Gas, Save Your Budget" article by Bob Kovacs very interesting, (Nov. 23, 2005). The most interesting was his discussion regarding diesel engines versus gasoline. I would like to look at the economics of this more closely.

First, the last time I compared prices, a diesel power upgrade for a van was about \$5,000. Using his fuel consumption number of \$1,400 per year of savings, it would take about three and a half years to pay for the upgrade.

Second, diesel prices in my area, Southeastern Wisconsin, are on average \$0.40 higher than regular unleaded. So diesel, currently, is not a lower-priced item, resulting in an even longer period of time to pay for the upgrade.

Third, not every station carries diesel. I remember a local gas station that offered a "lower than pump price" deal for our TV station didn't carry diesel.

Fourth, unless your local dealer specializes in diesel trucks and works on them everyday, I would look for one that does. Diesel power plants are a completely different animal and require an expert trained in diesels. Likewise, I wouldn't take my Corvette to a diesel shop for service, (if I had one).

Fifth, a diesel generator is going to cost more than a comparable gasoline unit.

Sixth, durability: Diesels are proven performers in big trucks, but police cars, ambulance vans, and taxi cabs have done well on gas engines for many years with solid results.

Seventh, I wouldn't plan on keeping my van more than four years. The ENG vans I operated were always near maximum capacity on the load rating, which shortens its life span that much more. While it's great that the engine is still good after four years, the suspension and transmission are most likely in need of replacement and it is probably also on its third set of complete brakes, fifth set of

tires, the body and interior have seen better days, and the electronic equipment and mast are four years old, too. A new van every four years may be a better idea. It is probably still worth a few bucks on the used market, too.

Eighth, and last, accounting probably uses a standard three-year depreciation schedule on ENG vans. Keeping it past the full depreciated level doesn't help the tax situation.

The real advantages I see to a diesel-powered van is that it can go further on the same capacity tank of fuel and a small torque advantage, but the big V8s and V10s probably null that. So the only real question is: Is the expense of that upgrade worth it?

Don't get me wrong. I like diesel power. It's simple and cheaper in the long, long run. I simply don't believe ENG vans are a long, long run unit.

Patrick Pfankuch  
Waukesha, Wis.

#### Bob responds:

I realized just after writing the article that we happen to be in one of those periods when diesel costs more than gasoline. However, this is historically unusual, as diesel fuel requires less refining than gasoline. (Diesel fuel is also less volatile and therefore safer than gasoline, but that has nothing to do with efficiency.)

Therefore, diesel usually costs less than gasoline... just not at the moment.

Otherwise, you have many good points to consider when debating the purchase of diesel or gasoline vehicles. Diesel vehicles will work for some owners better than others, for a variety of reasons. Many others will be best served by gasoline-powered trucks.

In the meantime, keep your tires properly inflated, your air filters clean and the wheels aligned. That will save you money on any vehicle.



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# NAB2006 Focuses on New Distribution Channels

*As the DTV transition matures, broadcasters examine other digital media delivery methods*

by Susan Ashworth

LAS VEGAS

**M**ore than 80 years ago, broadcasters gathered for the first NAB convention. Then, as now, it was targeted toward the broadcasting industry, with attendees meeting in a small convention space to discuss broadcast equipment and mull over hot issues of the day.

No longer. After all, not all of the 100,000 attendees expected to pour into Las Vegas during the week of April 24-27 will be familiar with SMPTE standards or triax connections. And to analysts who cover the industry, that diversity seems just right: This year's convention is just as apt to focus on over the air broadcasting as it is podcasting and mobile devices.

"I think the biggest topic at NAB will be simply this: How can owners of video content make money from distribution beyond regular broadcast?" said Josh Bernoff, an analyst with Forrester Research. "This includes VOD, video streaming, Internet downloads and mobile."

"Secondary, but still important, is: How can they manage all this content distribution?"

The NAB2006 convention will respond to the industry's growing diversity with a fairly well-rounded mix of sessions, speakers and exhibits for the markets of broadcast, satellite, cable, the Internet and mobile television, which looks to be one of the bigger topics at this year's convention.

NAB also continues to welcome groups that might have previously been labeled offshoots of

out in 2006 in attempting to host a convention of this scope, while at the same time tailoring the spate of sessions, conferences and keynotes to try and address each of those hot-button topics.

## HD IMMERSION

One of those key topics will again be the ongoing rollout of high-definition television. This year, the HD conversation will likely ratchet up even further, as the television broadcast industry faces a definite date for the end of analog television in 2009. Though most professionals in the industry have at least embraced the concept of high-definition technology, stragglers remain, and the NAB believes that some of these could begin the process of purchasing initial HD equipment at this year's show.

That could make 2006 a key sales year for the industry, if last year was any indication. The 2005 convention generated approximately \$3.4 billion in sales, according to the association.

After encountering success with a new HD venture in 2005, the convention will again sponsor the NAB-HD pavilion, an HD broadcasting facility built within the convention center and giving attendees the opportunity to see an HD facility in action. A growing number of vendors will donate equipment this year, including Pixel Power, with its Clarity 5000 GX broadcast graphics system, and Snell & Wilcox, whose Kahuna SD/HD production switcher will manage signals. Miranda will provide signal processing and master control equipment.

"Many people who are shopping for HD equipment have only seen pieces, never the whole puzzle," said Jim Lien with Pixel Power. "The HDTV station exhibit is an ideal opportunity to showcase the technology to the NAB attendees in a more realistic operational situation than a show booth."

Another key topic is expected to be local HD news production. "Maybe there were one or two stations doing local news in HD last year, while today there are nearly a dozen," said Dennis Wharton, NAB senior vice president for communications.

While prohibitive equipment costs may have limited the number of stations opting to do local news in HD in past years, the NAB thinks this year will be different.

"More stations are using it as a promotional tool, and I think they'll come to NAB to ask questions and spend money to invest in local HD equipment," Wharton said.

Along with new HD technologies from myriad manufacturers, attendees can also expect to see a new batch of next-generation tapeless workflow technologies from Grass Valley, Ikegami, Panasonic, Sony and others.

## VIDEO ON THE MOVE

Another key topic will almost certainly be podcasting, "which has been quite the craze in the last year," Wharton said. For the first time, the NAB has organized a Podcasting Summit as part

of the Post|Production World conference. This session will explore such issues as encoding and production techniques, licensing and copyright laws, and delivery methods. The convention will also host a Web and Mobile Development Conference, which will touch on the opportunities surrounding Web design, new visualization tools and software, and revenue opportunities.

While the influx of mobile video devices may not have the same enormous impact on the market as the original Apple iPod music player had on the music industry, analysts expect a sizable shift in the way many customers begin to view and consume video. For example, Apple's iTunes Video Store is now allowing its customers to purchase single episodes of popular TV programs a day after the program airs. This year's NAB will examine all the associated issues that come with that new delivery shift—from pricing and rights management to marketing and advertising.

NAB approaches these key topics under the tutelage of David Rehr, the organization's new president and CEO, who will give his first state of the industry address during the All Industry Opening keynote on Monday, April 24. Taking his post in December after long-time NAB President and CEO Eddie Ertus stepped down, Rehr comes to the industry from the National Beer Wholesaler's Association. Following the keynote at NAB2006, Rehr will award the NAB Distinguished Service Award to three well-known television anchors—Tom Brokaw, Dan Rather and the late Peter Jennings—in recognition of their contributions to broadcasting.

Hollywood will also play a big role in NAB this year, as the editors of the Academy Award-nominated films "Brokeback Mountain" and "Crash" will be featured speakers during the NAB's Post|Production World Conference, April 21-26.

Hollywood will also have a significant role in the Multimedia World Conference as well, as IIP Digital Entertainment Services Vice President Willem deZoete expounds on "The Digital Media Supply Chain: Hollywood Meets Silicon Valley" during his keynote address on Monday, April 24. deZoete will look at how video content publishers, post-production companies, distributors and retailers can reach new markets through the deployment of new digital content management solutions and services.

## DIGITAL CINEMA

The digital cinema market will remain a key topic, and this year's fifth-annual Digital Cinema Summit will focus on how the technology



the show's core audience, among them Webcasters, multimedia and post artists and editors, with different ideas of how video ought to be acquired, manipulated and distributed.

"It used to be that this show was just about broadcasters, but that's no longer true," said Richard Doherty, an analyst with Envisioneering, a research and consulting firm. "Now the convention is also about cable, satellite, the Web and podcasting."

And multimedia. And post production. And radio. And so on. NAB will have its work cut

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World Radio History





TUNING IN

Gary Arlen

# Form Factors and Future Habits a la NAB

LAS VEGAS

Introducing a new camera at a Las Vegas tradeshow is *de rigeur*. So are revelations about new digital distribution schemes. Depending on which Strip cocktail parties you attend, you'll probably hear plenty about storage and rights management and maybe sports production techniques.

Of course, you should look at your badge to see if you're at the Consumer Electronics Show, NATPE, a telephone industry convention, a sports marketing conclave or any of the many other events that bring video visionaries and production functionaries to Las Vegas in an endless progression.

Significantly, cameras, digital transmission alternatives and storage options are becoming universal issues, as the look of media is overhauled, and not just in television as we knew it.

Although these intertwined and overlapping issues seem like a paean to "convergence," they are actually a warning against inertia, a very comfortable force of nature. Recent tectonic shifts in the video production and distribution worlds are creating a landscape in which every element in the value chain is fair game for change. It may be hard to shake habits of how to produce video or expectations about how to watch it. Nonetheless, the assault from so many directions is forcing us to give up "old ways" and archaic shapes.

In the process, the emerging tools are enabling a radically different range of creative behavior.

First, an analogy: At CES, there were cameras that see-through casings—a reminder that picture-making no longer needs a lightproof box when it doesn't hold light sensitive film. Point-and-shoot cameras have assumed new form factors—enabled as they become embedded in mobile phones and other devices, which themselves are no longer bound by the forces of product design inertia. Digital video cameras, not to mention Webcams and an array of personal video products, are being shaped to meet lifestyle and ergonomic demands beyond their image-capture capabilities.

Admittedly, the shape and con-

struction materials for consumer cameras are hardly equivalent to the values needed in a professional video camera. Yet the underlying reality persists. As form follows function and devices assume new designs, the programming they capture and the audiences they reach are morphing, too.

For example, how do "next-generation" viewers watch television? Most of us recognize that viewing is not strictly a living room or den or bedroom experience. Despite the raging promotions for flat-panel, big-screen televisions, viewers are opting for a



wide array of alternatives.

Too many video professionals still wince "impossible" whenever they confront the prospect of watching a TV show on a 2- or 3-inch screen, or even a 5-inch portable media player. Yet Generation Y (teens and 20-somethings) is fully embracing that option. Hence, it was no surprise that the NATPE and CTIA conventions dwelt extensively on cross-platform performance.

Another vision of small-screen evolution pops up in the Mobile ESPN phone service, which debuted via commercials during the Super Bowl. In the TV ads, fans were shown walking through an immersive sports world, all the time riveted to the screen of a mobile handset. As a mobile virtual network operator, ESPN, and its parent Walt Disney Co., are not only changing the look and distribution of video content; they are also rearranging the business relationship between viewers and content suppliers.

The growing distribution of mini-DVDs for playback on Sony PlayStation further attests to the appeal of alternative viewing platforms. Three times as many movie titles are available for the PSP as games.

## SCREEN-LESS DISPLAYS

In its current promotional cam-

paign, the National Cable and Telecommunications Association features a futuristic display floating in air, much like the "touch sensitive" non-monitor displays that responded to the wave of a hand in the 2002 Spielberg movie "Minority Report." Right now, such screen-less viewing options may be the realm of visionary science fiction, but actual implementations are in the works for military and defense applications.

What enables the holographic-like images to float in the air, and how viewers will respond to such abstrac-

**...Screen-less viewing options may be the realm of visionary science fiction, but actual implementations are in the works for military and defense applications.**

tions, can be evaluated elsewhere. For now, these concepts force us to consider that future viewing is not necessarily tied to the conventional forms and structures.

Evolving industrial design repeats the experience of a century ago. The first horseless carriages looked like their horse-drawn predecessors because that's what manufacturers were tooled to produce. Eventually, streamlining and comfort demands dictated new styling to accommodate an internal combustion engine shape and passenger cabin.

Television and the dozens of industries in its accompanying armada are all involved in today's co-dependent migration. In particular, digital distribution is facing significant overhauls as Internet Protocol infiltrates all segments of the value chain.

Vint Cerf, the so-called "father of the Internet," singles out as invalid the complaints about jittery delivery and partial-screen images on today's pioneering IPTV systems. He contends, for example, that as 1 Gbps transmission reaches the edges of a network, speed simply doesn't matter. Sixty minutes of high-definition TV content could be delivered in 16 seconds, said Cerf, now a Google vice president and "Chief Internet Evangelist. Such video would be

stored in high-capacity storage, copyright rules permitting.

By Cerf's measure, IPTV is not a replacement for streaming audio or video. It is both an entirely new structure and an alternative to existing video transmission—actually data delivery—systems.

Such visions, of course, are built on collaboration and convergence of multiple media and telecommunications sectors. These are ideas you hear from different perspectives, depending on which professional conferences and tradeshow you attend.

## TELEVISION 3.0 OR 4.0

At such events, there is substantial speculation about the "second age of television," sometimes characterized as "TV 2.0." Attention generally goes to today's evolution (actually an ongoing process since the late 1990s) of the original television infrastructure.

Actually, the current transitional

phase may be coming to an end before some people realized it happened. Technical and programming changes foreshadow the industry's next era, which might be called TV 3.0 or maybe TV 3.1 and eventually TV 4.0. At engineering and lifestyle events, there are already glimpses of what video display and transmission systems will shape the next TV period.

Forget about a DVR built into set-top box. Who needs it when the DTV monitor itself has a built-in hard drive to do that job? By the time the screen-less displays are rampant, other storage systems may emerge, or the Internet cloud will be able to handle limitless video-on-demand.

What about new fusions of mobile and video technologies? Could those Mobile ESPN phones generate some Spielbergian screen-less displays? Could the hard drive in the phone (or the nascent communicating iPod) feed other personal viewing devices?

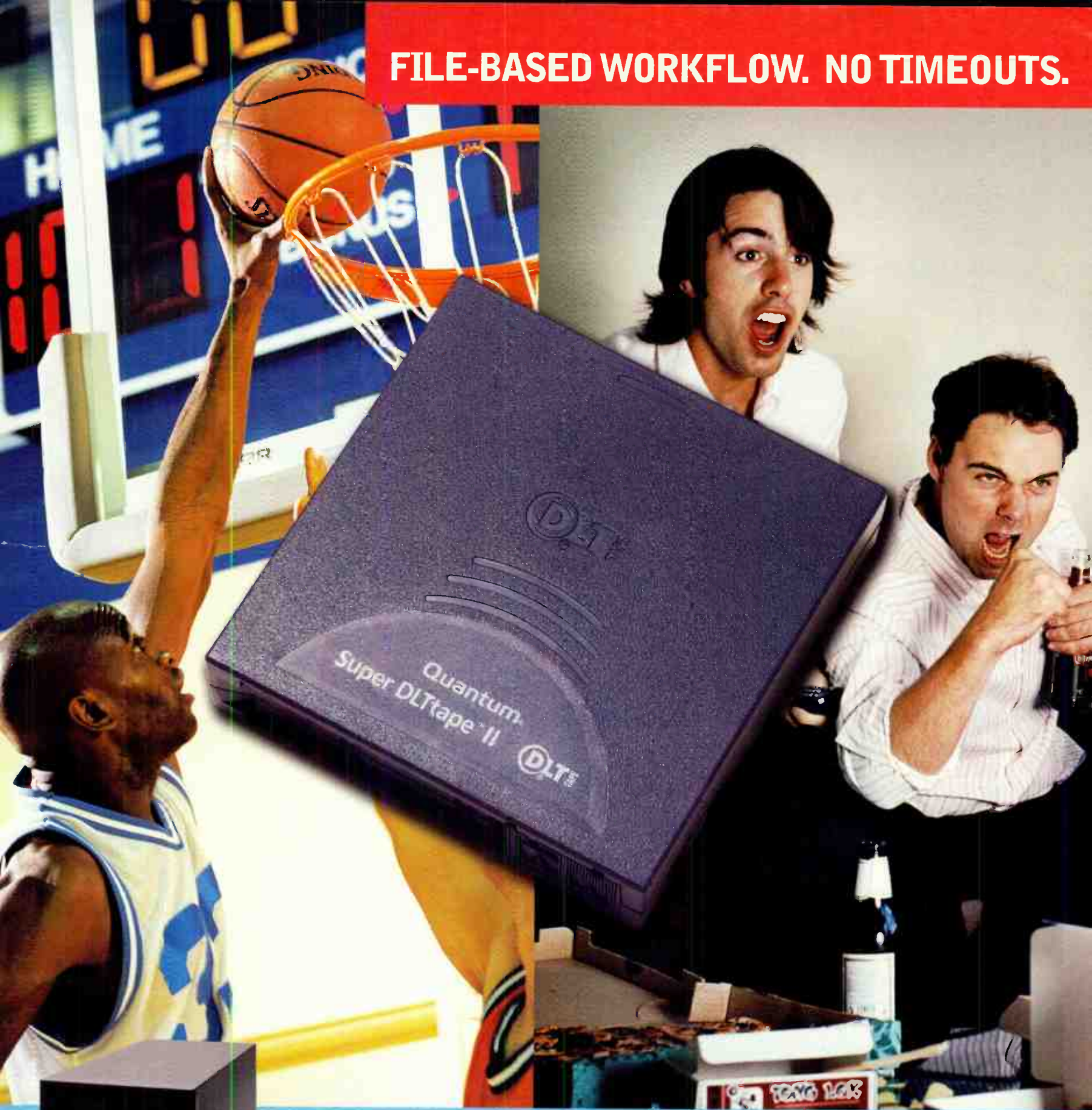
Clearly, the ways in which we watch TV affect the methods to produce programs. Dick Wolf, the über-producer of "Law and Order," has begun looking at podcasting and digital downloads in connection with a new series he is developing called "Power."

As a video stylist, Wolf expects that production techniques will have to

FORM FACTORS, PAGE 12

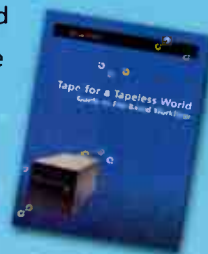


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**World Radio History**





## THE MASKED ENGINEER

Mario Orazio

# Break Out the Lawyers, It's Congress, Again!

**Y**ou might not have noticed that NAB stands for National Association of Broadcasters, and it's pronounced N. A. B. These days, folks go to Las Vegas to attend a "nab" show on account of they want to nab a deal on a mobile-phone modem or a satellite set-top box or maybe a massage chair. Oh, yeah, and somewhere amid the vast acreage of camcorders, cable channels, and CD burners, if you look really hard you might find a TV transmitter or two.

I ain't sure how long those transmitters will continue to show up at the "nab" show on account of my not knowing how long there will continue to be something called a television broadcaster. Yes, I'm talking about the recently signed legislation ending analog-TV broadcasting, but that's not the part of the law you ought to read.

## THOSE NASTY SUBSECTIONS

What was supposedly signed into law Feb. 8 (but constitutional bicameralism could yet undo) is the "Deficit Reduction Act of 2005." Hey, the last law specifying a cutoff for analog TV (end of this year) was the "Balanced Budget Act of 1997."

The law tells the FCC "to terminate all licenses for full-power television stations in the analog television service, and to require the cessation of broadcasting by full-power stations in the analog television service, by Feb. 18, 2009; and to require by Feb. 18, 2009, that all broadcasting by Class A stations, whether in the analog television service or digital television service, and all broadcasting by full-power stations in the digital television service, occur only on channels between channels 2 and 36, inclusive, or 38 and 51, inclusive (between frequencies 54 and 698 megahertz, inclusive)."

You could pick a nit about channel 37 being excluded in the channels but not the frequencies, and you could ask (not me, please) about translators and non-Class-A LPTV, but the gist is clear: If you're a TV station, stop transmitting analog after midnight on Feb. 17, 2009, and don't be above channel 51 with your digital. For the millions still relying on broadcast NTSC TV that day, there's section 3005, the "Digital-to-Analog Converter Box Program."

Subsection "a" says the program is to provide folks with "coupons that can be applied toward the purchase of digital-to-analog converter boxes." Near as I figure, up to \$990,000,000 worth of those coupons are allowed to be distributed.

Subsection "c" tells more about the coupons: each is worth \$40. You'll have to ask for them between Jan. 1, 2008 and March 31, 2009. There are no more than two per household. You can't use more than one coupon towards the converter price. The coupons expire three months after they're issued. And, if 24,750,000 coupons (\$40 into \$990,000,000) ain't enough, maybe there's some more money to use.

## MASS MARKET?

Now then, maybe you think the coupons should be worth more, or maybe you think they're an unnecessary imposition on your taxes. Maybe you think that poor folks should have priority, or maybe you think coupons should be useable on all digital-TV purchases, not just converters.

Those are all arguments you can take up with your elected representatives, but I can't find much doubt about what the law says or intends. That is, I can't until I get to subsection "d."

"For purposes of this section, the term 'digital-to-analog converter box' means a stand-alone device that does not contain features or functions except those necessary to enable a consumer to convert any channel broadcast in the digital television service into a format that the consumer can display on television receivers designed to receive and display signals only in the analog television service, but may also include a remote control device."

My, my! Manufacturers have been promising that

those converter boxes will cost \$50. Methinks that's on account of their figuring there will be a mass market for them. But subsection "d" is so restrictive that maybe the market won't be so mass after all.

Have a look at the digital-to-analog

pose that'd work. But, if the converter box has analog audio and video outputs (never mind HDMI), they're unnecessary to an analog TV receiver, so you can't use your coupon on it.

To my meager mind, the converter specified in the law has to have an RF input, an 8-VSB demodulator, an ATSC demultiplexer, an MPEG-2 decoder, a scaler, an AC-3 decoder, an NTSC modulator, an RF output, and a power supply—and it's allowed to have a remote control. Anything else—other inputs or outputs, program guide, NTSC tuner or bypass for those low-power stations that don't have to be analog by Feb. 18, 2009—and it vio-

**There's a limited number of coupons, so you'd better ask for them early, but they expire three months after you get them, so you'd better be sure there's something to buy first.**

converter boxes that are out there today. Some of them receive DirecTV as well as digital TV. Well now, DirecTV ain't "necessary to... convert any channel broadcast in the digital television service into a format that the consumer can display on television receivers designed to receive and display signals only in the analog television service." So you won't be allowed to use a coupon on a DirecTV receiver.

Some current converters have built-in recorders. But those ain't "necessary," so you won't be allowed to use coupons on them, either.

Want to use an external recorder, like a D-VHS machine? That'd require an unnecessary IEEE-1394 connection. Want to use an analog VHS recorder? If you connect it via the RF output from the converter box, I sup-

lates subsection "d," so the coupon can't be used to buy it.

Let me see if I've got this straight. There's a limited number of coupons, so you'd better ask for them early, but they expire three months after you get them, so you'd better be sure there's something to buy first. So, by 2008, when the coupons become available, \$50 converter boxes with just digital RF in and just analog RF out and absolutely nothing else will be available, right?

There weren't any at the Consumer Electronics Show this year, but maybe you can nab one at NAB. ■

*Mario Orazio is the pseudonym of a well-known television engineer who wishes to remain anonymous. E-mail him at Mario\_Orazio@imaspub.com.*

## Form Factors

CONTINUED FROM PAGE 10

change to fit the new viewing styles. In a recent interview with Variety magazine, Wolf pondered whether, for example, the intimate viewing formats will require more close-ups, and he wondered if he'd shoot differently for the "HBO version versus the network version." His evaluation echoes that of other producers and directors, who have been re-orienting their creative outlook as digital cinema, home video and other options forced them to confront the next wave of media.

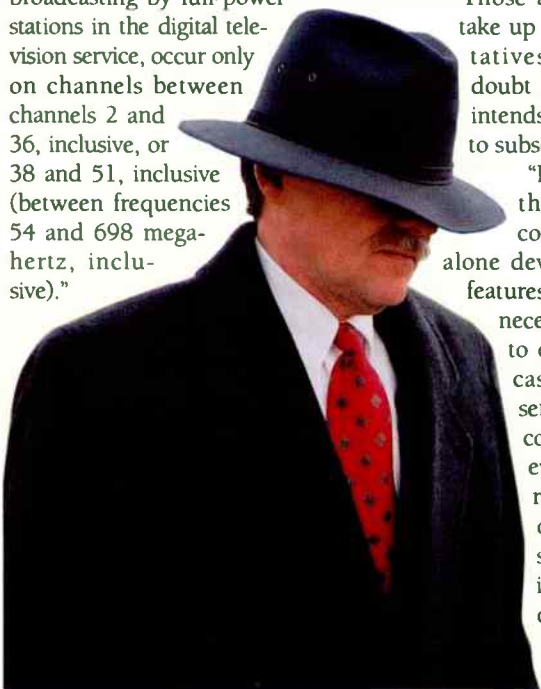
Wolf's viewpoint also underscores the complicated realities of TV 3.0

and beyond. Despite old habits and production inertia, the market is heading elsewhere. We just don't know where. Yet.

Las Vegas remains the perfect venue for confronting the future form of TV in all its manifestations. Aside from the dreams seen along the Strip, this place is surrounded by endless sand—the raw material of fiber-optic lines as well as a terrific medium for drawing lines and building castles.

Out of this sandy terrain, at the NAB convention or other industries' events, will emerge the shape of video things to come. ■

*Gary Arlen, president of Arlen Communications Inc., can be reached at GaryArlen@columist.com.*





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# NAB-HD Shows How HD is Done

## Working HD broadcast station will also include D-ENG

by Susan Ashworth

LAS VEGAS

After a rocky first year, the NAB-HD pavilion plans to come roaring back to life with a new goal: to serve as a large, fully operational, true high-definition broadcast station that demonstrates the possibilities of live HD television.

That's the hope of Nigel Spratling, who orchestrated the debut of the NAB-HD pavilion in 2005 and has been traveling the country in the months prior to NAB2006 to garner support, volunteers and equipment donations to pull together something that some NAB attendees may have never actually seen: an HD station up and running, from ingest to broadcast.

### LIVE FROM THE LVCC

And unlike last year, the majority of programming aired in the facility will be live.

Spratling hopes visitors come away with several key impressions after visiting the pavilion: "One, is that HD is now genuinely affordable and building a standard-definition facility makes little sense even if the final output will remain SD in the foreseeable future," he said. "Second is that creating content for mobile media and podcasting is straightforward and the tools required are not only available but simple to implement.

"And thirdly, that new technologies and delivery systems are rapidly changing the way media is produced and managed," he said. "Broadcasters

and service providers that embrace these systems will be able to generate additional revenue from them in the near future."

Situated in a larger exhibit space (5,000 square feet and in the LVCC Central Hall), this year the pavilion will be anchored by a large theatre that sports a 20-foot high-definition screen. The pavilion will also include an operating broadcast facility, including an editing suite, a full production room, a post-production area and a four-camera studio designed for 16:9 production.

The design is "typical of a regular station, but we're also trying to build something that visitors may not have seen before," Spratling said, quoting an NAB statistic that 25 percent of annual NAB visitors are first-time attendees. "We see a lot of young people or people who are new to the industry, and we want to show them what HD can offer," he said.

### D-ENG DEMO

Spratling thinks it would also be a kick to throw in a little helicopter ride, too. Not for attendees, mind you, but as an opportunity to showcase the capabilities of downlinking a live HD feed, while simultaneously illustrating the high-quality imaging capabilities of live high-definition from above the strip. A helicopter will be sent to fly above the convention center and across Las Vegas, sending a live high-

bandwidth feed down into the NAB-HD pavilion booth.

With the industry in the midst of a transition to a new digital broadcast auxiliary spectrum, the demonstration will give broadcasters a glimpse into the future of digital electronic news-gathering for high-definition news.

The pavilion will showcase how equipment is used for each step of the process, and how engineers can work out kinks on the fly.



Programming from NAB-HD will be displayed on monitors throughout the LVCC and will be piped into Las Vegas hotel rooms.

with equipment donated by several North American-headquartered firms, including Omneon, Sundance Digital and Miranda, and will also include equipment from an international contingent of manufacturers this year, including those from Asia, China and Europe. Volunteers from throughout the industry will donate their time as production assistants, camera operators, studio floor managers, editors, anchors and field reporters.

"The HD pavilion affords NAB attendees the chance to observe the latest broadcast technologies in operation," said Steve Krant, vice president of sales and marketing for Sundance, which is donating its multichannel Titan automation system to the NAB-HD facility to manage the schedule of on-air broadcasts and to control the video server and master control room devices. "[The pavilion] provides a valuable hands-on experience for the next generation of broadcast professionals."

The pavilion is geared towards traditional ATSC transmission processes, but will also be delivering content to mobile media devices via DVB-H, to Web-enabled handheld devices, to selected hotels around Las Vegas via IPTV and also by podcasting. "We want to show how all the components work together," Spratling said. "We want visitors to see how the system is constructed, and the value that comes from this technology." ■



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World Radio History





## SBE REPORT

Fred Baumgartner

# RF Takes Center Stage at Ennes Workshop

## LAS VEGAS

**S**BE's Ennes Educational Foundation Trust, along with PBS and NAB, will once again present a full-day intensive tutorial—actually two programs—on Saturday April 22 in Room S226, in the South Hall of the Las Vegas Convention Center.

The key word is *tutorial*. Each year, the industry's leading broadcast engineers put together a program addressing an area of broadcasting technology which is seen as particularly timely and of value to fellow engineers. Once again, a series of presenters who design and implement the technology being addressed will gather to share information and ideas.

## EVERYTHING RF

This year, the topic is "Everything RF" and it starts bright and early with Dana Myer's two-hour RF brush-up. The full day's set of presentations concludes with Doug Lung's take on RF matters. Everyone on the program has spent at least a night or two "at the transmitter," and most also answer to their amateur radio call signs.

For those less RF inclined and more interested in display, video acquisition technology and the user experience, PBS is presenting a program entitled "Connecting with the Consumer."

The sessions kick off at 8 a.m. with "RF 101: A Brush Up for Broadcast Engineers" conducted by Dana Myers, principal engineer in the television transmission systems division of Harris Corp. Meyers will review the basics, from couplers and

hybrids to Smith charts and pulsed reflection analysis.

Radio is not ignored, as Gary Liebisch, applications and product line engineer for radio transmission products at Harris Corp. will host a session on the intricacies of HD radio.

Aiming slightly up in the RF spectrum, Scott D. Nelson, director of product management and business development for Alcatel, will discuss the world of digital microwave. Nelson will explore differences between FM and digital BAS and will examine problems unique to digital and how to successfully deal with them.

Scott Fybush, free-lance author, contributor to TV Technology's sister publication Radio World, and publisher of the yearly "Tower Site Calendar" will provide a brief look at historical, technically unusual and special antenna systems that he has documented in the course of visits to thousands of transmitter sites in the United States, Canada and other countries.

give a tutorial on making DTV measurements. Since DTV depends on error-free transmission, precise measurement techniques and accurate measurements are essential for determining the overall health of the transmission system. This tutorial explores information provided by constellation diagrams and eye patterns and the clues they provide in determining the extent of intersymbol interference. Other measurements associated with digital transmission impairments are error vector magnitude, modulation error ratio and signal-to-noise ratio. These will all be examined. RF noise bandwidth and amplitude measurements provide



Scott Fybush plans to explore unusual tower installations.

modulation error ratio and signal-to-noise ratio. These will all be examined. RF noise bandwidth and amplitude measurements provide

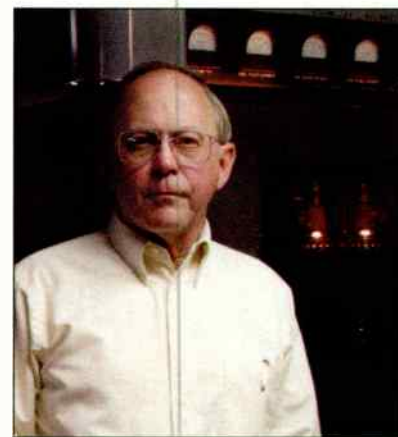
measured system, the instruments used and careful attention to measurement procedures and conditions. The session will illustrate some important details of 8-VSB measurements that members of the IEEE G2.2 have encountered during the development of DTV mask measurement draft standards.

## MOBILE VIDEO

Other scheduled afternoon events include a look at the MediaFLO transmission system by Tom Mikkelsen, senior director of production for Qualcomm MediaFLO.

The MediaFLO mobile video system relies on satellite transmission and what was previously UHF-TV channel 55. Deployed nationwide, MediaFLO distributes a complex RF waveform to deliver both live and pre-positioned video and audio content to cell phones. MediaFLO is one of several emerging broadcast methodologies targeted at multichannel mobile television and audio distribution.

James E. O'Neal, technology editor for TV Technology, and retired broadcast engineer, will provide a brief look at some historical and specialized transmitters from around the



James O'Neal will offer glimpses into interesting transmitter technologies and historical installations.


**Each year, the industry's leading broadcast engineers put together a program addressing an area of broadcasting technology which is seen as particularly timely and of value to fellow engineers.**

In the afternoon, Greg Best, principal of Greg Best Consulting, Inc. and by John D. Freberg, president of Freberg Communications Corp. will

indications of spectral compliance. Making these measurements accurately and repeatedly requires knowledge of the characteristics of the

world that he has encountered in his 40 years in broadcasting.

The best transmitter in the world is not going to perform properly if it's installed in a makeshift manner. Scott Barella, director of systems at Burst Video will provide insight into the planning and design that needs to go into a good transmitter facility. The physical transmitter building, electrical infrastructure, tower structure, transmission lines, antenna parameters, transmitter systems, passive RF components, grounding, monitoring, test and measurement, as well as safety, are all a part of the equation. The aim of the session is to provide the fundamentals for those who want to construct a sound DTV transmission plant or might want to shore up an existing facility.



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SBE, PAGE 20





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**HDTV: MAKING IT HAPPEN**

World Radio History



# Sony Delivers XDCAM HD for NAB2006

## Slow-motion camera, new HDV decks also on tap

by Tom Butts

NEW YORK

A year after announcing the launch of the high definition version of the XDCAM Professional Optical Disk format, Sony is delivering new camcorders and related gear for the high definition format to NAB2006.

Two years since it began shipping, XDCAM continues to make successful inroads into the broadcast and production community—more than 9,000 units have been shipped worldwide and XDCAM is being used on more than 20 reality TV programs. But Sony executives emphasize that XDCAM is applicable to a broad range of applications beyond just broadcast.

"We think the XDCAM HD system can easily become the standard for documentary and reality TV production, independent cinematography, as well as HD newsgathering," said Alec Shapiro, spokesman for Sony Broadcast.

### VARIABLE FRAME RATE

At NAB, Sony will be demonstrating a full XDCAM HD system including two camcorders and two decks, both backward-compatible with existing Sony XDCAM standard definition systems.

The two XDCAM HD camcorders—models PDW-F330 and PDW-F350—both offer true 24p recording in SD or HD, interval recording and slow shutter. The PDW-350 offers true variable frame rate recording at a rate range of frame rates from four frames per second to 60 fps in one frame increments. This is also commonly referred to as "over-crank-

ing" and "under-cranking" or "slow-motion/fast-motion" functionality.



The Sony XDCAM-HD PDW-F330 (pictured) and the PDW-F350 camcorders are now shipping.

"This is a much-desired and often critical feature for cinematographers and directors of photography who need the flexibility of changing frame rates to create unique 'looks' for their productions or to create special effects," said Bob Ott, vice president of optical and network systems for Sony.

The XDCAM HD products can record 1080i video in 25, 35 and 18 Mbps and can record HD content using an HD MPEG-2 long GOP video compression codec. The camcorders use three half-inch CCD 1.5 megapixel imagers with lenses from Canon and Fujinon.

The PDW-F70 and PDW-F36 decks up-convert XDCAM standard definition content recorded in the DVCAM format to 1080i HD at output and all XDCAM camcorders and decks can down-convert HD material to standard definition in anamorphic, letterboxed or 4:3. Up to two hours of HD content can be recorded onto discs.

Four optional boards for expanding the capabilities of XDCAM HD will also be introduced. The PDBK-101 network board delivers Gigabit Ethernet capabilities in a networked

environment, while the PDBK-102 interfaces with HDV products or HDV NLEs via FireWire. The PDBK-103 offers an HD analog component input and RGB output and the PDBK-104 provides SD-SDI and SD composite inputs for upconverting.

Sony will brand XDCAM HD under its CineAlta professional production name. XDCAM HD products are shipping now.

CBS recently took delivery of new XDCAM HD gear for two of its owned and operated stations and will take delivery for its 15 remaining O&O's over the next 18 months. The first two stations, WBZ in Boston and WBBM in Chicago, plan to launch high-definition news this month.

"HD news is a hot topic on the minds of many in our industry and it's critical to have the right technology in place when it's time to make the switch," said Bob Ross, senior vice president, East Coast Operations, CBS Television.

### SLOW-MOTION CAMERA

Sony is also launching a number of other new products at NAB2006 including a new 3x HD super slow motion camera system.

Designed for use by OB vans and production or rental houses, the new system can also output normal speed signals simultaneously for live feed through separate digital signal processing. The new camera includes three 2/3-inch High Speed Progressive CCDs and enables recording at 1920x1080/180i or 150i, as well as 1280x720/180p or 150p.

Sony executives expect the new camera to be a hit with sports production crews shooting in HD.

"The growth of HD sports broadcast-

ing has placed more demands on all the tools available to sports producers doing SD broadcasts," said Rob Willox, director of content creation marketing for Sony Broadcast. "The ability to do 3x super motion fulfills the need for quality motion analysis and adds immensely to the HD viewing experience."

Another new CineAlta camera, the HDW-900F is designed to replace the HDW-900. The HDW-F900F features a more compact and lighter chassis, HD-SDI outputs and a new accessory board for slow shutter, image inversion and down conversion with 3:2 pull-down. It features three 2.2 megapixel CCDs, 12-bit DSP and has the same optical axis as the 900 with virtually identical image-making capabilities.

A new IP based communications system for HD production will also be demonstrated in the Sony booth.

The PCS-HD90 codec, combined with the Sony PSCA-CHG90 pan-tilt-zoom camera, can transfer HD resolution video and stereo audio over an IP network during on-air news interviews or in fixed camera applications like weather or traffic reports. The system, which uses Sony's IPELA IP communications technology, also enables the sharing of high-quality content—live or taped—between location sets and production studios.

Two new professional HDV video-cassette recorders—the HVR-M25U and the compact HVR-M15U—will be shown at the Sony booth as well.

Also on tap is the new IXS-6000 line of hybrid routing switchers, which supports SD and HD video, AES digital audio and RS-422 control signals, all within the same mid-sized matrix for use in TV studios, OB vans and production houses. ■

## Harris to Showcase Expanded Lineup

### Highlights to include new Leitch products, H-Class, mobile TV

by Tom Butts

CINCINNATI

What a difference a year makes. At NAB2005, Harris demonstrated how it was integrating technology from its 2004 acquisition of Encoda into its automation line. Twelve months later, the Cincinnati-based company, which until two years ago had been primarily known for its transmitters and automation systems, has greatly increased its presence in the broadcast and production market with its

2005 purchase of Leitch Technology. Leitch itself had also been on a recent buying binge, adding Inscraper graphics and Videotek test and measurement product lines over the past several years. The addition of these two companies has more than doubled Harris' share in the broadcast and production market.

"In the last 14 months, our addressable market has changed from just under a billion dollars, to just shy of a \$3 billion market," said Jeremy Wensinger, president of Harris Broadcast Communications.



Harris Broadcast President Jeremy Wensinger

And Wensinger says Harris could still acquire more companies in the broadcast business if the acquisition fits with the company's goal of providing value in the media chain.

"Our objective is clear," he said. "We want to be in every part of the media chain where value is created. For both us and our customers."

### THE LEITCH VALUE

Integrating Leitch into the Harris line of products has already begun and attendees at NAB2006 will see the results of that integration.

HARRIS, PAGE 23



# ***The Best in Routing ...just got smaller***

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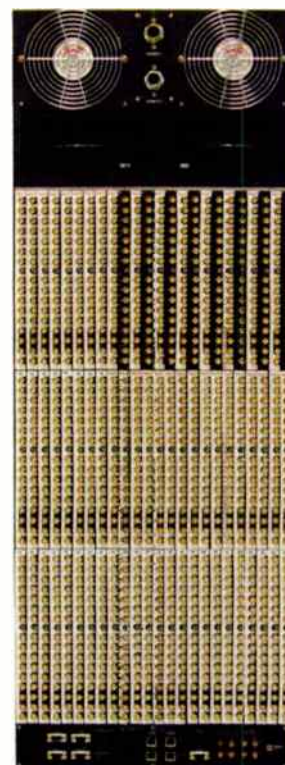
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# SBE

CONTINUED FROM PAGE 16

## RECEIVING ANTENNAS ARE IMPORTANT TOO

Another element in the RF chain is the receiving antenna. Kerry W. Cozad, senior vice president for market development at Dielectric

Communications will discuss off-air digital television reception, emphasizing the design and performance of consumer receiving antennas for DTV. Several common design types, as well as newly introduced models, will be evaluated through the use of design software, test range measurements and field experience. The session is aimed at providing an in-depth understanding of what happens when the signal

eventually reaches the viewer's home and what can be done to improve reception for viewers who may be new to off-air television.

Doug Lung, Telemundo Group vice president of engineering and TV Technology columnist, will wrap up the day's RF sessions. Doug handles RF and transmission issues and projects for both Telemundo and NBC and will examine some accepted RF engi-

neering practices and offer information as to why they don't match reality, including tips on avoiding common problems. Some of the common fallacies include the belief that increasing power increases multipath; that FCC DTV coverage numbers accurately reflect station coverage; that adjacent channel stations create a major interference problem; and that distributed transmission is an easy solution to coverage problems. Doug will offer input in all of these areas and more.

## CONNECTING WITH CONSUMERS

Running concurrently with the RF sessions is a separate series of presentations addressing delivery of content to consumers, consumer display devices, media players, antennas for digital television and more.

These sessions start at 10:00 a.m. and feature industry panel discussions

**The best transmitter in the world is not going to perform properly if it's installed in a makeshift manner.**

moderated by Pete Putnam, president of ROAM Consulting, Inc., as well as papers by Greg Doyle, AZCAR senior systems engineer, and Ken Morse, Scientific-Atlanta vice president of client architecture. In addition, an HDMI tutorial presentation is featured, along with information on Blu-Ray and HD DVD developments.

Full NAB Broadcast Conference registration is required to attend the Ennes Workshop. The full conference package includes the Broadcast Engineering Conference, exhibit floor and a ticket to one of the three industry lunches. Members of SBE, whose stations or employers are not NAB members are eligible for the special NAB Partner registration rate of \$695, \$200 less than the non-member rate. Registration is available at the NAB2006 Web site, [www.nabshow.com](http://www.nabshow.com).

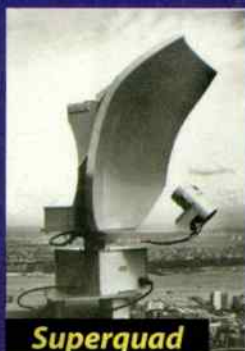
More than 500 broadcast engineers attended the Ennes Workshop at NAB2005.

Fred Baumgartner, CPBE, CBNT, is a Trustee of the Ennes Educational Foundation Trust and will moderate the Ennes Workshop. He is director of broadcast engineering for Qualcomm MediaFLO. ■

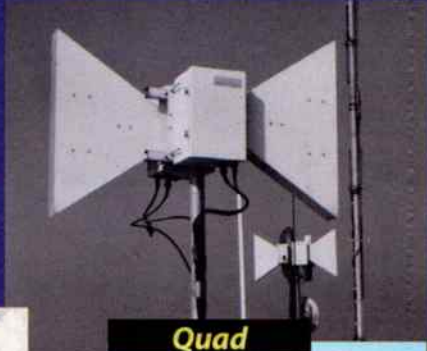
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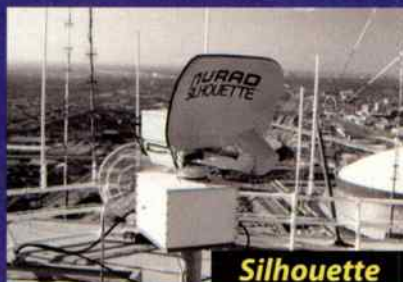
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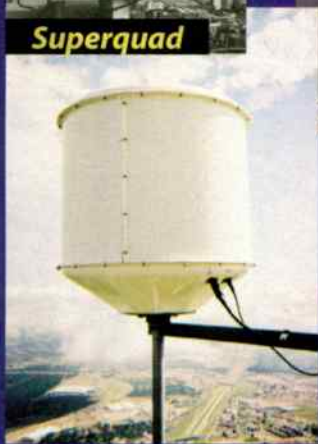
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# Panasonic Puts HD in the Driver's Seat

## Company to launch new P2 cameras, decks at NAB

by Craig Johnston

SECAUCUS, N.J.

**B**roadcasting programs in high definition has become an important competitive factor, said Panasonic Broadcast & Television Systems Company Vice President Marketing and Product Development Robert Harris at the company's pre-NAB press briefing in February.

"[High definition] drives the content producers, who produce in [HD] for live airing," he said, so material can be archived for later repackaging for high definition DVD release. "That also expands the demand for this content. [That creates demand from] the production services companies, and so on and so on."

### LARGE SCREEN FACTOR

Harris described the sales of large-size plasma screens as one of the driving forces of demand for HD content.

"It's this tremendous momentum, and it took a long time to get this thing going. But it's really taken off at this point," Harris said.

Aiming to satisfy that demand for HD content, Panasonic will introduce new high definition acquisition and content handling tools at NAB2006.

The first is a full-sized shoulder-mount P2 camcorder, the AJ-HVC2000, aimed at the news market. It uses 2/3-inch HD CCDs, 14-bit A/D processing, has five P2 card slots to increase record time, and can be switched between 1080i, 720p and standard definition formats. The importance of standard definition capability in a news environment shouldn't be underestimated said Joseph M. Facchini, Panasonic's director of product development.

"It's very easy to design a high definition camera that doesn't record at standard def, so if you're at a press

conference and you get a pool feed that's standard def, you have to up-convert the signal in order to record it."

While the P2 solid-state media is designed to fit into a laptop's PCMCIA slot for non-linear editing, Panasonic will introduce the studio VTR-like AJ-HPS1500 P2 Station, with a familiar shuttle-jog knob to allow viewing and cuts-only editing of up to five P2 cards at a time. Attached to the network, the five P2 cards in the P2 station will



The AJ-HVC2000 is Panasonic's first shoulder-mount P2 camera.

appear as separate drives.

The company will also present a field version of the P2 Station, the AJ-HPM100 P2 Mobile Recorder/Player. In addition to six P2 card slots and an SD card slot, it handles up- and down-conversion and features a nine-inch wide-screen LCD monitor, speakers, HD and SD outputs and the ability to edit and add voice tracks. Facchini described it as a crossover device, "kind of transitioning from the AV environment into the IT environment."

Both Harris and Facchini noted the fact that HD P2 camcorders and other production equipment can be integrated into a DVCPRO infrastructure one at a time if necessary, without having to revamp the infrastructure itself.

Facchini also said the quality of Panasonic's professional flatscreen LCD monitors have progressed to the point that CRT monitors will not be used in the Panasonic booth this year.

"[LCD monitors were] very difficult

to use in the past," he said, "because of the latency. When you panned a camera, the monitor would not keep up, you'd have the lag."

Panasonic's new line of professional-grade LCD monitors sports a quicker refresh rate to eliminate such lag, and have all video and power inputs built into the flat panel itself.

Facchini also noted that the company's DVCPRO50 line will be repositioned, price-wise, to a price-point very close to that of its DVCPRO products. "We think that at that price level the product still has legs, because it still makes terrific pictures, it's still a good quality professional system, completely compatible, and it's used throughout the marketplace"

Aside from the production equipment at Panasonic's NAB booth, the company will display its 103-inch plasma screen, one of the hits of the Consumer Electronics Show last January. ■

## NAB2006

CONTINUED FROM PAGE 8

is being put to work in real-world applications.

This year, NAB will work with the Entertainment Technology Center at USC and SMPTE to pull together case studies, tutorials, keynotes and panels to examine some of the current issues arising from the production, post production, distribution and presentation of digital cinema. The summit will also explore the newest generation of digital cameras, digital cinema mastering and distribution and exhibition issues. Other key sessions within the Multimedia World conference include IPTV World; the Mobile TV and Video Forum; and the MPEG Industry Forum and ISMA, which will look at advanced video services from broadband

to wireless.

NAB will again reach out to the religious broadcasting community through the third-annual Worship and Technology Conference. "This has been a big growth area for us, partly because software and hardware is becoming so much more accessible," Wharton said. "The conference helps [the religious broadcast segment] take advantage of that accessibility."

Sessions will touch on some of the unique issues that religious organizations face when pulling together broadcast productions, such as lighting and camera control, digital content and audio for video issues.

The convention will again host RTANDA@NAB in the Las Vegas Hilton. This program is designed to address issues specifically for radio and television news directors.

### KEY SESSIONS

NAB will offer attendees a glimpse of what the future holds with sessions such as "The New Age of Broadcasting: Advanced Media Delivery." This will focus on The Research Channels' Visions '05 Project, in which HD video shot from the bottom of the Pacific Ocean was transmitted from an underwater robot to a nearby ship. The video was then retransmitted via satellite by a system known as "HD-SeaVision." Other key sessions include "New Technologies for Digital Media Distribution," which will discuss how entertainment technologies, studios and content owners can work together to offer more choices for consumers.

NAB will also induct several broadcast figures into the NAB Broadcasting Hall of Fame, including 40-year radio veteran Dick Purtan and television personality Regis Philbin. ■



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## Harris

CONTINUED FROM PAGE 18

"We're the only company that has positioned ourselves to deliver an end-to-end capability. Most of our initiatives are going to be designed around taking advantage of this end-to-end capability that we've put together," Wensinger said. "It's not about running Leitch as a separate business from Encoda, [and] running a separate business from what we do in transmission. These are integrated, physically, technology, and people-wise, into Harris."

When Harris acquired Leitch last fall, the number one question on everyone's mind was whether the Leitch name would disappear, according to Wensinger.

He says that although the Leitch name has valuable brand equity, the name will eventually merge into the Harris family.

"You will see us co-brand with Leitch for probably the better part of next year, but slowly you'll see the Harris name emerge," Wensinger said. "We'll keep the Harris name in the long run but the product names will stay."

### H-CLASS ENHANCEMENTS

A major emphasis at the Harris booth at NAB2006 will be its H-Class Content Delivery platform. Introduced at NAB2005, the H-Class platform is a software suite that manages media across multiple distribution channels, providing broadcasters and others an integrated solution to address new opportunities such as IPTV and mobile video.

The first applications introduced last year dealt with media ingest, automation and intelligent transport. New H-Class applications debuting this year address content management and sharing, intra-application messaging, increased security and scheduling functionality.

The enhancements allow Harris to "redefine how media businesses leverage content to their maximum revenue potential, allowing our customers to enter new markets while lowering operational costs," said Les Wyatt, general manager of Harris Software Systems and vice president of Harris Corp.

Harris has also been involved in initial trials for mobile video services in Europe and Australia and will demonstrate its solutions for DVB-H, FLO and T-DMB standards at its booth.

New graphics products from Leitch will include a new Inscribe Graphics system named the "G-Series." G3 is an HD/SD-selectable CG system that adds a wide variety

of key functionality and the ability to interface seamlessly with automated or news environments.

For news and promotions editing, new additions to the Leitch Nexio server platform include Nexio NX, a full-featured SD/HD promotions craft editor for Nexio. The Velocity editing system has been enhanced with Velocity XNG, an SD/HD news editing system designed for journalists to use as a portable news desk in remote locations. Version 9.1 of VelocityHD—with support for HDV—will also be demo-ed.

Also making its debut at NAB is the Harris Icon, a full suite of SD/HD master control and branding products based on the Leitch NEO modular platform.

Harris has also added new features to the Leitch X75 multiple path converter/synchronizer, including a hardware plug-in module for MPEG-4 streaming for monitoring purposes, a video-to-audio time measurement tool to help maintain lip sync through multiple conversions, Dolby-E encoding and a 32-channel audio module, with eight AES I/O.

The 6800+ platform now includes the OPTO+ fiber-based system, which mixes and matches technologies to allow all fiber modules to operate simultaneously alongside any processing or distribution modules within the 6800+ frame.

In the monitoring space, Harris will launch NUCLEUS, a user-configurable real-time control panel designed to centralize the operational control of processing, branding and routing products.

The new Platinum largescale router will make its NAB debut. Featuring high capacity in a small footprint, the multifunction routing switcher provides signal routing up to 256x256 in 15 RU and 512x512 in 28 RU and supports a mix of any signal, video and audio, from analog to HD in the same frame.

Also on tap is the Leitch NEO SuiteView, an advanced, highly scalable modular multi-source display process, which allows users to create a customized, system-wide monitoring system. The NetVX multi-service networking system will also be demonstrated.

And last but certainly not least, the Harris line of PlatinumCD VHF DTV transmitters has been enhanced with an integrated Harris eCDi transmitter network monitoring and control system.

Harris will have two booths at the show: SU2929 in the South Hall will emphasize the production, test and measurement and graphics products while its booth in the Central Hall (C807) will showcase its transmission line. ■

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### VIPER II

With small "throw down" modules that can be converted to rack mount, the Viper II is an expandable system that grows with your facility. Modules range from video/audio to Ethernet to robotic HD/POV, for incredible flexibility using simple building blocks.



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# NAB 2006

## PRODUCT PREVIEW

### Cameras

by Craig Johnston

**W**hen a product category such as high-definition cameras starts to see second generation and specialty products being introduced, you know it has firmly taken hold. This year's NAB introductions of HD cameras and camcorders—from the high-end to economical models—will show HD acquisition for broadcasters and cable networks is firmly entrenched.

#### ARRI



ARRI D-20

The D-20 film-style HD digital camera uses a single imager the size of a 35mm frame of film, allowing the use of 35mm format lenses from the film world.

#### Canon



Canon XL-H1

The XL-H1 features three 1/3-inch HD CCD sensors and records (and plays back) in the 1080i HDV format with selectable frame rates. The camcorder comes with a 20x zoom lens

featuring Canon's optical stabilization, and incorporates professional type connectors. While the XL-H1 records in HDV, it also features uncompressed HD-SDI (SMPTE 292M) and SD-SDI (SMPTE 259M) output, as well as genlock input and SMPTE timecode I/O for multicamera shoots.

#### Grass Valley

The Infinity Series digital media camcorder features HD/SD multiformat support including 1080i50/60, 720p50/60, 625i50 and 525i60, with recording and playback to and from integrated Iomega REV and CompactFlash media.



Grass Valley Infinity Camcorder

The HD Wireless Camera System for Grass Valley HD cameras allows untethered movement of portable cameras.

The Mixed Operation Box will also be introduced. Grass Valley HD OB cameras are designed for use with triax, but the MOBox allows use of fiber-optic cabling. The MOBox works in conjunction with a companion compact base station in the truck, interfacing with three cameras in 2RU of space.

The Extended Range Triax Adaptor is a new version of the HD triax adaptor. This adaptor will extend the safe operating range of a camera from 3,300 to 5,000 feet.

#### Hitachi

Built for demanding environments, the DK-H31S uses 2/3-inch CCDs to provide full HDTV resolution in either 1080i or 720p.

Hitachi will also introduce its SK-3010P 24p HD production camera; SK-3010P HD production camera with CMOS sensors; DK-H31 HDTV two-piece camera, and digital triax for SDTV production cameras and video over TCP/IP transmission systems.

#### Ikegami

The HDK-79EC/HS features new multi-format CMOS imaging sensors and can shoot at standard or high-speed in 1080i or 720p.



Ikegami HDK-79EC

The HDK-79EC is the non-high-speed-capable model with docking-style fiber and triax adapters.

The HDL-40C is a box-style multi-format POV camera.

The HDN-X10 HD Editcam is a tapeless HD camcorder and the DNS-33W Editcam camcorder (with stand-alone DNE-31 recorder), is its SD version.

Ikegami will also showcase the new HDK-79EX II for production, HDK-75EX for studio applications, and the HDK-725/725P for 720p production, and studio applications as well as the HDL-40 and HDL-40p compact, self-contained "box"-style HD cameras, featuring 1080i and 720p, respectively.

#### JVC

The GY-HD250U professional camcorder is a feature-rich HDV model, with 60p capabilities, genlock and studio options with a CCU, cinema gamma, an HD-SDI output and a composite video input for pool feeds.

A studio cradle for the 250 allows

for the use of a multicore, 16:9 LCD viewfinder with 4:3 aspect ratio marking, intercom and tally.

#### Panasonic

The AJ-HPC2000 camcorder uses 2/3-inch CCDs and 14-bit A/D processing. It features five P2 card slots to increase record time, and can be switched between 1080i, 720p and standard definition formats. It is targeted specifically at the news market, and features a 52db gain feature for low light work.

Touted as the industry's first com-

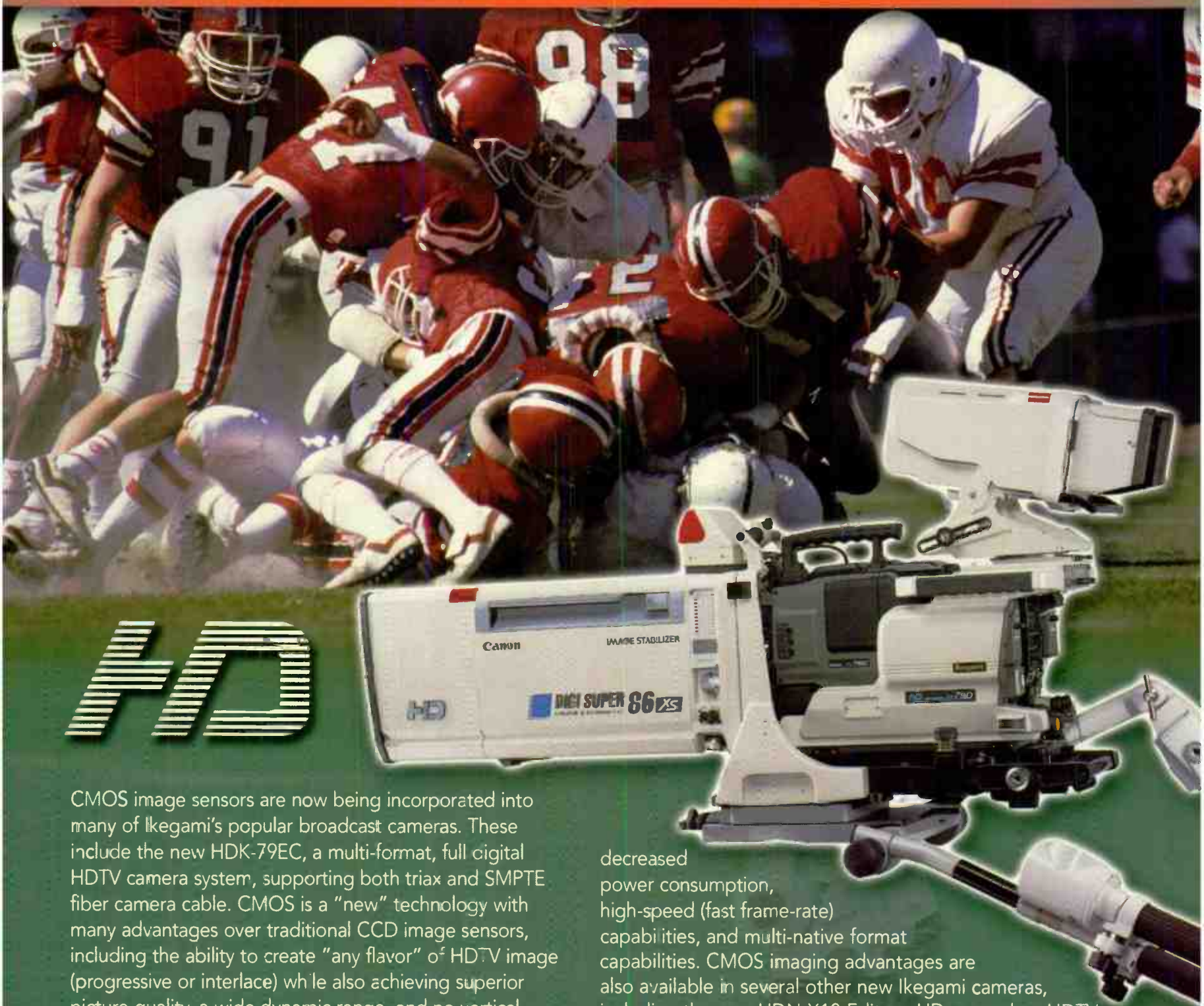
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# Ikegami's HDK-79EC CMOS Camera: SHOOT TO THRILL In Any HD Format.



CMOS image sensors are now being incorporated into many of Ikegami's popular broadcast cameras. These include the new HDK-79EC, a multi-format, full digital HDTV camera system, supporting both triax and SMPTE fiber camera cable. CMOS is a "new" technology with many advantages over traditional CCD image sensors, including the ability to create "any flavor" of HDTV image (progressive or interlace) while also achieving superior picture quality, a wide dynamic range, and no vertical smear. Each pixel of the CMOS sensor has its own amplifier so it can perform amplification on a pixel basis. CMOS sensors allow for smaller camera size (with drive, amplification and 14-bit A/D inside the sensor itself),

decreased power consumption, high-speed (fast frame-rate) capabilities, and multi-native format capabilities. CMOS imaging advantages are also available in several other new Ikegami cameras, including the new HDN-X10 EditcamHD, a tapeless HDTV camcorder, and the new HDL-40HS High-Speed HD box style camera, which can produce images at 1080/60p and 720/120p for slow-motion applications in conjunction with an EVS server.

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# Camera Support



by Craig Johnston

**B**eyond the high image quality today's high-resolution video equipment and lenses can deliver, videographers and their directors continue to clamor to the camera support industry for tools to add more production value to their shoots.

## TRIPODS

### Miller Camera Support

The Sprinter II ENG tripod features dual side-action leg locks that let the user independently adjust both stages of the tripod using one hand. Each tripod leg has two Sprint Loks, co-located on the upper leg clamp to provide high-speed adjustment.

### OConnor Engineering (Sachtler Booth)

The Cine/HD ("heavy duty") tripod features a ground-level floor spreader to handle cameras weighing up to 140kg.

### Slik Broadcast

The DST-32, for DV video cameras weighing up to 9 pounds, features dual-rail upper stage legs, a 60 mm ball level with bubble level and an all-metal fluid head.

### Sachtler

The Video 18 SB and Video 20 SB, part of an expanded SPEED BALANCE series of fluid heads, more than double the number of counterbalance spring settings from their predecessors, the Video 18 and Video 20.

Advanced features on the new Cine

30 HD fluid head include a side-load camera mounting plate and industry-standard front box mount and eye-piece leveler fittings.

### The Tiffen Co.

The Davis & Sanford Carbon LiteX10 Tripod features ultralight carbon fiber and magnesium construction, rubber/retractable spiked feet, easy glide centerpost and easy-grip foam-cushioned insulated legs and three-section adjustable snap lock legs. Maximum height is 62 inches.

The ProVista Airlift Tripod is a heavy-duty tripod for a variety of field, studio, educational, and industrial applications. The hydraulic centerpost creates a floating action for quick height adjustments, and supports cameras up to 10 pounds.

for use with an external air supply.

The Osprey light pedestal is a single stage, 88-pound capacity pedestal with full steering capability.



Vinten Osprey

## CRANES

### ATS Communications

The CoolCam professional is a lightweight, portable camera boom with an 18-foot maximum length, body harness and tripod mounting.

### Calumet Photographic

The Cambo V-40 Pro Video Boom features an interlocking joining system that allows setup in minutes without sacrificing weight capacity.

### Camera Turret

The 300 Series Jib Extension extends the 300 series jib to 12 feet from the pivot, creating an 18-foot reach.

A pan/tilt keypad developed for the PT20 or PT24 enables the pan/tilt systems to save hundreds of positions and reframe automatically.

### Cammate Systems

CamMate will exhibit a range of camera crane systems from 11-foot to 50-foot.

The Travel Series of cranes consists of four-foot sections packed in durable hard cases for frequent location traveling.

### Chapman/Leonard

Designed with a heavy-duty amphibian pan head, the Hydrascope 30-foot telescoping crane arm can operate under water.

### Egripment

The StarShot remote camera head features the same level of motion and smoothness as Egripment remote heads, while eliminating some features such as slip rings.

The Focus Dolly Package adds a set of hard rubber wheels and a lightweight aluminum column and seat system for use with jib arms such as the Genie Jib.

## PEDESTALS

### Cartoni USA (STE-MAN Booth)

The P90 Pedestal supports up to 198 pounds in two stages and features wheeled steering.

### Chapman/Leonard

The Lencin pedestal features an enclosed base to create a completely smooth profile and a Hold Column friction brake to stop the column at any height.

### Shotoku Broadcast Systems



Shotoku TP-90 pedestal

The TP-90 is a compact three-stage, minimum height pedestal with a record-breaking column stroke reach of 37.2 inches and a payload of 132 pounds.

### Vinten

The Vision Ped Plus pedestal features advanced camera balance developed from the Osprey pedestals. It yields an increased payload of 66 pounds, and has an integral manual pump and an inlet

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# SC-2055 THE ULTIMATE SCAN CONVERTER



The SC-2055A supports HD-SDI Dual Link, HD-SDI, SD/D1-SDI, DVI, Analog (RGB/YPbPr/YCbCr) and composite video signals, depending on the modules the user has connected to the unit. For these interface options, the user is provided with 2 input slots and two output slots. With Astrodesign's I/P conversion technology, "SNaP" (Super Natural Motion Picture), jaggy diagonal lines usually resulting from interlaced video signals can be significantly improved without the omission of frames. The SC-2055A performs an exceptionally smooth conversion of the frame rates and resolution of the video signal as well as producing excellent scaling results. This unit also functions as a line doubler, converting interlaced signals into progressive signals. With its 3:2 and 2:2 pull down functions for film/CG imagery, the SC-2055 presents a very realistic feel / look to image conversion even when not in its original form, which is essential for large venue display systems. We have also included the amazing original animation search feature as well as image compensation. Additionally, it carries functions such as noise reduction and edge enhancement. This unit also supports outside reference synchronization through all the output modules.

**RGB/YPbPr/YCbCr  
Output Module**



**D1/SD-SDI  
Output Module**



**HD-SDI  
Output Module**



**DVI-D  
Output Module**



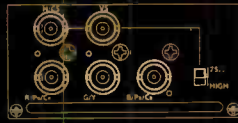
**Dual Link HD  
Output Module**



**VBS / S-Video / YPbPr  
Input Module**



**RGB/YPbPr/YCbCr  
Input Module**



**D1/SD-SDI  
Input Module**



**HD-SDI  
Input Module**



**DVI-D  
Input Module**



**Dual Link HD  
Input Module**



Conversion possible between any of the shown interface options. For further info on any of the modules, please visit our website at [www.astro-systems.com](http://www.astro-systems.com).

## TS-7805 MPEG-2 TRANSPORT STREAM ANALYZER



The TS-7805 is an M-PEG2 TS analyzer that allows for the measurement of the following signal parameters, which are displayed on a high quality 6" LCD screen in real time: bit rate, PID summary display, section summary display, program tree display, PCR jitter measurement, PTS/DTS analysis, and more. The TS-7805 is fully compliant with ATSC and DVB standards.

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See Us at NAB Booth # C3246

World Radio History



# Cameras

CONTINUED FROM PAGE 24



Panasonic AJ-HPC2000

compact, switchable 1080i/720p HD camera, the 3.3-pound AK-HC1500 camera features variable frame rate functionality and cine gamma curve. It includes a new IT-CCD, 14-bit A/D converter and DSP and is compatible with Panasonic's line of indoor/outdoor pan-tilt heads, pan-tilt controllers and camera control units.

The AG-DVC20 3-CCD mini-DV camcorder weighs 4.4 pounds, is equipped with three 460,000-pixel CCDs and has an optical 10x zoom with Electric Image Stabilizer to compensate for jitter and vibration.

## Sony

The PDW-330 XDCAM-HD camcorder offers SD or HD 1080i recording at 25 Mbps, 35 Mbps and 18 Mbps HD on the Sony Professional Disc system, plus interval recording and slow shutter.

The PDW-F350 XDCAM-HD camera offers true variable frame rate recording, also commonly known as "over-cranking" and "under-cranking" or "slow-motion/fast motion" functionality. XDCAM HD allows users to record up to two hours of high definition content on optical media, main-

taining workflow continuity by combining HD resolution and IT-based benefits.

Both camcorders use three half-inch CCD 1.5 megapixel imagers with a variety of lenses.

The HDC-3300 3x HD super slow motion camera system yields 3x slow motion in full HD resolution using 2/3-inch high speed progressive CCDs that enable recording at 1920x1080/180i or 150i as well as 1280x720/180p or 150p. The HDC-3300 features a number of in-camera functions, including flicker reduction, shading correction, white balance and auto iris detection. A companion HDCU-3300 camera control unit enables 10 Gbps digital transmission from the camera head to the CCU.



Sony HDW-F900R

Designed to replace the HDW-F900, the HDW-F900R camcorder features a more compact chassis, HD-SDI outputs and new accessory boards for slow shutter, image inversion and downconversion with 3:2 pull-down. The upgraded model is also designed to take advantage of the optional video cache feature of Sony HDW-730/750 camcorders.

## Photron

The one-piece ultima APX-RS provides 3,000 full color fps at 1024x1024, and a top speed of 250,000 fps with a one microsecond

shutter.

The ultima 512 can capture at 32,000 fps and is high G-rated for reliable operation in extreme environments. The compact camera head is connected to the processor (combined weight is 5 pounds) by a 16-foot cable to provide easy access to remote locations.

The ultima APX produces megapixel resolution up to 2,000 fps and a top speed of 120,000 fps. Like the ultima 512, the camera head connects to the processor via 16-foot cables.

## Complex Corp.

The PRO-XC5 allows users to convert a Mini-DV/HD camcorder into a live production camera. All signals and power are delivered via a single Cat-5 cable as far as 1,000 feet.

The CP-701 component/composite/SDI video camera signal multiplexing system and Complex CP-301C composite camera signal multiplexing system universally interface with most brands and types of camcorders and TV cameras. A new HD-SDI option will be introduced for both.



Complex CP-701

The PRO-XHD System for Mini-DV/HD camcorders converts camcorders into live production cameras, delivering all signals including HD component and power via a single Cat-5 cable up to 1,000 feet.

## FLIR Systems

The UltraMedia III high-performance aerial broadcast camera system uses the industry-standard Ikegami HL-59 camera, a 1,000 mm Canon lens, and advanced stabilization technology.

The UltraMedia HD is a gyro-stabilized HDTV camera featuring the Sony HDC-950 with the Fujinon HA42X13.5 ERD. At full lens telephoto, the camera delivers an HD image at 1,140 mm.

## Television Engineering Corp.


The TEC Eagle Eye camera system allows users to capture breaking events from a camera vantage point at the top of an ENG truck's microwave mast. The remotely controlled camera is mounted in a heated weatherproof enclosure and is equipped with a 16x zoom lens.

The camera has a sensitivity of 2 Lux for capturing situations developing at nighttime or in other dim lighting conditions. Automatic backlight compensation is provided, as well as genlock functionality. Remote control functions include variable speed pan, tilt and zoom, along with focus adjustment and on/off controls for the enclosure heater. All control functions are brought up to a 1RU panel that has illuminated pan and tilt control buttons for ease of use in dimly lit trucks.

## Vision Research

The Phantom HD high-speed digital video camera can run at up to 1,000 pictures per second at resolutions of 1920x1080 pixels. Higher frame rates are available at reduced resolution. Other camera features include 14-bit encoding, 800 ASA rating, PL-mount, HD-SDI output, flash magazine and fiber output.

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## Camera Support

CONTINUED FROM PAGE 26

### Industry Advanced Technologies

The Intel-A-Jib Lt. is a lightweight, stable DV camera jib for a 100mm ball tripod.

### M. Klemme Technology

The Avalon Traveler is a professional boom pole that fits into a standard equipment case, with a minimum length of just 20 inches.

Designed for ENG, EFP, and DV production, Avalon Graphic economy boom poles sport many features of the company's top-of-the-line boom poles.

### Technocrane

The Technodolly crane brings computer control to Technocrane's telescoping cranes for repeatable moves.

### DOLLIES

#### Calumet Photographic

The Cambo VPS-1 Pedestal with VPD-9 Dolly accommodates cameras up to 44 pounds.

The Cambo Uni Track System is a stable and flexible track system.

### Chief Manufacturing

Chief will showcase cinematic mount-automated mounting for flat-panel swing arm mounts, table stands and flat-panel and projector lifts.

### Egripment

The Sports Dolly is built as low to the ground as possible to minimize spectator view obstruction.

### Porta-Jib

The Losmandy FlexTrak is a seamless dolly track that can be configured in straight runs that can suddenly curve in any radius or direction.

The Losmandy Spider Dolly is available in two forms—a three-leg version for use with a tripod, or a four-leg rideable system.

### STABILIZERS

#### CamMate Systems

The Steady-Shot camera stabilizer can carry a payload of up to 10 pounds and features a double-padded vest, roller bearing movement, double bubble level and Anton/Bauer battery plate.

### Glidecam Industries

The Gold System is a professional body-mounted camera stabilization system for cameras weighing from 13 to 35 pounds, and incorporates advanced engineering and precision machining.

### PAG

The Orbitor, an advanced shoulder-mounted, camcorder support system, features 3-axis control and can shoot at right angles to the operator's body.

### Tiffen

The Steadicam Merlin Limited Edition Signature Series handheld camera stabilizing system weighs 12.8 ounces and measures as little as 3.5-by-2-by-11 inches when folded. It uses aluminum alloys and precision stainless steel weights, and is balanced on a three-axis intergimbaled handle.

### ROBOTICS

#### Frezzi Energy Systems

Total Control Robotics is a modular remote pan/tilt system for video camera systems designed for fly-away work. The system is scalable and can be configured to control up to 18 robotic pan/tilt heads.



Frezzi Total Control Robotics

### Media 3 Ltd.

The second-generation BureauCam remote LiveShot system allows network or dial-up remote control of all functions necessary for a bureau live shot, including a precision robotic camera positioning and shot control system, integrated camera control unit, and extensive A/V routing and distribution capabilities.

### Shotoku Broadcast Systems

The TG-19 and TG-17 robotic pan/tilt heads support a maximum payload of 154 pounds. The TG-19 pan/tilt head is capable of manual control and can learn movements for later replay.

The TG-17 standard configuration includes drive electronics for the pan/tilt functions, as well as those for lens functions integrated into the head itself.

The i-Height robotic height control pedestal offers an additional dimension to robotic camera controls.

### Telemetrics

The Telepod Portable Motorized Elevating Tripod features remote control capability and consists of a motorized column with collapsible legs that enable the unit to rise to a manual height of 46 inches with an additional motorized elevation range of 26 inches.

CAMERA SUPPORT, PAGE 30

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## Camera Support

CONTINUED FROM PAGE 29

The CP-D-3A Advanced Camera Control System provides a flexible architecture to control up to 50 cameras or devices.



Telemetrics CP-D-3A Control System

### Vinten

The Radamec Controller communicates with both AutoCam and Radamec products.



Vinten controller for AutoCam and Radamec

## TELEPROMPTERS

### Audio Video Design

The EasyReader NewsRoom Closed Caption Teleprompter system features simultaneous scroll and edit/line up scripts with dual-screen teleprompter software for Windows XP. It has been upgraded to include closed captioning.

EasyReader PRO Closed Caption prompting software and its AV15HB Speech/Podium Prompter feature a vertically adjustable stage that places the monitor closer to the glass reflector for a larger apparent image.

### Autoscript

GoPrompt now has a 15-inch, 1600nit HIGH BRIGHT screen with a wireless foot control and a receiver hooked up to the prompting PC.



Autoscript GoPrompt

The ELP 15 PT is a 15-inch prompter for use with a low-capacity tripod.

Though it weighs 25 pounds, it doesn't sit on a pan/tilt head.

The Plus Light is a fill light mounted to and powered by Autoscript's TFT On Camera Prompters. It uses an LED array to offer soft controllable light.

### Computer Prompting & Captioning

The MacCaption-DV and MacCaption-NLE/MPEG is a closed-captioning system on a CD for the Mac.

The CaptionMaker-NLE is a closed-captioning system on a CD for Windows.

### Listec Video

The LV-2008P Point-of-View LCD Prompter is a seven pound, POV 8-inch ENG flat-panel on-camera prompter with a full-sized fold-down mirror/hood assembly.

The LV-80 Point-of-View handheld prompter features a bright 8-inch LCD display. The handheld POV mounts above-the-lens, securely fitted to the camera's handle, and weighs only five pounds.

### QTV/Autocue

Master Series prompters are remodeled versions of QTV premier prompters.

The Professional Series features a range of affordable prompters for non-traditional broadcast business sectors.

Next-generation WinCue Software represents a re-engineering of the QTV WinCue suite to incorporate state-of-the-art technologies.



8-inch QTV prompter monitor

### Telescript

TeleScript FLIP! prompting software can be used with standard LCD screens. The software flips the image on the prompter display while keeping the computer screen correct.

TeleScript FPS200 In-Studio 20-inch on-camera teleprompter mount for full-size studio cameras with box lenses features an aluminum housing and weighs 30 pounds.

### Vinten/Autoscript

A jointly developed prompter system with Autoscript uses a Vinten Vision iScript pan/tilt head, includes a pre-set counterbalance system for the prompter system, and is for use with the Autoscript GoPrompt 12 system.

## CASES

### ATS Communications

Designed to move up to 500 pounds of equipment cases, the Rock n Roller Multicart sets up with up to three shelves for on-location support. Mounting accessories turn it into a sound or video monitor cart, or a portable editing or workstation.

### Cinebags

The DV Backpack targets all new medium-sized camcorders including the Panasonic AG-HVX200 or the Sony HVR-Z1U.

The Producer's Bag now features added padding for a laptop.

### Pelican Products

The 0340 Cube Case is 18-inches on each side and comes standard with detachable, stainless steel framed casters and a recessed, built-in, rigid, pull handle secured by a spring loaded release latch.

The 1430 Top Loader Case boasts nearly 1,100 cubic inches of usable storage space.

### Porta Brace, K & H Products Ltd.

The CWC 2 is a cool white case made from a comfortable, breathable, reflective fabric to protect the camera from absorbing heat when exposed to the sun.

The BK-EX Back Pack Extreme is a multi-functional backpack with optional modules.

## MISCELLANEOUS

### Spider Support Systems

Spider Pod Version 2.0 assembles into a platform to elevate a camera tripod and the operator two feet, allowing videographers to shoot above crowds.

### Techni-Lux Inc.

Gaffstage Tape features non-residue adhesive that doesn't leave goopy mess on cables upon removal.

### TecNec Distributing

The DELV-LCD1 Combo Stand and VESA LCD Mount for field and studio monitoring allows LCD monitors up to 20 inches to be used on productions in the field or studio.



The TecNec DELV-LCD1

### VFgadgets.com

The Pro Gripper Quad DV camera car mount is designed for easy set-up with four telescoping hard anodized arms with suction cup mounting.

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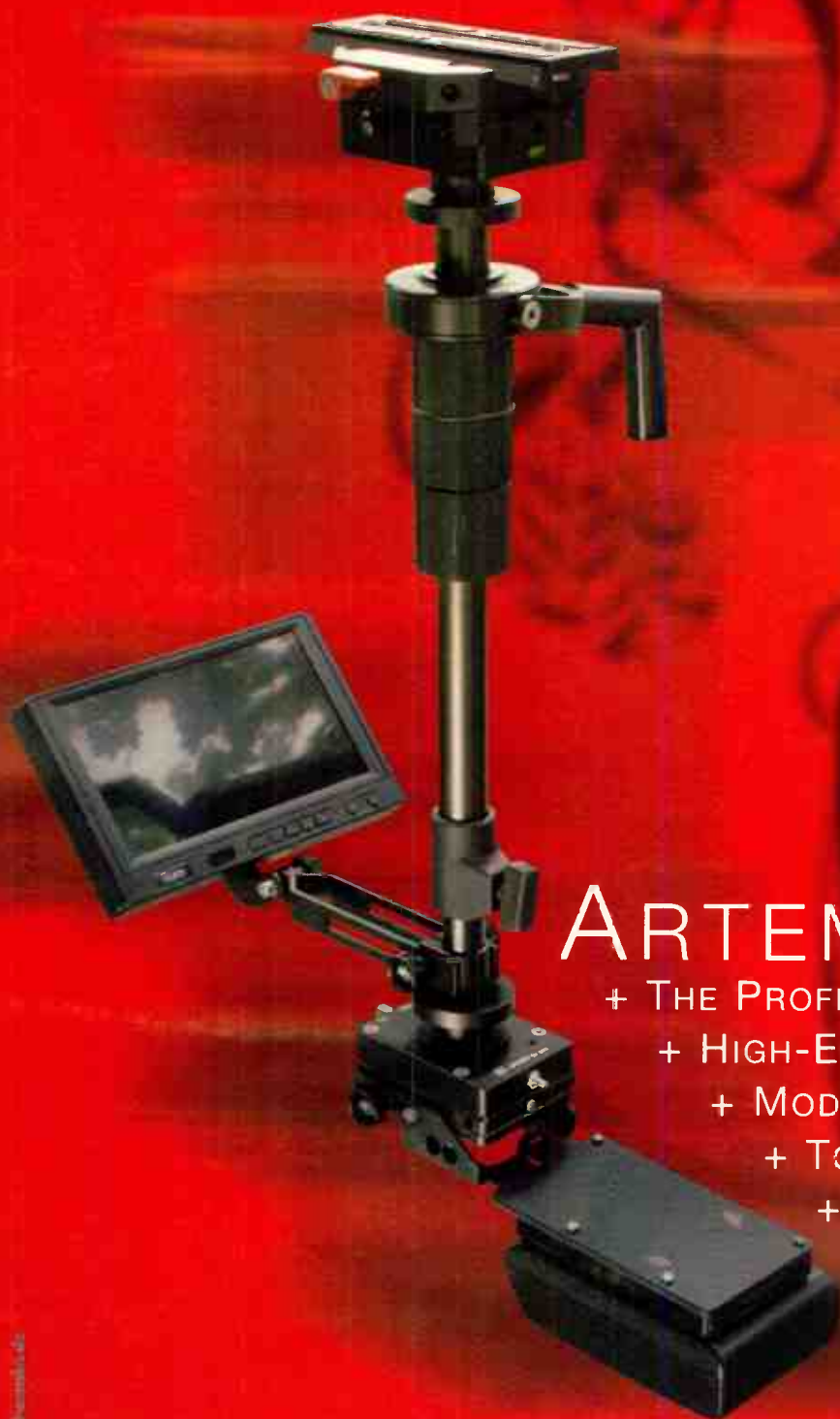


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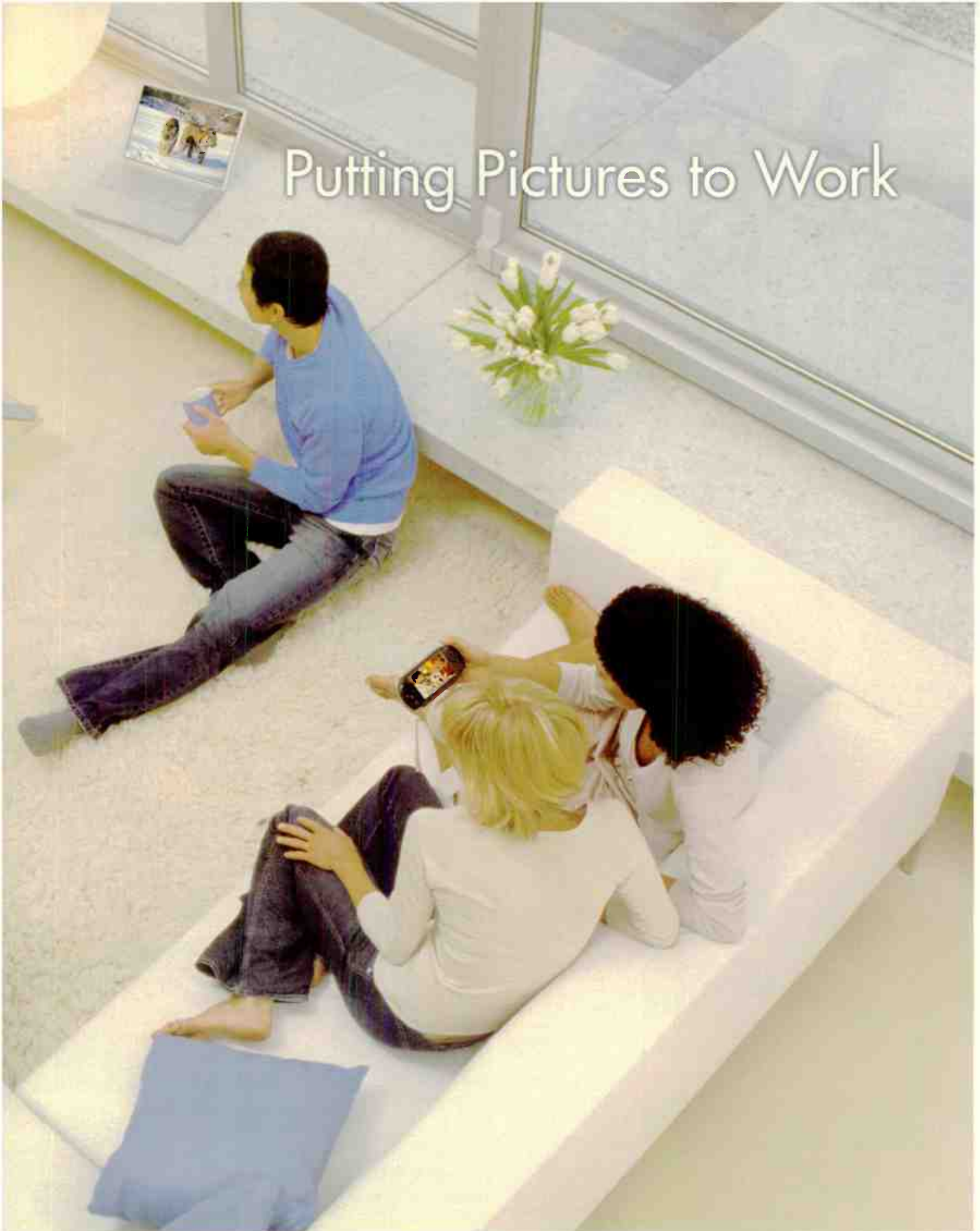
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# Putting Pictures to Work



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# Lenses



by Craig Johnston

It wasn't all that many NABs ago that it was considered a major accomplishment to design and build an HD lens, but lensmakers have that task firmly under control now. NAB2006 will see lens vendors showing advanced versions of their lenses as well as sophisticated accessories. There will also be new accessories designed for HDV and other economical camcorders.

## 35Digital

SKATER Scope is a compact periscope lens system providing a tilt element that can be adjusted from -105 to +105 degrees, a lens block that pivots 360 degrees, and a full 360-degree unlimited optical image rotation. The HE/SD video version has a B4 camera mount.

## ARRI

ARRI will show 12 Master Primes that combine T1.3 speed with high optical performance, as well as the Ultra Prime 8R, the Lightweight Zoom LWZ-1 (15.5 to 45mm, T2.6, 4.4 pounds) and the high-speed Ultra 16 lenses for the Super 16 format (6, 8, 9.5, 12 and 14mm, all T1.3).

ARRI will also showcase Master Diopters consisting of three achro-

matic diopters (+0.5, +1, +3) for close-ups.

## Canon Broadcast & Communications

The HJ18x28B IASE, a compact Super Telephoto portable HDTV zoom lens with eDrive, is touted as the longest portable HD telephoto lens available.

The Advanced Focus version of the DIGI SUPER100xs HDTV long field lens enables camera operators to instantly achieve exact focus at all times.



Canon DIGI SUPERxs 100 AF

The YJ20x8.5B Series and YJ13x6B Series portable SDTV lenses feature the widest focal lengths, highest zoom ratios, and fastest zoom speeds in their class, as well as Canon IF-Pro Technology and Shuttle Shot features.

## Carl Zeiss (Band Pro Booth)

The Telephoto DigiZoom17-

112mm lens focuses to within 22 inches of the image plane and employs film industry standard pitch zoom, focus and iris gears, etc.

The company will also show its DigiZoom 6-24mm T1.9 and range of DigiPrime lenses.

## Chrosziel (16 x 9 Booth)

The 5.65x5.65 HD Mattebox & Quick-Mount Studio Rig Follow Focus changes quickly from full-blown swing-away mattebox to a clamp-on system and features interchangeable filter stages.

## Fujinon



Fujinon HA27x6.5ESM

The HA27x6.5ESM is an HD studio lens with 27x magnification, 6.5mm wide angle, higher optical performance, reduced flare, improved color balance, a reduction in operating noise and a small-

er size and weight than previous models.

The HA16X6.3ERM 2/3-inch portable lens yields a 6.3mm wide-angle and a 16x zoom ratio, with a minimum focusing distance of 0.4 meters and includes a DigiPower servo system for precise control of zoom functions.

## Innovision Optics

Mini DV Probe tubular lens system is designed for the Sony HVR-Z1U and HDR-FX1, Panasonic DVX100/A and other DV and HDV camcorders and features an interchangeable straight-view and 90-degree periscope lens attachments that enable shooting from ultra-low perspective.

## P+S Technik

The Mini35 Image Converter allows use of a range of 35mm lenses for HDV camcorders by Canon, JVC and Sony as well as the Panasonic AG-HVX200 camcorder.

## Schneider Optics

The Century Universal HD Compact .8X Wide Angle Converter threads onto the front of 72mm lens to provide a 20-percent wider coverage throughout zoom range and fits the Sony HDV cameras, Panasonic AG DVX100A/B, Canon XL-2 and other camcorders.

Century lens accessories include a range of add-on lenses and a 1.6x tele-converter designed to enhance capabilities of the Panasonic AG-HVX200.

## Thales Angenieux

The 70X HD Studio/OB Lens delivers a focal range of 11 to 665mm (9.5 to 570mm with wide converter) and an aperture of f-2.2. The 70X HD lens requires very low power for operation and can be directly connected to the camera.

The 26X HD ENG/EFP Telephoto Zoom Lens offers a focal range of 7.8 to 203mm, (15.6 to 406mm with a 2x extender) and a fast aperture of f-2.2.



Thales Angenieux 26X

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# Batteries & Lighting



by Craig Johnston

There will be few new battery and lighting product introductions at NAB2006, but exhibitors will feature an impressive array of product upgrades.

## BATTERIES

### Anton/Bauer



Anton/Bauer Dionic lithium ion battery

The Dionic 160 lithium ion battery, originally designed for high-power military applications, can provide up to 140 W and run typical ENG cameras for more than five hours.

Anton/Bauer will also showcase its Hy-TRON line of Ni-MH batteries, Ultralight and Stasis power support systems, InterActive 2000 Power-chargers and Titanchargers.

### Frezzi Energy Systems

The BP-14MH is a 130 W-h battery that doubles run time and is available in Anton/Bauer mount and Sony V-mount configurations.

Energy Gage Bricks and Mini-Bricks are high-capacity repairable and rebuildable NiCad and NiMH cells.

### IDX

The E-10 Endura battery is an upgraded model that has 20 percent more life than its predecessor and is rated at 98 W-h. The upgraded E7 Battery is rated at 71 W-h.

The VL4SI is a 4-channel charger that accommodates various types of batteries and offers 3 Amp-h charging and an LCD monitor.

### Jadoo Power Systems

The FillOne is a portable single port fuel canister refill station for mobile use. The PowerBase is a support stand for use with the fuel cell power unit in desk or bench applications. The PowerTote is a carrying bracket that allows the fuel cell power unit to be used in the field.

### PAG USA

The PAG V2 Charger is a 2-channel unit designed for PAG and Sony V-

Mount Li-Ion batteries. Also featured is a power package for JVC HD100 camcorders that extends run time and allows use of ENG PAGlok batteries for camera and accessory power.



PAG USA V-series Li-Ion charger

### Sony

The BC-L500 is a compact quick-charging system for up to four batteries that is compatible with many Sony Lithium-Ion batteries.

## LIGHTING EQUIPMENT

### ARRI Lighting Products

The ARRIMAX 18/12 fixture combines the variable beam spread of a Fresnel with the light output of a PAR. It provides continuous focus from 15 to 50 degrees and is 50 percent brighter than a 12K PAR.

Automated Stirrup is a system that

offers remote pan/tilt and focus for large daylight and tungsten fixtures.

### Brightline

SeriesONE fluorescent studio lighting fixtures harmonize with CCD-based imaging devices and feature compact 55 W advanced phosphor lamps and a range of available dimming-control options.

The T-Series line is for suspended ceiling applications; Studio CycSeries and SeriesTWO RGB color-changing fixtures are for studio cyclorama applications and architectural cove lighting.

### Bron Kubold

All-Weather 200, 400 and 800 W HMI systems operate under harsh conditions and are offered in kit configurations.

Kubold Tungsten equipment and Lumax Fluorescent fixtures will also be shown.

### Calumet Photographic

The Studiolute SL455 and SL855 are lightbanks for film and video studios.

### Cinemills

FilmGear HMI Pars are made of a lightweight aluminum composite for cooler operation and are available in a variety of sizes, up to 12,000 W.

FilmGear Tube Flos are fluorescent lights available in models with internal and detachable ballasts.

### Dedotec USA

Dedolight DLH200S portable 200 W HMI softlight units accept daylight and tungsten ceramic lamps.

The Dedolight DLH400S is a portable 400/575 W HMI daylight softlight that accepts softboxes up to five feet and folds into a small package for transport.

The dimmable Dedolight DLOBA2 is a camera-mount light fixture with zoom, flip-down daylight conversion filter and flip-up diffusion filter.

### DeSisti Lighting

The Tinteretto chroma-key lighting system uses two blue and two green fluorescent 58 W lamps controlled via DMX.

Tinteretto fluorescent Cyclorama lighting systems using red, green and blue 58 W fluorescent lamps and are designed to provide even light dispersion.

## JOKER-BUG 800

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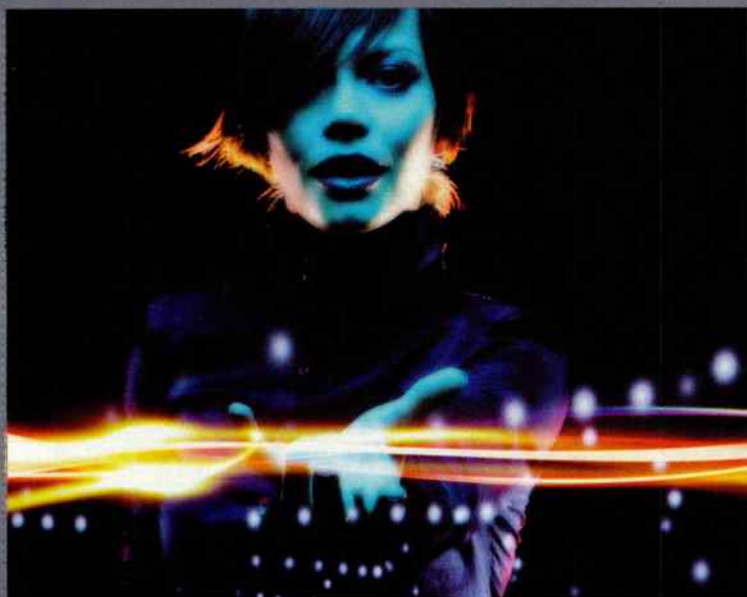
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golf tournaments for CBS Sports.*





# Monitors



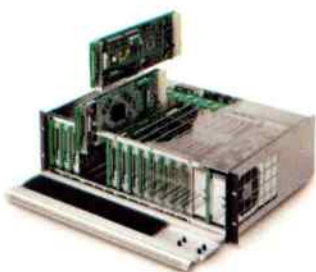
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Engineering The Broadcast Future

by Jay Ankeney

Whether used for visually evaluating image quality or to display its technical parameters, in the monitor arena of NAB2006, display's the thing.

## CoolTouch Monitors LLC

The RX-702AT is a dual 7-inch LCD unit with composite, VGA and audio inputs, as well as a built-in scaler. It offers touchscreen functionality, operates from 12 VDC and occupies 3RU. The RX-802AT is a dual 8-inch LCD unit.

## Dayang

The MagicWall 5000A replaces CRT monitor walls in control rooms and presentation suites. It can display 32 SDI video sources and offers switchable dual DVI outputs with integral de-interlacing.

## 2s2/Display Integration Technologies

The DTS RM201 high performance 20.1-inch 8RU LCD monitor features a high contrast ratio and wide viewing angle. It has UXGA resolution and RGB, DVI-D, NTSC/PAL, S-Video and CVS inputs, and audio features.

## Ikegami

The HLM-900P is an 8.4-inch battery operated field monitor in the company's HLM line. Also included are the HLM-2200R, the HLM-1700R and the HLM-90R LCD multi-format monitors.

The HTM-1505R1Z is a 15-inch rackmount entry in the Ikegami HTM line of CRT multi-format monitors.

## JVC

The GM-L40L1G 40-inch LCD will be demonstrated with multiplexed HD in 1x4 and 1x6 configurations. The DT-V19L1GU is a 19-inch version and the DT-V24WL1GU is a 24-inch model. The TM-1051G is a 10-inch utility monitor.

## Marshall Electronics

The V-R231P-AFHD 23-inch monitor features native HD resolution with image motion compensation. It also emulates SMPTE-C phosphors, and offers inputs for SDI HD and SD signals, component and composite analog, analog or digital DVI, as well as computer video inputs. A dual 8-inch version, the V-R842-AFHD, is also offered.

## NEC

The LCD3735WXM MultiSync

37-inch multifunction display offers composite, component and S-Video inputs as well as PC and HDCP connectivity.

## Panasonic

The BT-LH2600W 26-inch production quality LCD monitor accepts SD and HD SDI, and also has component and composite I/Os. It features a 176-degree viewing angle and delay line compensation to improve SD imaging.



Panasonic BT series LCD monitor

## Sony

Sony will feature new models in its BVM-A CRT monitor line. The company will also display its line of LUMA LCD professional monitors.



Sony BVM series CRT monitor

## Wohler Technologies

The Touch It monitor features dual 7-inch high resolution LCD touch screens and an integral mini router that allows selection of 12 composite inputs. Thumbnail images from active inputs appear on one screen and appear on the other screen at full size when the thumbnail image is touched. Internal audio monitoring is also available.



Wohler Touch It monitor

## Zandar Technologies

The Predator HD8 MultiViewer HDTV video and audio compact monitoring system occupies 1RU and is designed for control room, studio and mobile HDTV system applications.



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# Cable, Fiber & Networks

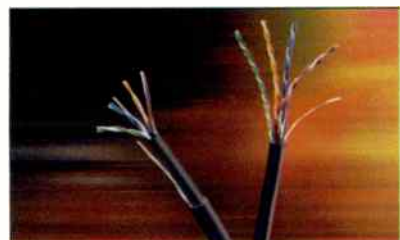


by Claudia Kienzle  
and Craig Johnston

**A**t NAB 2006, broadcasters will be able to peruse a wide range of cabling, fiber-optic transport, and networking solutions enabling them to move multiple formats of video and audio between all types of equipment.

## CABLE

### Belden CDT



Belden CatSnake

CatSnake Tactical Heavy Duty Cat 5e cables are constructed for rugged environments; shipboard standards-compliant cables, mini hi-res coax connectors and component video cables also will be displayed

### Bittree

489-S programmable long-frame audio patchbays allow users to program switched grounds and program bussed, isolated and looped grounds.

### Canare Corp. of America

Canare will showcase its L-4CFTX triax video cable.

### Gefen

DVI and HDMI all-fiber components are bundled in a durable cable for uncorrupted images at transmission of hundreds of feet.

### Hitachi Kokusai

TU-CX-Z4 Digital Triax for SDTV enables longer cable lengths than SDI digital triax for uncompressed digital A/V transmission between camera and CCUs.

### Liberty Wire & Cable

Audio EZLinx termination options include 6-XLR plugs, jacks, and 6 1/4-inch stereo plugs, all designed to mate to EZLinx bulk cable.

### Techni-Lux

Non-Residue Adhesive doesn't leave a gooey mess on cables upon removal.

### TecNec Distributing

The Jackreel-3 steel-framed cable reel is designed for easy carriage and dispensing of cables.

## CONNECTORS

### Bomar Interconnect Products

The HD BNC video connector offers improved return loss characteristics; fully shielded X2 dual-HD PC board BNC connectors and HD true 75-ohm BNC Barrell adaptors will also be shown.

### BTX

The BTX SnakeJet HD System houses an 18-channel 75-ohm coaxial video multi-connector that delivers a true HD signal; Razor HDTV components and dubbing assemblies and BTX EZ Terminating CD-EXRJ45E connectors will also be displayed.

### Canare Corp. of America

Canare will unveil economical BNC connectors.

### Fischer Connectors

SS and SSC series are designed for miniature equipment while offering a high-density pin configuration; WSO is a series of high-performance right-angle connectors.

### Gepco International

G37 12-channel DT12 connectors feature a new hard anodized aluminum backshell that locks in place with two set-screws into a series of castellations.

### Industry Advanced Technologies

Firefly illuminated cable protectors reduce accidents by warning pedestrians of tripping hazards.

### Neutrik USA

Sealed Ethercon Assembly Kit for D-Series EtherCon connectors can be used to achieve a waterproof IP54 connection.

### Stratos International

Stratos will introduce Hx1080 SMPTE-compliant fiber-optic connector and media converters for BNC-to-fiber connections.

### Switchcraft

EH connectors are mounted in an XLR-panel housing. A single panel cut-out supports USB-A, USB-B, FireWire, S-VHS, 3.5mm stereo with normal circuit, MIDI, 9- and 15-pin HD D-sub, RCA and BNC feed-thrus.

### Telecast Fiber Systems

Hermaphroditic Mini-Expanded Beam fiber-optic connector is available in two and four-core configurations; the MX Connector replaces pin-and-socket connectors.



Telecast-MX

### Trompeter

The PL130SC three-piece studio-grade F connector enables equipment with designed-in F interfaces the full benefits of transmitting and cabling technologies.

## FIBER NETWORKS

### Artel Video Systems

DigiLink4000 moves up to 16 channels of SD or HD A/V over fiber transport systems; the DV6000 Universal Transport System is for CATV and telco video transmission.

### Communications Specialties

Pure Digital Fiberlink 7250 Series transmits RGB resolutions up to UXGA and stereo audio over two single mode or multimode fibers.

### Fiberplex

LightViper VIS-1832 and LightViper VIS-4832 are 32x8 fiber-

CABLE, PAGE 42

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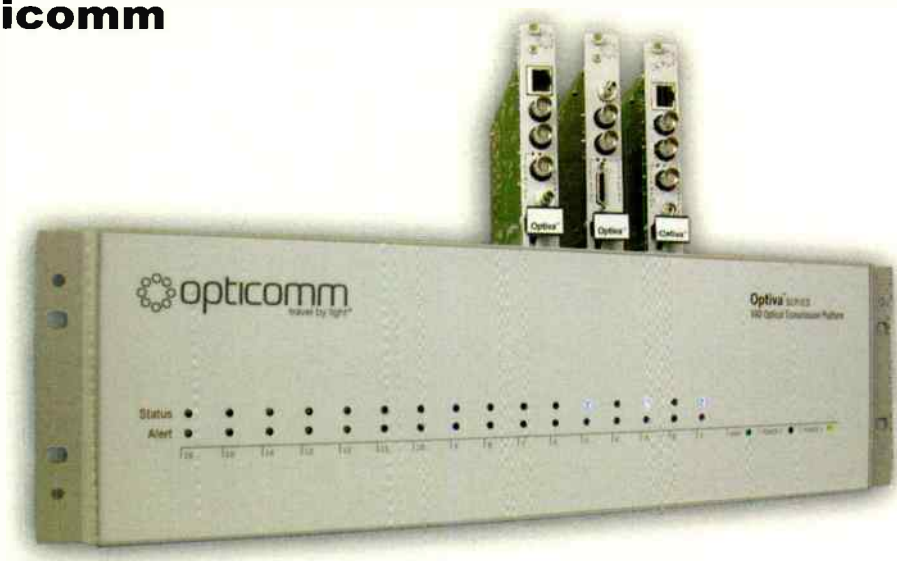
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RS-232

RS-422

RS-485 (2 or 4 wire)

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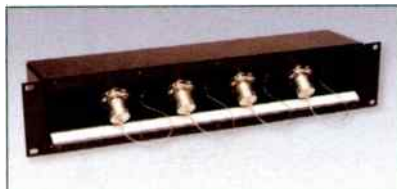


## Cable

CONTINUED FROM PAGE 40

optic transport systems; the LightViper 1808/0808 8x8 and LightViper Shadow 64x32 fiber-optic transport systems will also be shown.

### Gepco International



Gepco HDRA

The HDRA angled two-rack unit hybrid fiber distribution rack simplifies onsite installation of SMPTE hybrid fiber interconnections.

### Media Links

The MD2500 video transport system for HD-SDI-over-270 Mbps telco circuits uses I-frame MPEG compression, supports HD, SD and DVB-ASI, has adjustable delay and accommodates 10 video channels.

### MultiDyne

The RGB-5000-CWDM 18-channel RGB/UXGA fiber-optic transport sys-

tem targets long-haul high-resolution RGB or VGA video sources via one fiber.

### Opticomm

Optiva digital fiber-optic transmission systems can be customized; Product Configurator allows users to select signals for transport, optics and connectors and the most suitable housing unit; OLX-3000 OptiLinx provides high-speed switching; RGB-4004 digitally transmits a VGA-H/V RGB video signal and stereo audio over one fiber.

### RTcomUSA

The HDX Fiber Optic Extension is optimized for HD multimedia.

### Telecast Fiber Systems

Teleport for high-bandwidth optical signal multiplexing uses CWDM technology; G2 CopperHead next-generation, camera-mounted transceivers; SCAMP optical repeater and power amplifiers for SMPTE 311 hybrid cables; and Teleport-X wavelength management SWDM multiplexer will also be shown.

## NETWORKING

### Aastra Digital Video

The VideoRunner multiservice video networking platform connects studios, production centers and distribution hubs.

### Avocent

ESP2-MI is a serial-over-IP solution designed for network access of serial devices.

### Cabletime USA

The MediaStar Evolution delivery system offers video streaming and multimedia content delivery across a LAN and WAN.

### Cte International srl

The ED Series DVB-T/H transmitter and regenerative transposer converts a transport stream into coded COFDM output; Cte will also introduce EK 200 compact DVB-T transposers and DTA 500U DVB-T power amplifiers.

### Harmonic

PWRBlazer HLN 3812H is a compact high-output node designed to facilitate the construction and expansion of high-fiber networks and streamline segmentation of the hub-to-home section of a network to increase bandwidth.

### Harris Corp.

Designed for broadcasters and content originators, NetVX multiservice video networking system provides bandwidth efficiency for multichannel operations, enhanced HD services, disaster recovery, remote newsgathering and IP-based video transport.

### KDDI R&D Laboratories

VistaFinder Bx is a combination videophone/wireless network that enables store-and-forward A/V transmission over IP.

### Path 1

The Vx8000 multiport video over IP gateway is designed to transport broadcast-quality digital video over public or private IP networks.

### Pathfire

Pathfire Direct allows organizations to move live and store-and-forward video.

### Scopus Video Networks

Scopus video networking solutions provide satellite reception, real-time encoding and headend video processing through IP networking.

### Switchcraft

StudioPatch 6425 connects to I/O interfaces with common DB25 cables and is laid out with four groups of eight channels of TT jacks.

### VBrick Systems

The VBrick WM Appliance is a Windows Media video device for delivering high-quality video over IP networks.

Ethernet TV 3.0 IP-based video distribution system delivers live and stored content to TVs and PCs.

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Dual 7.0" LCD Monitor



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Triple 6.5" LCD Monitor



**V-R44P-HDSDI**  
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by Susan Ashworth

The automation market continues to expand and evolve, and at NAB2006, attendees will find automation gear that handles nearly every part of the broadcast process, from newsroom ingest and server control to controlling transmission.

## BEHIND THE SCENES

### 360 Systems

Remote Broadcast Workstation allows Image Server 2000 operational features to be controlled via Ethernet so individual workstations can be created. With an Image Server, individual workstations can be created to perform ingest, trimming, file management, playlist building, play-to-air, among other tasks.



360 Systems ImagerServer system

### Adtec Digital

adCode media ingest station is

designed for MPEG-2 SD encode, review and approval of commercial and program material from FireWire, SDI, analog composite or YC sources. adCode also includes serial RS-422 or FireWire VTR control.

### Axel Technology S.R.L.

X-TV digital multiformat and multiplatform TV play-out system controls switchers, VCRs and other devices.

The company will also show the software-based EZ-DML, a Windows PC digital media logger.

### Burk Technology

Burk will showcase new products and updates for its line of broadcast facility control systems.

### Comprompter

NewsKing NEXT Newscast Automation system controls stillstore, CG, close captioners and robotic cameras.

### Controlware Communications Systems

New umbrella management software for OpenBroadcast software suite offers management, monitoring, scheduling, switching and billing solutions.

NetSwitch and EasySwitch network management software tools switch

video and data connections via a telecommunications network.

### Crispin

The Digital Transfer Agent automated interface moves programming from third-party content delivery systems to a video server in preparation for play-to-air. The system repeatedly detects re-feeds and re-imports programs automatically.

A new multi-IP architecture allows facilities to "float" management of channels between various control rooms anywhere on an IP network.

### Davicom, a division of Comlab

Davicom will showcase its next-generation Davicom MAC remote monitoring and control system.

### DCIT

PROVYS TVoffice integrated information system provides play-out automation, transmission evaluation and content management, among other features.

### Deyan Automation Systems

AirMaster multichannel automation software for master controls features manual control and status feedback of all devices, drag-and-drop playlist editing, and the ability to control devices over IP.

ClipMaker for automated ingest; RecordManager for automated recording; and BasicPlay, for server or VTR control will also be showcased.

### Digital Broadcast

MediaBank Central centralized broadcast system controls multiple stations.

MediaBank Safety Net provides on-air functions off-site if a station is unable to maintain on-air operations.

### Digital Transaction Group

Features for the Xe line of integrated applications for television automation and media asset management include a content manager as well as a delivery manager.

DTG will also demonstrate its AIRO automation platform.

### DNF Controls

A new as-run log option for the 3040P/DLO playlist play-out and on-air automation backup system will be showcased.

### Eyeheight

Play-out Application Suite enables

Eyeheight play-out master control, switcher, logo generator and SQ-2 image-squeeze processor to be configured and managed from a standard PC; The TB-12 multichannel source identifier will also be showcased.



Eyeheight Play-out

### Florical Systems

Enhancements to Florical automation systems include a join-in-progress feature for the AirBoss presentation controller, a Breaking News feature and a Traffic Assist feature that form a trio with a station's traffic and automation systems to provide production detail for on-air operations.



Florical automation in use

Florical will also show a new ShowTimer/Pathfire interface, new Supervisory Monitor feature, an AirLogger feature and enhancements to NewsGrabber.

### Fjord Media

The Fleetmaster Control System comes in three versions: FMC-SILVER for one user, FMC-GOLD for unlimited users and FMC-WEB for a Web-based interface.

### Harris

H-Class Play-out Automation system, part of the H-Class Content Delivery Platform application, is designed to handle automation, scheduling, asset management, media ingest and content distribution.

### ILC

Version 5.0 of MaxView for Broadband consolidates management of multitechnology hybrid networks into one view and enables direct control of network device activity.

AUTOMATION, PAGE 46

network

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## Automation

CONTINUED FROM PAGE 44

### Leightronix



Leightronix NEXUS

NEXUS Version 3 includes new options for controlling digital video messaging, playback and recording. The server and automation combination also supports legacy and A/V switching equipment.

### MassTech Group

MassLogger Gateway provides a management and control interface for external devices.

### MicroFirst

Microfirst will showcase its DAS 3200 multichannel digital automation system and DAS NLS nearline storage control system.

### OmniBus Systems

OmniBus iTX for SD/HD can act as a video server, master control, graphics and logo inserter with automation, ingest, editing and basic content management functionality. OmniBus will also demo its Colossus automation suite running HD, SD and IP streams.

### Pro-Bel

A new media browse facility for the Morpheus automation and media management system provides access to media within a facility or across multiple locations.

### Ross Video

OverDrive Version 4.0 provides

enhanced control over additional devices.



Ross Video OverDrive

### Sundance Digital

The FastBreak NXT Xpress automation system is designed for operator-supervised program playback and spot insertion.

FlexEvents enables secondary event command sets to be organized and placed within a traffic log for auto-execution.

Titan and FastBreak NXT upgrades include N+1 redundancy that uses spare server outputs in the event of port failure.



Sundance Digital FastBreak

### Tightrope Media Systems

Cablecast 4.4 station automation system offers a Web-centric interface, an integrated program library with permanent show history and support for live and VOD streaming.

### Verizon

ICF Media Platform In-A-Box

Edition offers multichannel distribution, NLE editing of live content and automated transcoding of content to multiple formats.

## IN THE NEWSROOM

### AVECO

Live Production Automation System allows one individual to control robotic cameras, servers, production mixers, audio mixers, VTRs and graphics—with live integration to the newsroom system.

### Autocue

QSMART in-a-box newsroom computer system is designed for smaller-market stations.

QSeries is a suite of newsroom production and automation systems.

### BitCentral

Précis 3.0. news production system offers new features to move stories through the production process faster.



BitCentral Précis server

### Comprompter

NewsKing NewsRoom System built on Microsoft Windows, SQL and Word offers point-and-click and drag-and-

drop capabilities.

The SchoolMaster closing and cancellation package and VoteMaster XL election automation system will also be showcased.

### Dalet Digital Media Systems

The DaletPlus News Suite tapeless system can ingest media to a central storage application, make rough cuts and assemble packages, etc.

### KDDI R&D Laboratories Inc.

The NewsStoryViewer news video story segmentation system extracts features from MPEG news video streams online and automatically segments the video accurately into stories.

### Newsroom Solutions

24-Hour Digital Channel In A Box uses FreedomFX CG/DVE to broadcast school closings, severe weather information, and the company's 24-hour TickerWire automated content service.

### Video Technics

Version 4.0 of the NewsFlow Version 4.0 scalable tapeless newsroom production, play-to-air, and archive system offers an application to streamline media ingest from the Sony XDCAM system to Adobe Premiere Pro.

### Wegener



Wegener iPump

iPump Broadcast News Distribution solution allows scripts and video news clips to remain linked together all the way to the news director's desk. It works with the Wegener MediaPlan, which ingests, encodes, tracks and archives news information as digital assets.

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# Asset Management



by Susan Ashworth

A reporter gets the perfect clip—stunning images, good quotes, excellent audio. But now that the clip is set to air in 30 minutes, where did it go? Today's asset management equipment looks to eliminate that snafu, whether it's audio and video files, sales information or trafficking data.

## AVECO

Media management solutions allow users to move clips based on on-air schedules, transfer times, current network availability and clip priorities.

## Avid Technology

Avid Media Browse uses three PC-based components and one specialized encoder to capture video, manage media and deliver real-time MPEG video to the desktop. Each server supports eight ingest and 40 browse systems in its base configuration.

## BitCentral

OASIS file-sharing system allows station groups to share story data and video. The system provides instant online searching and proxy viewing.

## Blue Order AG

Media Archive 3.0 supports automated ingest, scheduled ingest and batch ingest; Media Archive 3.1 enables management of master data and the integration of third-party tools.

## Controlware

NetSwitch and EasySwitch management software solutions allow broadcasters to move media between locations.

## Crispin

With integration to newsroom computer systems, video servers and non-linear edit rooms, NewsCat archives news stories and makes them searchable for re-use; CTS applications are built around a Web-enabled asset management solution.

## Dalet Digital Media Systems

DaletPlus News Library leverages MOS and MXF to interface with legacy systems.

DaletPlus Media Library combines a flexible content catalog and workflow engine with rules-based scheduling.

DaletPlus ActiveLog records, logs, archives and distributes A/V feeds across multiple sites.

## DRM Networks

MediaGate digital management online billing e-commerce system and device management utility manages content on portable devices.

## DVS Digital Video Solutions



Digital Video Solutions Clipster workstation

DVS Content Management System manages content, metadata and searches.

## EOS International

EOS Web Media is scalable media

access management solution that organizes and allows users to search and order film tapes, cassettes, reels, clips, keyframes, audio, transcripts, and digital media assets.

## Focus Enhancements

Focus Enhancements will showcase its line of advanced, proprietary video and wireless video technologies.

## Front Porch Digital

DIVAnet Version 2.0 allows customers to leverage the DIVArchive system.

DIVAdirector is a Web-based content management application.

## Harris Corp.

The H-Class Content Delivery Platform and Application Suite allows media companies to combine workflow and business processes.

## IBIS

Highlighter allows the capture of highlights from up to six live feeds at one workstation. The system will be demonstrated with an Omneon video server.

## Infosys

Infosys will showcase its enterprise digital asset management solutions for transition from tape to digital archives.

## Justedit

New content management solutions include vsnnetsharer and vsnmacsharer that allow journalists to quickly locate materials stored in video servers at their own PCs.

## Logic Innovations

Content Manager CM-1200 allows users to preview, catalog and distribute video/audio content.

## Masstech Group

MassStore provides integrated, end-to-end nearline, archive and asset management. A new Avid-based interface, SavI, lets editors save Avid Unity disk space by backing up content and projects to any standard tape library system.

## Maximum Throughput

Xstorer 2 is an application for content manipulation and interconnectivity between workstations, effects systems and storage systems.

## mediaproxy

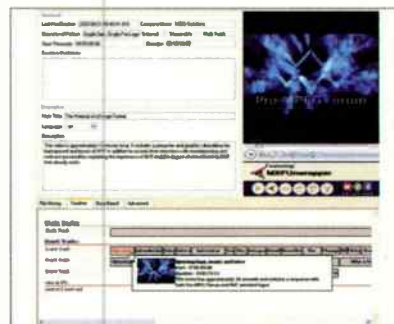
Enigma Version 6.0 is a logging solution designed to replace VHS recorders.

## Metaglug Corp.

MXFixer gives users access to the metadata in MXF files; showDiffuser creates master references.

## MOG Solutions

MXFKeyFrameExtractor allows users to search for and extract a keyframe in JPEG or bitmap formats from a MXF stream.



MOG Solutions MXFKeyFrameExtractor

ASSET, PAGE 50

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# Asset

CONTINUED FROM PAGE 48

## MSoft

VisionClip Version 2.0 is a digital asset management server system for managing video and graphics media.

## Nextamp

The NexTracker turnkey system monitors content integrity, corroborates airtime sales and manages broadcasting rights.

NexGuard provides encryption and management of domains, NexGuard Domain secures the storage, transfer and viewing of critical content, and NexGuard Master enables forensic tracking of media.

## Octopus

New features for the OCTOPUS5 newsroom computer system include an enhanced newsdesk module and option to group stories within folders based on topic.

Also new is the OCTOPUS Field Reporter, a standalone remote finger of the OCTOPUS5 that is dedicated to working in the field, even without network connections.

OCTOPUS Video Twister encodes/transcodes high-res files into lo-res video.

## OmniBus Systems

OmniBus OPUS Sports & News Logging system allows for logging, recalling, sorting and accessing of live and recorded events.



OmniBus Systems OPUS

## Omneon

Designed as a complementary system to the Omneon Spectrum media server system, Omneon ProBrowse creates and displays low-resolution (proxy) versions of full-resolution material contained within the server system.

## Pathfire

Pathfire will showcase its Browser DMG for advertising and syndicated programming

Also on display is the DMG Traffic Connect, which provides access to content metadata by traffic and programming systems. Via the Pathfire Central Archiving system,

remote users are able search to preview and request content stored on the system.

Pathfire will also showcase its Pathfire Direct content distribution solution.

## Peter Storer & Associates

Peter Storer & Associates will showcase its SIMS Storer Information Management System.

## ProConsultant Informatique

The LOUISE integrated traffic scheduling system includes a digital asset management module.

## ProMax Systems

ProMax will show its turnkey digital asset management systems.

## Prophet Systems

The Acuitas station asset management tool allows users to transfer media from site to site over a wide area network as well as control certain systems.

## ScheduALL

Media Connection can be used for asset management operations.

Other scheduling and management solutions include ScheduALL for the Web.



ScheduALL scheduling and management system

## SDS

EBroadcast is a Windows-based broadcast software traffic and billing system.

## SintecMedia

New companion solutions for the OnAir sales and traffic management system include a revenue and



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inventory management system that allows users to monitor and manage content.

eTV support is a new set of tools in OnAir that manages streaming of video and data parallel to regular events.

### Stratacache

The OmniCast Media Scheduler media authoring tool is designed to help marketing and creative staff author media. The scheduler allows users to combine video, audio, text, animation and graphics, which are then distributed to network player devices.

### Sundance Digital

Web Inventory has been updated with a new user interface based on Microsoft .Net. The application, which comes with the optional SQL DataServer, lets authorized users access and view playlists, server and tape inventory database information.

Intelli-Sat schedules and lo-res browse copies of server content on internal or secure private networks.



Sundance Digital Titan playlist

### Sun Microsystems

The Sun Media Asset Management system features many components, including storage and multiformat distribution, a Java format and Sun MAM Reference Architecture.

### VCI

Orion sales management and traffic tool has a new graphical user interface, enhanced XML interface, and embedded OneDomain Director, a seamless sales proposal to traffic system with drag-and-drop make-good functionality and new management tools.

### VertigoXmedia

New features for Xmedia Suite Version 3.7 include automatic publishing of graphics assets to the appropriate system, automated purging of assets residing on the Xmedia server and graphics systems and improved external asset management.

### VideoBank

VB Live encode/logger allows users to capture low- and high-res video, add data elements, and search and view events while encoding is still in progress.

Other solutions include VB Lite, a scaled-down version of the company's production-level system.

### Volicon

Observer 2.0 software is a broadcast monitoring and logging system that searches, retrieves, views, shares and exports video from a desktop.

Observer UNO is a new version of the Observer flagship media monitor-



Volicon Observer

ing system. It gives a large number of users simultaneous access to live and

archived content on local networks as well as the Internet. Users can log their own and competitors' broadcasts, as well as retrieve and analyze video clips with metadata, locally or remotely.

### Xytech Systems Corp.

Xytech will introduce new shift scheduling and article management solutions as well as Version 8.5 of Enterprise.

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# Editing

by Jay Ankeney

**D**espite considerable brand consolidation among edit manufacturers over the past year, new post production systems will at NAB2006 will handle formats spreading from H.264 up to 4K.

## 1 Beyond/1st Design

1 Beyond uncompressed HD editing laptops include the 3817 HD running Avid Xpress Pro HD and the new Adobe Production Studio software that enables uncompressed HD editing.

## Adobe

Adobe Production Studio Premium version encompasses Adobe After Effects 7.0, Adobe Premiere Pro 2.0, Adobe Audition 2.0 and Adobe Encore 2.0, in addition to Photoshop CS2 and Illustrator CS2. Studio 8 includes

Dream-weaver 8, Flash Professional 8, Fireworks 8, Contribute 3, and FlashPaper. Studio features include Adobe Dynamic Link that delivers a highly efficient workflow.

## Apple

Final Cut Studio, Logic Pro, and Logic Express now run on Intel- and PowerPC-based Mac computers. Current owners of Final Cut Pro, Soundtrack Pro, Motion, or DVD Studio Pro can upgrade to Universal Final Cut Studio.



Apple Final Cut Pro

## Autodesk

The Smoke editing and finishing system will appear under the "Discreet" name. Also on hand—Discreet Flame visual effects system and the latest versions of Autodesk Toxik film compositing software.

Autodesk Incinerator 1.0 will get its first public debut in a demonstration with the Discreet Lustre digital color correction system.

## Avid Technology

Avid Symphony Nitris hardware



Avid Symphony Nitris

delivers two streams of uncompressed HD or eight streams of uncompressed SD with real-time primary and secondary color corrections, and more.

Avid Instinct for iNEWS includes a desktop workspace with a flexible, intuitive script and video story assembler, a video monitoring window, access to the newsroom database, and research query and results areas. Users can begin building stories with either video or text, adjust audio and timing, and then submit rough sequences to craft editors for completion or play sequences directly to air.

## BOXX Technologies

APEXX 8 is a new super-workstation capable of handling 2K and 4K film material.

## Dayang

The Dayang D3-Edit HD8 A/V editor

EDITING, PAGE 54

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## Editing

CONTINUED FROM PAGE 52

supports hybrid editing of compressed and uncompressed video formats.



Dayang D3-Edit HD8

### DVS Digital Video Systems

DVS will showcase the latest versions of the Clipster digital intermediate workstation.

### Edirol

Roland Systems Group will show two new editions of Ediol Direct Linear Video Editing system: the DV-7DL PRO Studio Edition and an entry-level DV-7DL G.

### Grass Valley

Grass Valley EDIUS HD includes three components: NLE software,

Canopus HQ, HD, Lossless and SD uncompressed codecs, as well as the RX-E1 I/O hardware card with companion HD-SDI I/O module.

Grass Valley will also show Canopus EDIUS Version 3.6 of EDIUS Pro and EDIUS Broadcast solutions with support for the Canon XL-H1.



Grass Valley EDIUS HD

### Harris/Leitch

Version 9.1 of Velocity HD now includes support for HDV and variable frame rate processing for content on the Panasonic Varicam as well as IEEE-



Leitch Velocity XNG

1394 I/O support.

A new software-only version of Leitch Velocity HD NLE for laptops also includes a new effects engine.

Harris will also showcase the VelocityQ and Velocity X NLE systems as well as Velocity XNG, a laptop editor designed for journalists to use as a portable news desk in remote locations and the Velocity NX promotions craft editor for NEXIO server environments.

### KDDI

MPEG Edit Studio Pro Version 2.0 provides fast frame accurate editing of native H.264 in a long-GOP bitstream with other MPEG formats, including HDV, and MPEG-2 along with up to 7.1 channels of audio.

### Lightworks

Alacrity MR (multiresolution) is a new generation of HD-capable NLEs that can mix every HD or SD format on the same timeline.

For completely tapeless operation, Alacrity MR will be fed by Geevs MR, a new HD, multichannel ingest and play-out server from Lightworks parent Gee Broadcast.

### Macrosystem

Solitaire Plus running new Smart Edit 5, is now capable of editing native HDV.

### Matrox

Matrox Axio LE using Adobe Premiere Pro software for real-time HD and SD work features no-render HD and SD finishing in compressed and uncompressed formats.



Matrox Axio

### Media 100

Version 10.1.3 of Media 100 HD builds on the intuitive Media 100 interface with optimized acceleration on a Macintosh G5.

Media 100 sw is a software-only nonlinear editing companion to existing Media 100 systems. Both will be shown in the Boris FX booth.

### Sony

HDXchange is a collaborative networked system for editor workgroups featuring shared storage for SD and HD material, proxy browsing, asset management, Web publishing and archiving; HDXchange is targeted at

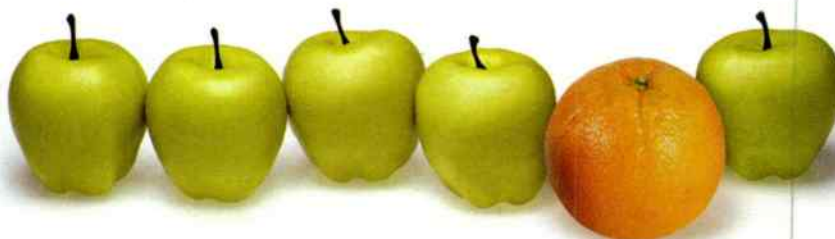
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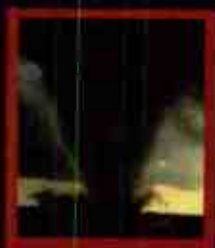
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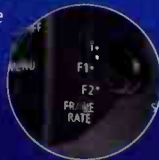
Like all of Canon's 3CCD camcorders, the XL H1 includes image control features, customizable settings and a well-balanced design — for the creative control, flexibility and advanced capability your video work demands.

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For the professional videographer, the XL H1 gives you the capabilities you need — no matter what the job, no matter what the facilities. Multi-camera shoots are no problem using Gen-lock synchronization or SMPTE time code input and output. Also provided is uncompressed digital HD and digital SD through an SDI output. The XL H1's professional JackPack brings together all these capabilities and lets you quickly and conveniently make the connection you need.



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# Storage & Recording

by Susan Ashworth

**M**any of the storage, server and video recording technologies set to hit the floor at NAB2006 are faster, smarter, more adept than previous iterations—with many solutions offering enhancements such as increased capacity, portability and HD/SD combinations—allowing broadcasters to get their jobs done ever more efficiently.

## SERVICES & STORAGE

### 360 Systems

Image Server XP Plus plays MPEG-2 DV and TARGA files from three simultaneous outputs and has SDI and composite video I/O, 12 channels of AES/EBU and more.

360 Systems will also demonstrate its Image Server 2000.

### Adtec Digital

The Soloist 411 is a digital media server for MPEG-2 SD/HD file playback and IP stream decoding.

Adtec will also demonstrate adCode, a media ingest station.

### Akiwa Technology Inc.

Server and storage technologies on display include the GHI-442 multipurpose rackmount server, GHI-690 storage server, GHB-B05 set-top box with up to 8 SATA or SAS drives, and the GHK-425, offering existing servers new scalability.

### Avid Technology

Avid Unity ISIS (Infinitely Scalable Intelligent Storage) features an open architecture that supports both Avid and non-Avid clients in a range of mission-critical environments. ISIS can be expanded from 8 TB to 64 TB.



Avid Unity ISIS

### Caldigit

New storage options include a 2.5- and 3.5-inch SATA II multiple bay storage solution.

### Chyron

The X-Clyps HD/SD graphics server features RAID 5 protection to store hours of compressed HD clips. It also

features redundant power supplies, VDCP interface and networked control architecture.



Chyron X-Clyps

### Crispin Corp.

ArchiveManager provides broadcasters with nearline storage of media that is integrated into the automation system. The solution now includes Hierarchical Storage Management designed specifically for broadcasters.

### Digital Broadcast

The MediaFire play-to-air server offers HD and SD capability with built-in automation and direct interface to Pathfire, Fast Channel, DG Systems and Vyvx.

The MediaView server system provides ongoing verification of off-air feeds and can store up to a year's worth of off-air feeds per station.

### Doremi Labs

The DCP-2000 digital cinema server plays DCI-JPEG2000 digital movies at up to 250 Mbps. Each DCP-2000 server comes with a variety of software utilities for movie clip and playlist administration. The ListMaker utility allows users to build and play composition playlists.



Doremi DCP-2000

### EVS

The XT [2] production system features native support for HD, up to six reversible video channels and 48 audio tracks with built-in audio router, as well as 1.5 Gbps networking capability.

### Exanet

Storage takes a high-performance turn with the ExaStore NAS (network attached storage) solution. Comprised of off-the-shelf hardware components and ExaStore software, the ExaStore

solution integrates with various workstations and servers.

### FirmTek

The SeriTek/2EN2 dual-bay hot-swap external eSATA enclosure is a small but flexible audio/video storage device that sits beside a notebook or desktop computer. The slightly larger version is the SeriTek/2eEN4 enclosure, a four-bay system.

### Focus Enhancements

FireStore FS-4Pro HD and DR-HD100 Direct-to-Edit disk-drive recorders now support Native QuickTime HDV.

### Front Porch Digital

DIVArchive 5.10 archive management solution offers broader interoperability with key partners' emerging technologies; DIVAcomplete is a digital archive solution and DIVAworks is a plug-and-play archive management appliance that includes server and near-line storage.



Front Porch Digital DIVArchive

### Globalstor Data

Globalstor will showcase its SATALite Series high-capacity RAID solutions and CELESTIAL Series of storage solutions.

### Grass Valley

The K2 Media Server and Media Client is a file-based, IT-centric, scalable storage and delivery system. Features include single server bandwidth rates up to 180 MBps with iSCSI, plus 80 MBps for FTP/CIFS over Gigabit Ethernet connections.



Grass Valley K2 media server

### IPV Ltd.

The SVServer is designed to turn a PC into a video server for storage and

distribution. The system can also store recorded media from encoders and distribute it to client applications on demand.

### iQstor Networks

The iQ2280 storage system is a 4 Gb Fibre Channel to SATA II storage platform housed in a 19-inch 3U rack-mountable enclosure and supports up to 15 SATA II disk drives that provide 7.5TB of storage capacity using 500 GB drives.

Other storage offerings include the iQ2880 4 Gb Fibre Channel system, which can be scaled to over 100 TB of storage.

### Justedit

vsnairenews is a live play-out video server that also incorporates some automation elements.

Justedit will also highlight vsnmatric, a multiformat play-out and video server and vsnstorage, a lower-cost shared storage solution that can scale from 100 to 2,600 hours

### LaCie

LaCie Two Big is a SATA II RAID solution with capacities of 500 GB or 1 TB and offers a maximum speed of up to 115 MBps. Also on hand is the LaCie Biggest S25, a five-bay RAID tower capable of reaching interface speeds of 3 Gbps with next-generation serial ATA technology, and the LaCie Dupli DVD 125, which features smart controller technology and CD/DVD writers.

### Leightronix

NEXUS Version 3 is a server and station automation hybrid designed for local television operations and private communication networks.

Other new solutions include the TCD/NX multichannel MPEG video server, a system with digital video messaging features and USB hard drive media storage.

### Masstech Group Inc.

MassDR is an automated storage backup solution that offers a database to manage the storage of evergreen content.

### Maximum Throughput Inc.

Sledgehammer 2.5 includes a high-speed NAS and digital disk recorder, enabling the system to act as the core infrastructure for a tapeless video or digital intermediate workflow.

STORAGE, PAGE 60



## Storage

CONTINUED FROM PAGE 59

### Merging Technologies

Luxor Media Server System is compatible with Unix, Apple and Windows-based file systems.

### NVersion

The NcontrolLite server and spot play-out software package enables users to transfer content with frame accuracy for backup, archive and file trimming.

### Omneon

The MediaDirector component within the Omneon Spectrum media

server doubles system bandwidth to support higher channel counts and higher IP throughput on a single system. The MediaDirector 4202 also extends Omneon smart scalability.

Other solutions include ProBrowse and additional Spectrum HD format support for the Avid DNxHD format.

### OmniBus Systems

The OmniBus K2 Inception is an entry-level 1 to 6-channel play-out solution designed in partnership with Grass Valley.

OmniBus will also showcase its OmniBus iTX solution.

### Panasonic



The Panasonic AJ-PCD20

The AJ-PCD20 is a five-slot P2 solid-state memory drive designed for the high-speed transfer of 25 Mbps DVCPR0 or 50 Mbps DVCPR050 video into NLEs and servers. As an internal drive, the AJ-PCD20 installs in a standard PC-type 5.25-inch bay drive enclosure, and through its high-speed USB 2.0 or IEEE-1394b interfaces, connects to the host computer, and through that computer to a TV station's LAN.

### Pathfire

The Pathfire Central Archiving Solution is a centralized, hosted home for content with browser search capability.

The company will also demo its DMG Server Connect HD, designed to integrate HD content with play-to-air servers to maintain the media's original digital format.

### ProMax Systems

ProMax will show the G-Max storage solution for video and other media storage as well as its SAN Workflows solution, a networked storage option to handle uncompressed HD video.

### Quantum

DLTExchange is a data tape system designed for professional video that features a tape-based file system and network-attached storage. Each tape carries its own file system directory, allowing direct drag-and-drop access by applications on the network without the need for other software.

### SeaChange International

SeaChange will demonstrate how real-time, broadcast-quality I/O performance can be fused with centralized storage using its MediaLibrary with over 16 TB of RAID-5 storage per rack.

### SGI

SGI will show its Altix family of servers and new hardware offerings in the company's RAID storage and NAS product lines.

## CALREC BROADCAST SYSTEMS

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Sigma System Plus offers broadcasters a wealth of upgraded specifications. A new programmable monitoring system provides greatly expanded monitoring options and new colour TFT metering enables user defined metering schemes to be individually memorised. Also new is the provision for SNMP reporting to an external network for sophisticated status reporting.

- Up to 64 channel/group faders
- Up to 120 equivalent mono channels
- Automatic redundancy on PSUs, DSP and control processors
- All cards and panels are hot-swappable
- Comprehensive colour TFT metering with full configurability
- Fully configurable monitoring with full user profiles can monitor up to 112 different sources at any one time
- 8 stereo or mono audio groups
- 12 buses, 24 IFB / multitrack outputs
- 4 main stereo or 5.1 surround outputs
- Simultaneous LCPS stereo and mono outputs available from each 5.1 main output
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- Console and racks boot from power on in less than 20 seconds
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## Storage

CONTINUED FROM PAGE 60

### Sony

The PDJ-A640 cart system, an addition to the XDCAM Professional Disc product line, can handle 640 pieces of Professional Disc media and can be used for automated ingest, play-to-air

transmission, short- or mid-term, or for online and offline archiving. The system can be used with up to four separate XDCAM decks simultaneously, and complements the Sony PDJ-C1080 cart machine.

### Studio Network Solutions

Studio Network Solutions globalSAN x-4 provides 1.6 TB of RAID storage.

### Sundance Digital

Sundance Digital NAS solutions are designed to provide an economical near-line spinning-disk-based storage solution as an alternative to online storage. The solution is offered in several standard RAID configurations and capacities, and NAS bundles include storage and disk/archive management.

### Sun Microsystems

Sun storage technologies feature multitiered media archives that can grow organically as a content library grows.

### Vela

The MediaAdvantage 5000 is a high-density server that allows operators to choose a combination of video inputs or outputs. Users can also customize the MediaAdvantage 5000 system with multiple combinations of ingest and play-out options with up to five boards.

### Video Technics

Apella SDS and Apella HDS multi-channel, multiformat media servers support a mixed database of DV, MPEG-2, HDV, DVCPRO100, HDCAM and uncompressed 10-bit 4:2:2 video.



Video Technics Apella

The company will also highlight the Apella LCS, a cost-effective 3RU scalable server that offers new software designed to record SDI or analog feeds in a user-defined endless loop.

### Wegener

Unity 550 enterprise media servers increase user productivity and network efficiencies with hands-free satellite downlink operations powered by the Wegener Compel network control. The Unity 550 supports all media formats with MPEG-2, MPEG-4/H.264, HD/SD video decoding options.

## RECORDING

### AheadTek

AheadTek will showcase its DJR-22 video head drum for Betacam SX VTRs.

### ATS Communications

The nNovia Quick Capture is a portable DVR with analog and FireWire I/O for SD and HDV recording. Features include 100 GB drive, direct to edit recording formats and either a beltpack or camera mount.

### COSHIP Electronics

The CDVB9200A PVR is DVB-S/MPEG-2 compliant and can record and display two channels simultaneously.

### Digital Rapids

Carbon HD is a professional multi-format HD/SD video encoding and play-out DDR that includes integrated

STORAGE, PAGE 64

# eXtreme performance

The new XR video modulators and demodulators offer wild capabilities.

### DM240 XR DVB-S/S2 Modulator

- 30% Bandwidth Savings
- 1-250 Mb/s QPSK/8PSK/16QAM
- Gigabit IP/HISSI/ASI/G.703
- Upgrades to S2 and higher speeds



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### HE4000 HD and SD Encoder

- HD & SD Encoding Simultaneously
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## Storage

CONTINUED FROM PAGE 62

software to manage ingest, trimming and play out of clips.

### Doremi Labs

The NuggetPro HD video player plays HD MPEG-2 4:2:2 video up to 80 Mbps, features SDI, HD-SDI and DVI outputs and handles up to six channels of analog or digital audio.

The V1-HD video disk recorder with dual-channel playback records and plays back HD video.

### DVS Digital Video Systems

Pronto2K and ProntoHD disk recorders provide instant access, play-out and capture of uncompressed 2K, HD and SD.

### Fast Forward Video

The VDR 2005 portable DVR records to a removable 2.5-inch IDE drive and is designed for location recording.

Other recording options from the company will include the Omega Deck DVR, the lower-cost DigiDeck, the compact Mini DVR Pro and the on-the-go Field DVR.

### Grass Valley

The HD/SD multiformat Digital Media Recorder for the Infinity product line supports 1080i50/60, 720p50/60, 625i50 and 525i60. Features include flexible encoding/decoding options; support for DV25, MPEG-2 and JPEG2000, and a choice of removable recording/playback media including integrated Iomega REV and CompactFlash media,

A/V/metadata files in MXF-based wrappers and USB 2.0, FireWire and Gigabit Ethernet interfaces.



Grass Valley Infinity Recorder

### IBIS

Highlighter, a companion to the Omneon video server platform, allows the capture of live highlights from up to six live feeds at one workstation. The system is designed for live sports highlights for instant replay or fast turnaround of mobile events.

### mediaproxy

The Enigma 6.0 logging server-based recording system offers compliance recording and logging with flexible browsing capabilities. Features include multilingual client GUI, multiple audio languages and real-time alarms.

### Merging Technologies

Designed to replace SD/HD videotape machines, the VCube HD-2K 1080 HD system records uncompressed and HD video. Features include single- or dual-stream HD 1080i playback.

### NL Technology

The SAT Proxy solution is an option

for NL Technology recorders and Ikegami DNG disk-based cameras and allows users to simultaneously create Windows Media content as a proxy while recording hi-resolution video with matching timecode and metadata.

### Panasonic

The AJ-HPS1500 is a solid-state recorder/player designed as a bridge for HD and SD production environments. It provides upgradeable capacity by offering five P2 card slots, and two slots of additional removable hard disk drives.

The AJ-HPM100 mobile recorder/player is HD/SD switchable and records in DVCPR0 HD, DVCPR050 and DVCPR0. The recorder includes a nine-inch LCD monitor, a six-slot P2 drive, SD card slot, jog/shuttle dial, video encode adjustment control, front panel GUI, and playlist making and playback capabilities.

### QuVIS

The Encore disk recorder records and plays HD and SD in real time, making the system an option for high definition post, HD production truck and rental and staging applications.

### Sony



Sony HVR-M25U/HVR-M15U

The HVR-M25U and HVR-M15U decks offer HDV 1080i, DVCAM and

DV SP recording and playback capability, and are compatible with mini-size DV and standard cassettes. Both are switchable between 60 and 50 Hz and have an HD to SD downconversion function. The HVR-M15U model is a compact system; the HVR-M25U deck offers a ClearPhoto LCD 2.7-inch 16:9 panel and an HDMI output.

Sony will also showcase its PDW-R1 field recorder/player and new option boards of its XDCAM Professional Disc line.

## RECORDING MEDIA

### Grass Valley

REV PRO drives and removable media for the Grass Valley Infinity line of solid-state tapeless products combine the nonlinear advantages of a hard-disk drive with the portability and cost-effectiveness of video tape.



Grass Valley REV PRO

### Maxell

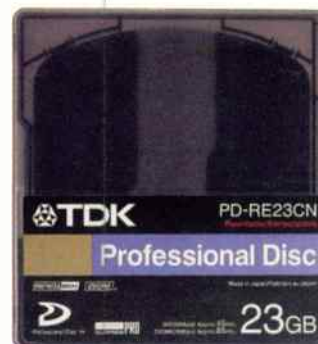
Holographic media offers 300 GB of storage capacity, a 160 Mbps transfer rate and a superior archival life. Holographic recording technology uses a laser beam to form and store data in a number of 3D hologram images of data pages into the same location.

### Primera Technology

Primer Technology will showcase new water-resistant inkjet-printable CDs and DVDs called TuffCoat with AquaGuard developed with Imation.

### TDK

TDK will show HDV Pro Master recording media for HDV camcorders, Blu-ray Media Products, professional disc options for the Sony XDCAM HD and XDCAM cameras, and bulk media solutions.



TDK Professional Disc

### Videomagnetics

Videomagnetics will be on-hand to discuss its repair and full service offerings for DVCPR0 VTRs.



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► Also **Coming Soon**, a new 2U product combining the AMP2-E8 (below) with an **Advanced Audio Metadata Analyzer and Alarm System** featuring TCP/IP communication to an included PC alarm and logging software package.

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# Satellite & Remote



by Claudia Kienzle

**A**t NAB2006, broadcasters will see that the spectrum of new products designed to support microwave, ENG, satellite, and remote transmission has expanded dramatically. These new products promise to maximize bandwidth, ensure signal integrity, and integrate multiple functions into compact solutions.

## SATELLITE

### ABE Elettronica SpA

ABE will show a new digital modulator plus MPEG-2 encoder line for satellite uplink and reliable housing for up to four MPEG-2 encoders and a multiplexer.

### DAWNco

A satellite feed switcher for 950-1450MHz signals allows satellite receivers to look at any satellite feed from a variety of satellite antennas.

Also on display will be an all-weather, dish-mounted satellite fiber-link transmitter, an L-Band system for sending signals long distances without loss; and the Starlook MPEG-2 satellite identifier.

### e2v Technologies

e2v will show StellarCool high-powered satellite communications amplifiers for 400 W Ku-, X- and C-band, and other applications.

### GMPCS



Inmarsat BGAN

The Inmarsat BGAN (Broadband Global Area Network) delivers data rates of up to 1/2 a megabit via a satellite terminal about the size of a notebook PC. BGAN enables users to remotely access their corporate network using a secure VPN connection and to send e-mails, transfer files and

SATELLITE, PAGE 68

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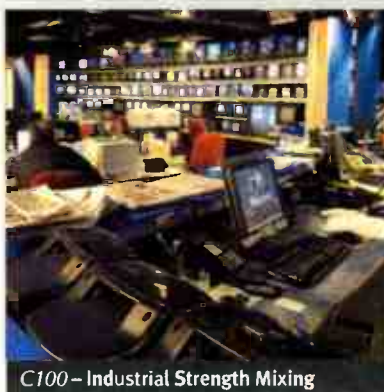
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**Perfect timing.** The ADVC1000 uses PerfectSync technology, developed by Canopus to ensure perfect conversion of all frames during DV-SDI conversion. When the FireWire interface outputs a DV stream, the ADVC1000 becomes the "cycle master," controlling the maximum transfer rate to flawlessly synchronize SDI output with the frame frequency of an external reference ("house") signal.

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### ADVC1000

Advanced Digital Video Converter



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Booth SL-566

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# Satellite

CONTINUED FROM PAGE 66

access the Internet, via satellite, from almost anywhere worldwide.

## Intelsat

Intelsat will promote its contract with MediaFLO, a Qualcomm subsidiary, to provide satellite capacity and bandwidth on its Intelsat Americas-8 satellite, for live A/V streaming, short-format content and IP datacasting to wireless operators in the United States.

## Mackay Communications

Mackay will roll out its BGAN service as well as show its secure, portable voice/data satellite communications equipment and services for Inmarsat, Iridium, Globalstar, and MSV.

## Newpoint Technologies

Compass is a solution for automated configuration and management of remote satellite transmissions.

## Radyne

A new modulator/demodulator for DVB-S produces 30-percent bandwidth savings.

Radyne will also show a new HD encoder and DVB MPEG-2 IRD.

## SES Americom

SES Americom will demonstrate its distribution of digital, HDTV and VOD, among other services for broadcast and cable clients.

## Scopus Video Networks

The UE-9128 DSNG platform features simultaneous MPEG-2 and MPEG-4 SD encoding, including H.264, with built-in DVB-S2 modulation and upconversion.

Scopus will also demonstrate a DVB-S2 version of its new IRD-2900 professional receiver decoder family.

## Wegener

The latest version of iPump broadcast news distribution solution allows 24-hour news operations to combine elements of digital asset management with satellite network control.

## Wavestream Corp.

Wavestream will unveil a compact 25 W Ku-band deck power amplifier for fly-away Satcom terminals, as well as new block upconverters Satcom terminals.

## MOBILE & ENG

### ABE Elettronica SpA

ABE will debut new digital microwave links for fixed and mobile applications.

## Allen Avionics

Allen Avionics will showcase its custom passive electronic components, including precision LC filters, digital delay lines, video delay lines, amplitude and phase equalizers, and more.

## Broadcast Microwave Services

The Truck-Coder II digital/analog ENG two-unit microwave system features rack-mounted control, IF unit and mast-mounted upconverter and power amplifier designed for field use.

The Digital Media Transport Package interfaces to laptops or NLE systems, provides simultaneous file and video transmission, and integrates with studio LAN servers.

BMS will also show the Central-DeCoder II COFDM digital central receive site decoder and Field-Coder II portable COFDM transmitter and digital media transport packages.

## DB Elettronica

DB Elettronica will demo the MLP series of portable analog or digital TV microwave links and MDTL digital TV microwave links.

## Frontline Communications

The Frontline HD-MSU-4.5 combination C-band/Ku-band system uses a 4.5 m Andrew Tri-fold C-band anten-

na and an AVL 1.8 m Ku-band offset antenna.

The Frontline NT-8EX-C/KU is a classic NT-8 layout vehicle with conference and operator sleeping areas.

The DSNG-350 LT includes a DSNG package with Tiernan SE4000 encoder.

The HD/Digital DSNG/ENG Sprinter includes SD/HD equipment.

## IRTE SpA

IRTE will showcase new digital microwave links and COFDM microwave links.

## Microwave Radio Communications

The MRX4000 is an integrated demodulator and decoder for central receive sites.



MRC SCM4000 single-carrier modem

The SCM4000 single-carrier modem features data rates up to 105 Mbps and support for HD-ENG.

MRC will also show its PTX-Pro fully integrated single box transmitter.

SATELLITE, PAGE 70

# Revolutionary Wireless

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# Satellite

CONTINUED FROM PAGE 68

## Moseley Broadcast

Event HD ENG Link provides users with the option of multiple HD- or SD-Video at DVB-ASI with data rates up to 85 Mbps. The superior modulation together with Reed-Solomon and Trellis-Coded error correction provides error-free performance.

## Modulation Sciences

The PRO-3 channel receiver features delay correction for the 2GHz BAS transition. PRO 3 has three built-in options to handle delay introduced during digital transmissions and works with the PCG-II PRO channel generator.

## NSI (N Systems Inc.)

The MC5 Viewer supports control and display of multiple remote spectrum analyzers per receive site as well as a real-time video display window.

## Nucomm

The Newscaster CR6D central receiver is available as a totally inte-

grated unit equipped with a 4:2:2/4:2:0 MPEG decoder, DVB-T-compliant COFDM demodulator and a (NTSC/PAL) FM demodulator. A third modulation format (VSB or QAM) is available for higher data rate requirements, such as HDTV applications.



Nucomm CR6D Newscaster receiver

ChannelMaster portable microwave transmitters are available in single band, 2, 7 or 13 GHz or dual band 2+7 GHz configurations.

## Peak Communications

The DBU200 dual hot-swappable block up-and downconverter units are compatible with L-band modulators and frequency converters, and provide block conversion to/from C-, X-, Ku-, wide-K-, and DBS-bands.

## RF Central

The RFX-ENG digital transmitter offers exceptional performance in ENG trucks with true 7W COFDM transmit powers in QPSK, 16QAM, and 64QAM.

RF Central will also show the new RFX-PHT portable 2GHz digital transmitter for 5-10 W power output; and a host of other microwave products.



RF Central RFX digital transmitter

## Shook Mobile Technology

Shook will exhibit its line of products and services for commercial broadcast including the "Roadrunner" series of ENG vans.

## Streambox

The SBT3-7500 encoding/compression system matches MPEG-2 quality at a 75 percent lower data rate.

The SBT3-7400 is a bidirectional, low-latency encoding and decoding conferencing solution using the Streambox ACT-L3 codec with advanced IP networking capabilities for real-time, full motion, full-framed interlaced broadcast video with audio.

## Television Engineering Corp.

TEC will show the Express ENG and DSNG trucks, TEC MicroSat ENG and DSNG (Ford E350 or Dodge Sprinter) vehicles, and the TEC Eagle Eye camera system, which includes a 16x zoom lens from atop the ENG truck mast with variable speed pan/tilt movements for smooth on-air operation.

## Wolf Coach

Wolf Coach will showcase its mobile turnkey telecommunications systems of all sizes for TV production,

ENG and SNG, from fully capable SUV platforms to high-end uplinks.



Wolf Coach custom broadcast vehicle

## REMOTE

## Aastra Digital Video

Aastra will show the Model 300 HD IRD for 4:2:2 contribution-quality video, ENC-S21 MPEG-2 encoder ENC-A11 H.264 MPEG-4 encoder, and the VideoRunner Video networking system.

## Agiosat Global Communications

The Agiosat 3G satellite-based IP-centric mobile system is based on Inmarsat's BGAN system.

The Agiosat Global Network provides global C- and Ku-capable satellite services.

## BGS

BGS will display a new tower switchbox to place at the tower site to provide tower specific and emergency contact information to tower crews.

## Paradise Datacom

Paradise will show the Evolution IF or L-band high-speed modem and Evolution modem redundancy switch.

## Troll Systems

The SkyLink Airborne Antenna System provides full control over radio, power, and monitoring functions.

TouchStar ground control systems provide comprehensive, flexible control over an array of broadcast equipment.

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# Editing

CONTINUED FROM PAGE 54

current and future users of DV, HDV and XDCAM systems and will support Vegas, Final Cut Pro, and other nonlinear editing software.

## Quantel

Quantel TimeMagic technology for the eQ system provides a signifi-



Quantel Pablo

cant boost to productivity.

Pablo combines new hardware and software-based color-correction technologies in a single system.

ZoneMagic software for sQ systems enables broadcasters to develop a collaborative workflow, regardless of geographic location.

Quantel will also demonstrate integration of its editing systems with XDCAM-HD and P2-HD.

## xm|Edit

Traffic for Final Cut Pro is a project management companion for Apple editing software that uses a sophisticated visual node-based user interface to perform time-intensive tasks that can be difficult to complete in the timeline-based approach to nonlinear editing.



# Audio



by Sanjay Talwani

**N**AB2006 will raise the roof with smaller, more rugged equipment, more flexibility, vast storage and hopped-up effects. Dozens of companies will turn it up to get attention with the loudest, quietest, smoothest, and most tricked-out audio tools available.

## AUDIO CONSOLES/MIXERS

### Axia

The Axia console features routing technology to move audio on Cat 5 or 6 without clashes or dropouts using off-the-shelf Ethernet switches and Axia nodes.

### Calrec

The Bluefin signal processing system provides 200 percent more processing power in 92 percent less physical space. Calrec will also showcase its Alpha,

Sigma and Zeta System Plus consoles and Hydra networking.

### Fairlight

The multi-configurable Constellation Anthem digital audio console unites all recording, mixing and editing functions into one console.

### Harrison

The MPC4-D digital film console features LCD display screens above all faders.

### Smart AV

The Smart AV Professional series of consoles have similar functions but vary in the number of faders and channel strips, and the presence of workstation controls.

### Studer

The Vista 8 digital live audio console with Vistonics user interface features an operating desk consisting of

one control bay and between two and seven channel bays incorporating 22 to 72 physical faders on the console.

### SSL

The C300 compact and assignable digital console for film and post incorporates dynamic resource allocation processing power as well as a large mixing capacity.



SSL-C300

### Wheatstone

The D-7 on-air and production console is targeted for small and medium

markets and mobile broadcasting.

Also new is the D-12 TV audio console with the same features as the D5.1 in a smaller footprint.

## AUDIO WORKSTATIONS

### Merging Technologies

Version 5.0 of the Pyramix Virtual Studio DAW 5.0 features firmware that expands its capability from 64 to 128 I/Os. Both versions have 24-track editing, mixing and processing.

### Yamaha

Yamaha will bring its line of professional audio products for recording, production, broadcast, installation, live sound and sound reinforcement.

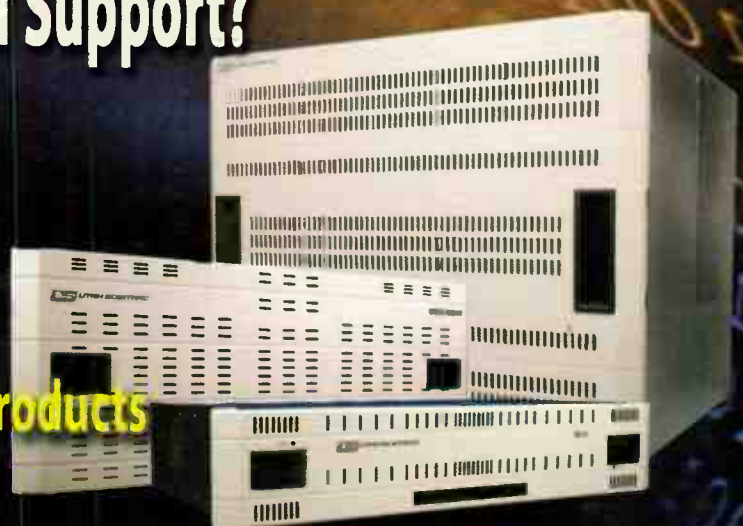
### Euphonix

The MC Media Application Controller forms a central editorial section with up to 48 channel strips, each

AUDIO, PAGE 72

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## Audio

CONTINUED FROM PAGE 71

with moving fader, eight knobs and TFT.



Euphonix MC

### AUDIO RECORDERS

#### AudioScience

ASI6600 series sound cards feature a PCI Express interface, eight stereo outputs, four stereo inputs, and more.

#### Sony

Sony will showcase its new compact PCM-D1 portable audio recorder.

#### Sound Devices

Sound Devices will show MixPre, 302, and 442 field mixers and 7-Series audio recorders.

#### Tascam

The HD-P2 HD portable stereo

recorder records to CompactFlash and features up to 192 kHz/24-bit recording, two built-in XLR mic-ins with phantom power.

#### Zaxcom

The Deva Mix-12 is a mixing surface for Deva IV and Deva V hard-disk audio recorders.

### AUDIO PROCESSING

#### Dolby

Dolby will exhibit its DP564 multi-channel audio decoder, DP569 multi-channel Dolby Digital encoder, DP572 Dolby E decoder and DP571 Dolby E encoder.

#### Evertz

Evertz' modular Dolby-E codecs support Dolby metadata throughout facilities to the AC3 encoding process.

#### Graham-Patten

SoundPals AEDM-4/HD and AEDM-4/SD de-embedders take in HD or SDI video with embedded audio and de-embed up to eight AES/EBU outputs. The units feature active looping HD/SDI inputs, allowing them to be stacked so that up to 16 channels.



Graham-Patten AEDM

#### Independent Audio/Cedar Audio USA

Cedar Tools Retouch allows users to define the temporal and spectral content of the sound to be removed and to identify noises from coughs to car horns.

#### Junger Audio

The C8403 dual mode HD/SDI SDI interface is an 8-channel audio embedder and de-embedder card for all standard HD/SDI format signals.

Junger will also showcase the SD SDI-interface C8402 SDI audio embedder/de-embedder card and Level Magic Surround technology.

#### Kramer Electronics

The VA-680D high-performance digital audio delay line can be used as a coax-to-optical or optical-to-coax converter, as a coax or optical repeater, as a digital audio switcher, and as an audio delay line.

#### Linear Acoustic

The AEROMAX-TV Digital Television Audio Processor is a dynamics unit for 2-channel main plus SAP audio with front-panel display and controls plus Ethernet remote control. Linear will also demonstrate the MetaMAX Bitstream Audio Processor.

#### Merging Technologies

The Sphynx 2 extreme audio converter is a combined 8-channel A/D-D/A audio interface for PCM, DSD and DXD.

#### Orban

Orban will demo its Optimod-TV 8382 digital audio processor.

#### RDL

The RU-ADL2 Professional Audio Delay features separate time delays for two audio outputs and other features.

#### Soniflex

The RB-DS2 stereo audio delay synchronizer resynchronizes audio to video following delay processes.

Soniflex will also show the RB-PA2 dual-stereo phono RIAA gram amplifier and the RB-ML2 stereo microphone and line level limiter.

#### Symetrix

The 88192 8-channel A/D-D/A converter features 24-bit audio conversion up to 192 kHz

Symetrix will also show the

Symetrix Orion 8088 8x8 analog I/O DSP; 6200 digital voice processor; and the 528E voice processor.



Symetrix 528E

### MICROPHONES & HEADPHONES

#### Audio-Technica

The AT892c MicroSet 2.5 mm omnidirectional condenser mic hooks behind either ear.



Audio Technica 892

#### Azden

The low-noise, 3-channel FMX-32 battery-operated field mixer can be attached with provided hook and loop fastener.

#### beyerdynamic

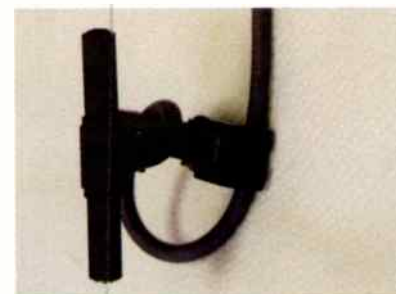
The MMX1 headset with condenser microphone features a closed headphone and cardioid mic, ideal for multimedia applications.

The TG-X 48 dynamic microphone features a supercardioid polar pattern and an integrated pop shield.

#### Remote Audio

The Ear Bud features a swivel ear hook for either ear and a 3.5mm mono plug molded into right angle and ideal for Comtek or IFB feeds.

#### Sanken



Sanken 1.25-inch lavalier

The 1.25-inch COS-22 dual-channel lavalier mic targets high-quality unobtrusive area micing.

#### DPA Microphones

The new 12 cm 4090 and 4091 mics have an omnidirectional condenser capsule with a 3-pin XLR connector for use with 48 V phantom powered systems, operational to 5 V.

#### Holophone

The H2-PRO Rev. 2 7.1-channel discrete surround microphone features

**NAB PREVIEW**

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enhanced low-frequency.

Holophone will also show its Pro-Mini 5.1-channel surround microphone for broadcast cameras.

### Kramer Electronics

The Kramer 106 is a high-performance mic amplifier/distribution amplifier that converts a balanced mono microphone input to two high-level balanced mono line outputs.

Kramer will also demo its 904 stereo power amplifier.

### Shure

The KSM9 condenser mic features dual-diaphragm construction and switchable cardioid/supercardioid versatility.

### SSL

The XLogic Channel EQ and XLogic Mic Amp feature circuits borrowed from the SSL XL 9000 K Series equalizer.

### Remote Audio

The HN-7506 High Noise Environment Headset Monitor provides extreme isolation from outside noise using Sony MDR-7506 drivers with special baffling.

### Sennheiser

The SK 5212 features a 36 MHz tuning window to access up to 7,200

frequencies in 5 kHz steps across the UHF spectrum.

### WIRELESS AUDIO

#### Avlex

The Mipro MA-909 is a 16-frequency agile wireless mixer.

The Mipro MR-90 Wireless ENG Receiver is 100-frequency agile receiver.

#### Lectrosonics

The UCR401 is a compact UHF wireless microphone receiver for mobile applications such as ENG and film production.

#### Remote Audio

The Miracle Whip Antenna wireless mic antenna is designed to withstand the rigors of on-location production without bending or breaking.

#### Sennheiser

The NET1 Network System is a hub for up to 10 Sennheiser wireless systems that automatically configures frequencies for all connected components and portable units through wireless sync.

#### Zaxcom

The TRX900 digital wireless transmitter features a built-in IFB receiver and up to six hours of internal recording.

Zaxcom will also show its TRX990

digital wireless transmitter.

### MISCELLANEOUS

#### Acoustical Solutions

The four-package studio-in-a-box includes RPG acoustical foam, diffusers and corner BASS traps as well as a new 2-inch thick Alpha WOODiffusor.

#### Remote Audio

The BDSv2 Battery Distribution System allows up to six devices to be powered from a single battery.

#### Studer

Studer's Call Management System interfaces to most private branch exchanges.

### INTERCOMS/IFB

#### Remote Audio

Speak Easy is a 9 V battery-powered speaker small enough to be easily hidden, now with optional front-mounted volume control, that interfaces with the Remote Audio push-to-talk Boom Box.

#### Riedel Communications

The new generation of Artist



Riedel Artist intercom

Intercom systems include Connect IP; Connect Solo and Connect Duo, which provide intercom interfaces via ISDN and public telephone networks.

#### Clear-Com

Eclipse VoICE is a four-way interface frame and the Eclipse Median Matrix is a combined interface frame for tight spaces.

#### JK Audio

JK Audio will demonstrate its Four IFB Phone Bridge four-way phone line interface listen-only IFB, and the RIU-IP remote IP interface.

#### Production Intercom

Production Intercom will showcase its 4-oz. TR-1, a rugged and lightweight IFB; the DMH948 all-in-one headset; broadcast announcer stations; and the FR4000 Half-Duplex wireless system.

#### Telex Communications

Telex will display Digital Matrix, wireless intercoms, two-wire intercoms, and broadcast headsets and ear sets.

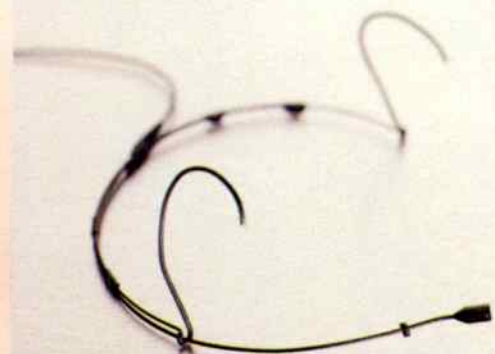
#### Trilogy

The Mercury advanced IP Audio Communications system enables instant two-way, multichannel voice communications between any number of individuals or groups linked via LAN or WAN.



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# Signal Processing



by James E. O'Neal

**M**any NABs ago, a prospective buyer in the signal processing arena had a choice of a few proc amps, stab amps or maybe a clamper or two. How times have changed! Nowadays with the multiplicity of formats that the digital revolution has spawned, signal processing is by far the largest category at the show.

## ENCODERS & DECODERS

### Adtec Digital

The adCode media ingest station for MPEG-2 SD encodes from a variety of sources.

### Anystream

Agility Broadcast 6.0 is a tapeless workflow system for media production with real-time HD encoding.

### Complex Corp.

The CP-701 is a component/composite-to-SDI camera signal multiplexing system.

Complex will also show the CP-301C composite video multiplexing system.

### Envivio

4Caster HD3 is a live HD AVC encoding system with adjustable bit-rates between 2 and 20 Mbps, supporting 720p and 1080i content.

### Popwire AB

Compression Engine is a media encoder for massive throughput; Compression Master is a media encoding application for professional media producers, and Live Engine is a live media encoder supporting dynamic frame rate adaptation within bandwidth constraints.

### Harmonic

The Harmonic IP-based ProStream 8000 MPEG-in/MPEG-out software

solution tiles several channels within a single digital video stream.

### Hitachi Kokusai Electric America Ltd.

The YU-CX-Z4 is a digital triax system for all makes of cameras.

### Inlet Technologies

Fathom 2.5 is a real-time encoder for WMC and VC-1, delivering high-performance compression for post production.

### IPV Ltd.

The SpectreView browse encoder



The IPV SpectreView browse encoder

transcodes SDI and file-based inputs into MPEG and WM9.

### Ligos

The MediaRig Mosaic IP-based system for multiple hardware decoders allows service providers to create and provide program guide and navigation channels.

### Media Excel Inc.

The HERA 3000 is a real-time H.264 encoder/transcoder system.

### NTT Electronics Corp.

The ES8000/DS8000 is an encoder/decoder set for real-time transmission of super high-resolution images.

### Optibase

The AVC H.264 is a new MPEG-4 encoding module designed to provide HD technology for IPTV operators.

### Radyne

Radyne will showcase the latest

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1.888.console | [tbcconsoles.com](http://tbcconsoles.com)



**consoles**



TBC's INTELLITRAC console system:

- a practical, ergonomic solution with high end aesthetics.
- Modular, upgradable, adjustable rack turrets with front and rear LCD mounting positions.
- In harmony with advanced television technology.

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# The right server for the job.

## NEXIO XS™

### Curriculum

Expert in true shared-storage networking

Leader in software coding and decoding

Champion in scalability

#### Objective

I provide broadcasters worldwide with the smallest and fastest HD/SD server platform that simplifies workflow, optimizes efficiency and maximizes ROI

#### Summary of Qualifications

Developed from a long lineage of shared-storage systems. SD with HD included for free in a baseband server – with a choice of internal and external storage – which is less expensive, easier to use and service, and capable of a much larger range of encode options than any other potential candidate. All this in a single 3RU frame!

#### Area of Specialization

All hybrid HD/SD systems. Transmission applications, commercial insertion, newsrooms, mobile production facilities, sports.

#### Critical Skills

- 6 channels in 3RU
- HD (1080i/720p) and SD (525/625)
- Software coding and decoding of media with back-to-back DV/MPEG playout
- Patented, Emmy® Award-winning RAIDsoft™ software storage protection
- Front access to boot and media drives, USB and IEEE-1394 (FireWire™) ports
- 4Gbps Fibre Channel support
- Industry's best file transfer performance (up to 80 MB/s per chassis)
- Full dual redundant path to storage

#### Professional Affiliations

- Integration of Velocity™ editing platform on the same SAN
- Fully compatible with all major automation, asset management and archive partners

#### Languages

- TCP/IP, UDP, FTP protocols
- MXF, AVI, DV, MPEG, IMX file formats

#### Accomplishments

- More than 1000 installations in 80 countries worldwide
- Industry award-winning technology leader

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developments in its encoder/decoder technology.

### **Ross Video Ltd.**

The ADC-8032B decoder has been redesigned for improved performance.

### **Scopus Video Networks**

The UE-9218 simultaneously encodes MPEG-2 and MPEG-4 SD streams.

### **Encore**

The Atlas MRD2187A is a modular receiver/decoder with 8 available I/O slots.

### **Handberg Television**

The TT1290 is a professional receiver and multiformat MPEG-2/MPEG-4 AVC decoder.

### **Trilogy**

The Mercury product line targets IP communications and bi-directional radio over IP.

### **com Inc.**

The CableVista edge decoder for MPEG modulates and upconverts as many as 24 NTSC/PAL channels.

### **VideoBank**

VB Live Encode/Logger is a video capture and encoding device providing high- and low-resolution video along with data tagging.

### **ela**

Argus 200/250 are 4:2:0 encoder boards supporting MPEG-2 and MPEG-4 and encoding at a 15 Mbps rate.

### **olicon**

Volicon will showcase its video processing system, comprised of a video encoder and streaming engine.

### **ghtrope Media Systems**

Cablecast 4.4 and Video Spyglass by Media Control Systems, offer intelligent monitoring of motion, sync loss and audio.

## **DIGITAL PROCESSING**

### **Image Video**

The new IMD-1 provides for in-video UMD/tally with embedded audio metering/demux.

### **ommunications specialties**

Pure Digital Fiberlink 7250 is a series of all-digital RGB transmission components, supporting UXGA resolution and stereo audio.

### **Crystal Vision**

Safire HD is an HD chroma-keyer for all common HD formats and SD.

### **DVEO**

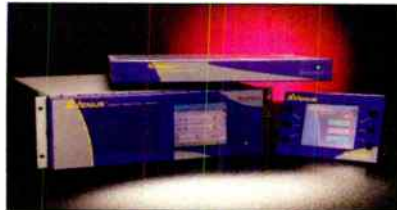
FireBridge is an HDV to DVB-ASI converter with FireWire input.

### **e-mediavision.com**

The X-View is a multi-image display processor system for creating high-resolution virtual monitor walls.

### **Ensemble Designs**

Ensemble Designs will showcase the latest developments in its Avenue and BrightEye product lines.



*Ensemble Designs Avenue*

### **Evertz**

The 7772 Series codecs are based on wavelet compression and provide 4:2:2 10-bit processing.

### **For-A**

The FA-9000 is an all-in-one signal processor with 12-bit technology and accommodates SD, HD, audio, analog and digital signals.

### **Hotronic**

The ATS51 single/dual channel TBC/frame synchronizer features a digital comb filter to provide full bandwidth output signals to VCRs, camera or satellite feed.

### **Kramer Electronics**

The SP-10D is a digital video processor featuring standards and format conversion, TBC and processing amplifier.

### **KTech Telecommunications**

The HAC-1000 is an HDV-to-ASI converter for mounting directly on cameras. The DVM-2000 GigE decoder will also be featured.

### **Laird Telemedia**

Laird will show the LTM-6000D standalone media converter with time-code insertion.



*Laird Telemedia LTM-6000D media converter*

### **Media Links**

The MD2500 HD is a video transport system for HD and SD content delivery over 270 Mbps telco circuits.

### **Network Electronics**

The SDI-IP-GTW is a gateway for transmission of uncompressed SDI over IP.

### **PESA Switching Systems**

PESA will showcase digital processing equipment from its recently acquired Fortel DTV division.

### **Prime Image**

Time Tailor HD/SD with Editware FastTrack is a processor that allows video programming runtime to be shortened in real time.

### **Snell & Wilcox**

The IDEQ series modular decoder/synchronizers feature 12-bit processing, synchronization and noise reduction.

### **Telecast Fiber Systems Inc.**

The G2 CopperHead is a new camera-mounted fiber transceiver with digital processing.

### **Wegener**

Wegener will showcase the latest developments and offerings in its Compel line of network control and transport stream processors and multiplexers.

## **FORMAT CONVERSION**

### **Astro Systems Inc.**

The SC-2055 scan converter features interchangeable interface options and is designed for dual-link SD/HD SDI and analog component video.

### **Axon Digital Design**

Axon, distributed by Nvision, will show Synapse TWINS 2HS10 HD-to-SD downconverter methodology providing two conversions channels per card.

### **Blackmagic Design**

Multibridge Extreme is an all-in-one bidirectional converter featuring very high speed capture, conversion and playback.

### **Cobalt Digital**

The 8821 is an HD downconverter card for Open Gear frames.

### **Gefen**

A new DVI-to-SDI conversion unit allows DVI video components to be accessed and integrated with SDI equipment.

### **Grass Valley**



*Grass Valley Canopus ADV700*

The Canopus ADV700 provides bidirectional analog/DV conversion for both Microsoft Windows and Mac OS. The ADV700 features a 19-inch rack-mountable design, RS-422A control, as well as support for LTC timecode and external synchronization.

### **Snell & Wilcox**

Housed in a compact, 1RU package, the Quasar HDTV upconverter uses motion estimation based on Snell & Wilcox's Ph.C technology to pro-

duce clear and sharp HD outputs from a variety of SD inputs.

The new Kudos Plus line of compact standards converters will be demonstrated.

### **Telestream**

The latest version of the FlipFactory file conversion products, including Flip4Mac, will be featured.



*Telestream Flip4Mac*

### **Teranex**

The Teranex 1RU is a two-channel, low-profile DTV format converter with a large array of audio/video I/Os and is designed to ingest any feed, synchronize it, and convert it to the desired SD or HD output.

### **TV One**

The new C2-7300 is a dual-channel HD unit designed to convert and process SD/HD SDI, DVI and analog component signals.

## **STANDARDS CONVERTERS**

### **Brick House Video Ltd.**

The Proteus standards converter now features aspect ratio conversion and lip-sync correction.

### **Crystal Vision**

The ADDEC-100, -200 and -300 12-bit decoding converters can convert composite NTSC/PAL, Y/C or YUV to SDI.



*Crystal Vision ADDEC decoders*

### **Snell & Wilcox**

The new Kudos Plus line of compact standards converters will be demonstrated.

### **Video International Development Corp.**

Video International Development will showcase the latest in the company's line of international broadcast standards conversion equipment.

**SIGNAL PROCESSING, PAGE 76**



## Signal Processing

CONTINUED FROM PAGE 75

### Pro-Bel / Vistek Electronics

The CIPHER is a new standards converter accommodating SD and all primary HD standards.

### CLOSED CAPTIONING, ETC.

#### Computer Prompting & Captioning Co.

CPC will demo MacCaption-DV and MacCaption-NLE/MPEG closed captioning technology for the Mac.

#### GlobalStreams Inc.

A new 1 GHz switcher card upgrades capabilities for the GlobeCaster Studio 4000 and 8000 systems.

#### Keywest Technology

The MediaXtreme MX7 digital signage system supports two DVI/RGB channels.

#### Link Electronics Inc.

Link will demo new closed-captioning technology and television conversion, processing and distribution equipment.

#### Softer-USA

Softer will show the Swift 5 captioning and subtitle system. Also featured,

the Swift TX for automated caption and XDS transmission.

### Triveni Digital

The latest developments in the SkyScraper system for point-to-point delivery of content are featured along with the newest offerings in StreamBridge and other product lines.

### PERIPHERALS

#### AJA Video

KONA 3 is a new uncompressed capture card for SD, HD and dual-link 4:4:4:4 HD.

#### DNF Controls

DMAT-O-EZ sports event controller facilitates slow motion replays and highlight list creation and play-out.

#### DVEO

DVEO brings FireCaster for HDV for real-time delivery of HDV originated MPEG-2 streams from Sony Z1U and JVC 100U cameras.

#### Miranda Technologies

The XVP-811iHD/SD up-, down- and cross-converter manages aspect ratio conversion with embedded control signals.

## TELECINE & COLOR CORRECTION

### Celco

The Firestorm 2 is a low-cost digital film recorder combining high quality and speed.

### da Vinci Systems

The Resolve digital mastering suite has been expanded into three configurations to fit specific applications.

### Digital Vision

The DVNR 2K RGB is a new image processing system providing real-time video processing and operating at 15 fps over HSDL links.

### Eyeheight

The canalettoMDi is a color corrector for 1920x1080 images.



Eyeheight canaletto color corrector

### Imagica

Imager HSK is a CMOS sensor-

based 35mm scanner for conversion film to 4K/2K.

### Nextamp

The Nextamp NexGuard Screener is an MPEG watermark embedding system combined with DVD burning and label printing.

## DATA & WEBCASTING

### Fraunhofer IIS C2507M

At the AV Alliance booth, Fraunhofer will demonstrate A/V streaming using a combination of AVC and MPEG-4 technologies.

### Optibase

Optibase will show a new AVC H.264 MPEG encoder that allows existing IPTV customers to seamlessly convert blade switching from MPEG-2 to MPEG-4.

### T-VIPS

The TVG 410 is an SDI-to-IP video gateway for transmitting uncompressed broadcast-quality SDI via IP networks for backhaul and media exchange purposes.

The TVG420 MPEG-to-IP video gateway transmits and receives compressed video over IP. TVIPS Connect manages video over IP networks.



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# Routers & Switchers

by Susan Ashworth

While flashy new solutions can always be found at NAB, the solid, dependable solutions—like routers and switchers—remain at the heart of a broadcast facility. At NAB2006, the next-generation of technologies offer to make behind-the-scenes routing and switching look seamless, whether routing signals within a facility, handling live switching or distributing final signals to air.

## PRODUCTION & MASTER CONTROL

### Brick House Video

Callisto range hybrid SDI/composite switchers offer push-button control and feature a new audio module and push-button controls on the front panel; Callisto HD will also be shown.

### Broadcast Pix

Broadcast Pix Scripts is an advanced



Broadcast Pix Scripts

memory system for Broadcast Pix production switchers that combines memories with recalls of graphics, clips and camera moves; also on hand—new camera control software and PixMaster Software.

### Echolab

Nova identity4 has industry standard look-ahead preview architecture; Optima digital switchers feature 4:2:2, ITU-R-601 video processing in NTSC or PAL and feature the Echolab mix-and-match I/O unimodule system.

### Grass Valley

The Kayak switcher line now includes an SD version that can be upgraded to multiformat SD/HD production with a simple software upgrade. The MatchDef option for Kayak provides a series of internal high-quality video input scalars, giving Kayak operators the ability to seamlessly insert SD sources into an HD production, HD sources into an SD production, and/or to cross-match dissimilar HD formats into either an HD or an SD project.

Ignite HD integrates a switcher, audio mixer and teleprompter all in one. It's available with one to four M/Es, up to 32 control ports and is completely scalable from 24 to 93 video inputs and 24 to 96 audio inputs.

### GlobalStreams

GlobalStreams X1 is a broadcast-quality, integrated 4-input production

switcher, CG, framestore and chroma-keyer; a 1 GB switcher card upgrades the graphics capability of the GlobeCaster Studio 4000 and 8000, both of which also get a new HD output card.

### Harris/Leitch

IconMaster combines critical master control functions with multilayer integrated branding and can be combined with other applications to create a same-frame, plug-and-play system; IconStation branding combines logo insertion with multiple real-time data-fed crawls and a squeezeback DVE; NEO-based, IconLogo is a modular branding solution.



Harris IconMaster

### Ikegami

The HSS-3000 large production switcher can input HD, SD, or SDI signals; a total of 96 inputs and 64 outputs can be supported, with all output

signals fully assignable. The HSS-3000 offers four M/E's (Mix/Effects buses), with either HD or SD signals assignable to each M/E.

A new, smaller counterpart—the HSS-300—features 2ME and 1ME control panels.

### Miranda

Imagestore Intuition SDI channel branding processor now has A/V clip play-out capability that improves the output of multilevel graphics over moving backgrounds; HD monitoring capabilities for the Kaleido Alto-HD multi-image display processor provides advanced A/V probing.



Miranda Kaleido Alto-HD

### Pro-Bel

Masterpiece next-generation master control switcher now features a HD DVE and the option to install Dolby-E decoders and logo storage.

ROUTERS, PAGE 82

## Homeland Security Solution

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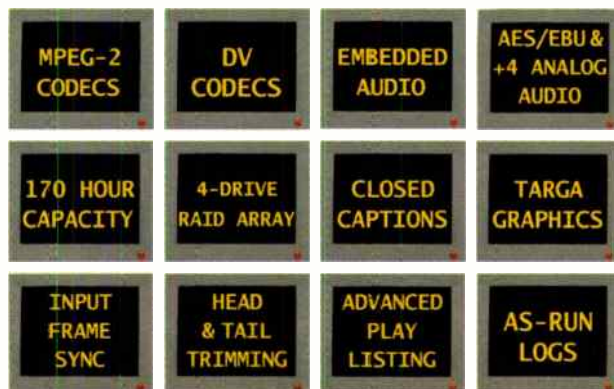
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## Batteries

CONTINUED FROM PAGE 36

### Electronic Theatre Controls

The Congo lighting control board offers control over moving lights, conventional fixtures, LEDs and media servers.

Sensor+ SineWave dimming technology eliminates lamp filament noise and saves on energy bills and replacement costs. The Source Four EDLT (enhanced definition lens tube) option is available.

### Frezzi Energy Systems

Micro Fill lighting stick kits are small quartz and HMI lights for smaller cameras. The line includes the Standard, Dimmer Control Micro-Fills and the Micro-Sun Gun, which equals a 40 W quartz lamp in brilliance. LED on-camera lights and Frezzi 200 W and 400 W lighting kits will also be shown.



Frezzi Energy Systems portable lighting kit

### IDX

The dimmable X3 is an on-board LED camera light that draws 11 W and supplies the illumination of a 35 W source, has a 5600 K color temperature and 10,000 hour lamp life.

### K5600

The Joker Bug 800 is an 800 W HMI daylight lighting fixture with a wide beam and increased output. It features low current draw, allowing combinations to be used on 15 or 20 amp circuits.

### Kino Flo

ParaBeam Studio Luminaires are DMX-controllable dimming/switching studio instruments that provide as much light as a 2,000 W incandescent studio fixture. Vista Beam Studio Luminaires are DMX units that provide as much light as a 6,000 W tungsten fixture.

ParaZip Studio Luminaires are DMX variable control fixtures that display a wide softlight beam. Location Lighting Luminaires are small handheld units.

### Litepanels

The Litepanels 1x1 is available in daylight flood or spot, and tungsten flood versions with a full dimming range and no color shift.

A DV battery adapter plate that

snaps onto the Mini Flood or Spot and allows either fixture to operate from two standard camera batteries for up to eight hours will also be shown.

The Mini 32 is an LED instrument that provides 3200 degree K softlight.



Litepanels LED lighting fixture

### Lowel Light Mfg. Inc.

Fluo-Tecs studio fluorescent units are available in five dimmable and nondimmable models. All use 55 W daylight or tungsten lamps. Dimmable models can be used with the IR DMX remote handheld controller.

Also featured are location lighting kits, controls, mounts and other lighting products.

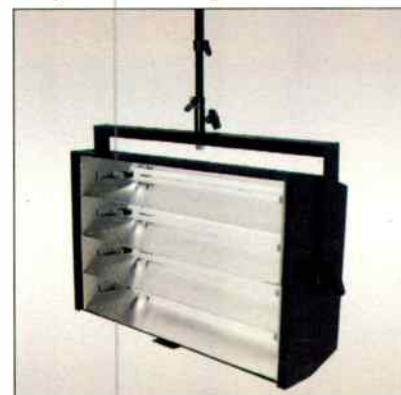
### Matthews Studio Equipment

Road Flags is a new, portable, lighting control system constructed in 4-

by-4-foot flag panels.

### Videssence

Power Key is a reduced power lighting system available in one, two or four lamp fixtures. It produces 71 percent more light output from 55 W Biax lamps than similar products.



Videssence multiple lamp instrument

The Baby Basekit and Shooter Kit are lightweight field lighting kits.

### Westcott

The Spiderlite TD3 on-location light features two controls, allowing the operator to use from one to three 50 W tungsten halogen or 27 W daylight fluorescent lamps. It has rod points for softbox attachment. It can be operated with sealed lead-acid or NiCad battery packs and an inverter and used a portable light source.

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Key Features	Your System	Vertigo XG	Vertigo XG
Video Formats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SDI or HD/SDI inputs with A/B switching in a single or dual channel configuration
Format Conversion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HD/SD cross conversion with VxScaler module
Audio	<input type="checkbox"/>	<input checked="" type="checkbox"/>	AES - 16 embedded and 8 discrete stereo channels
Graphics Layers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Unlimited layers for multiple animations, tickers, crawls, and DVEs
Clip & Graphic Formats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Support for MOV + alpha, AVI + alpha, WMV, MPEG, DV, DivX, plus over 150 image file formats
Video Bypass	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Auto-detect bypass on hardware, power, or software failure
Station Integration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Integration with MOS newsrooms, station automation, and traffic with full as-run logging
Data Support	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Drag & Drop data linking from databases, spreadsheets, web & live data feeds
Reliability	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Up to 1 TB internal RAID with redundant power, networking & fans
Future	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SD-HD field upgradeable

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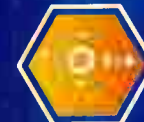
Content Editing



Real-Time Data Management



Payout Control



Authoring



Asset Management



Work Order Management





## Routers

CONTINUED FROM PAGE 78

### Ross Video

Version 16 software for the Synergy SD digital production switcher provides new device control interfaces and operational enhancements; Synergy MD/X multidefinition productions switchers offer an enhanced range of formats.

### Snell & Wilcox

New features for the Kahuna production switcher include the Kahuna IMPAKT, which offers up to four twin-channel 3D DVEs that users can apply in either SD, HD or both, and that work in source-based or bus-based modes, allowing both background and fill and key manipulation in a suite of 3DVEs.

New compact 2-M/E and 3M/E panels for Kahuna target production trucks and small studios.



Snell & Wilcox Kahuna

### TV One

The CC-300 CORIO console is a video production switcher-type interface for the C2-7000 HD video processor, with two rows of 14 buttons for preview and programming of mixed format sources.



TVOne CC-300

## ROUTING SWITCHERS

### Avocent

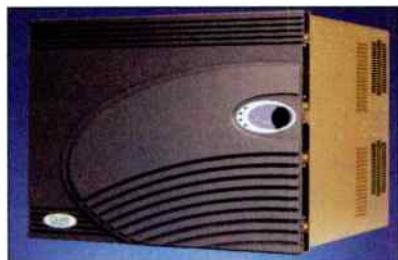
The Matrix Switch AMX5000 8x32 analog switch supports multiplatform server environments.

### BGS

The AXIA console and routing system moves signals around a facility on Cat 5 or 6 without clashes or dropouts.

### Evertz

The Quartz Xenon router is now integrated with Evertz VistaLINK SNMP software.



Quartz Xenon

### Force10 Networks

Force10 E-Series Gigabit and 10 Gigabit Ethernet switch/routers offers up to 1260 GB Ethernet ports or 224 10 GB Ethernet ports per chassis.

### Gefen

8x1 DVI switcher is capable of connecting up to eight HD DVI sources to one HD DVI display.

### Harris/Leitch

The Platinum small-footprint, multiformat routing switcher provides signal routing up to 256x256 in 15RU and 512x512 in 28RU.

### JLCooper Electronics

Gangway 16 is an RS-422 16-point switcher with interfacing options, 19 RS-422 ports on the rear panel and a RS-422 control input; MCS-3000 XL is an 8-channel motorized fader controller.

### Knox Video Technologies

The RSII SDI 16x16 SDI routing

switcher comes with or without digital audio, with optional front-panel, IP or standard RS232 control.

### Kramer Electronics

The VS-162AVRCA 16x16 A/V matrix switcher features multiple sync options, with video bandwidth that extends to over 90 MHz.

### Laird Telemedia

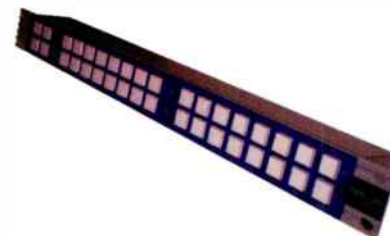
The LTM-DV4X1A FireCut Plus 1394 DV switcher accepts FireWire inputs from up to four DV devices and has the ability to lock and switch any of the four sources.



Laird Telemedia LTM-DV4X1A FireCut Plus

### Network Electronics

VikinX Sublime routing switchers offer a range of matrix sizes and cover signal formats from analog A/V to HDTV; the SL-D32P is a 32-port configurable data router provide machine control routing.



Network Electronics VikinX Sublime

### Nvision

The NV8288 mobile digital video router features 288x576 SWB in 10RU and 576x576 SWB in 20RU; Nvision will also exhibit the CR Router Series, which supports SD, HD and AES formats in 16x16 1RU and 32x32 2RU sizes.

### PESA/Fortel DTV

The Cheetah 1024XR is a two-rack system that offers low power consumption, N+1 power and dual inter-

nal control and supports signal routing for SDI, HD and ASI in either coax or fiber I/O; the Cheetah 512XR, new fiber option cards and a new 36 RU 2048x2048 audio router will be displayed.

### Ross Video

Ross NK compact multidefinition routers feature new enhancements and a new 72x72 version.

### Sierra Video Systems

Lassen HD routers use multirate digital video boards capable of passing several formats and are available with 2-channel digital audio or analog stereo audio; Ponderosa SDI/HD routers have stereo analog or AES digital audio in three frame sizes; the Sierra NLE is a high-bandwidth multi-format router for NLE systems.

### Sony

IXS-6000 and IXS-6700 hybrid routing switchers support SD/HD video, AES digital audio and RS-422 control and can be used with Sony MVS and DVS production switchers or as standalone routers.



Sony IXS-6700 Routing Switcher

### Utah Scientific

Utah Scientific will demonstrate the Utah-400, Utah-400/64, Utah-400/DATA and the Utah-400 with a fiber-optic I/O option.

### Vocality International

The V25 supports two telephone circuits including secure voice, network connectivity and four wire audio circuits.

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# Test & Measurement



by Mary C. Gruszka

**A**t NAB2006 there will be many new products for measuring the final output of the signal chain. Whether analog or digital, 8-VSB or COFDM, there will be measurement equipment to keep tabs on the signal, including some innovative ways of measuring actual coverage area.

## IP

### JDSU (formerly Acterna)

JDSU will introduce the DTS-330 IP video multicast analyzer and an optical test module for its HST-3000 handheld services tester for PON-based FTTx networks.

JDSU will also show new features for its FST-2802 Ethernet, IP and fiber-channel tester.

### Pixelmetrix Corp.

The DVStor-IP is a hard-disk system that allows non-stop simultaneous recording of multiple channels of transmitted IP video.

### Sencore

The VideoBridge 200 series of IPTV monitoring tools features GigE interface support, MDI media window, enhanced MPEG analysis, as well as thumbnail decoding and channel view.

The MIP1860 MPEG-over-IP cross layer analyzer and traffic generator provides stream duplication for hundreds of streams, generates different impairments for reproducing real-life situations and real-time monitoring for hundreds of MPEG-over-IP streams, simultaneously.

## MPEG

### Astro Systems Inc.

The portable TS-7805 MPEG-2 transport stream analyzer features TS bit-rate analysis of PID map display, PCR jitter measurement, PTS/DTS analysis, and PSI structure analysis.

### Bluetop Technology

The BTA-5100 transport stream analyzer features 14 analyzing modules.

The Bluetop transport stream capturer captures and records MPEG-2 transport stream data.

### K-WILL Corp.

K-WILL will demonstrate the VP21P for picture quality analysis of HD baseband video in 720p.

K-WILL also will show the QuMax-

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- > PMCP
- > Multiplexer PCI Card
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## Test & Measure

CONTINUED FROM PAGE 84

2000 for real-time A/V quality analysis.



K-WILL's QuMax 2000 real-time A/V quality analyzer

### Metaglug Corp.

Metaglug will show MXFixer, a waveform monitor for metadata.

### Pixelmetrix Corp.

Pixelmetrix Corp. will demo new capabilities for its DVStation product line.

### Rohde & Schwarz Inc.

The DV-ESA is a software-based video decoder, streaming interface for the Rohde & Schwarz DVM.

The DVM400 allows users to view video content with the software video decoder directly on the integrated high-resolution display.

### Tektronix Inc.

Based on the MTX-100, the new 3RU half-rack MTX100A MPEG recorder and player uses PC components including Windows XP and a Tektronix architecture.

The RTX100A ISDB-T RF signal generator is now available worldwide.

### Triveni Digital Inc.

The StreamScope M-40 remote con-

stant stream monitoring appliance monitors, measures, records and analyzes DTV streams.

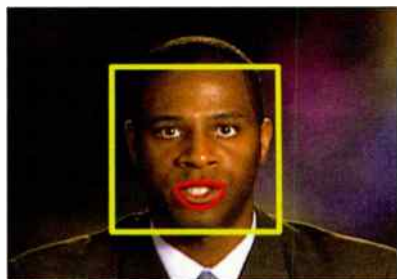
## AUDIO

### DK Technologies

The PT8612 HD-SD test signal generator is a new option for the PT5300 HD-SD VariTime sync generator that offers a test pattern to check lip-sync.

### Pixel Instruments Corp.

LipTracker lip-sync analyzer measures the lip-sync error in a program stream by comparing the relative timing of selected sounds in the audio.



Pixel Instruments Liptracker

### Prism Sound

Prism Sound will launch a major update to the software for its dScope audio test system.

### TSL

The AMU HD range of monitoring gear allows users to migrate existing SD audio and video monitoring to HD.

### Ward-Beck Systems

The AMS8 Series multichannel audio monitors feature audio-level meters on all inputs, DolbyE/AC-3 decoding available with analog audio and more.

## VIDEO

### Astro Systems Inc.

WM-3004 and WM-3007 waveform monitors feature dual displays that show waveforms at the lower half and the picture in the upper half of the display.

### Evertz

Evertz will show multi-input signal display processing—MVP, VIP and MWP, with further additions for input formats, signal monitoring support and media wall applications.

### Eyeheight Ltd.

The legalEyesSDi legalizer now handles digital composite signals.

### Hamlet Video International

The Flexiscope Micro base unit is based on a bespoke host processor with plug-in application modules.

Hamlet will also show VidScope-vx, a test and measurement system running entirely in software.



Hamlet's compact Flexiscope multipurpose monitor

### Harris

The Videotek VTM series is a fully customizable, multifunction test and measurement console.

Harris will also introduce enhancements to the Video TVM series.

## Leader Instruments

Leader will show its line of A/V, MPEG and RF monitoring equipment.



Leader LV 5750 video waveform monitor

## OmniTek

TQ for SD and HD broadcast monitoring applications features waveform generation technology.

OmniTek will also release new Version 2.0 software for the PQA Picture Quality Analyzer, and new XR software Version 2.0.

## Pro-Bel

The VALID8 is a new HD, 8-channel audio version of the Vistek VALID (Video and Audio Line-up and Identification) system.

## RTI

RTI-Research Technology International will highlight its Pro Line 4100 DLS Betacam and the 5100 DVCPro and DVCAM recycling and rejuvenation systems. It will also demonstrate TapeChek videotape inspector/cleaner/rewinders.

## Tektronix Inc.

A new VGA option for the VM5000 automated video signal analyzer automates video signal analysis and VSA standards compliance testing for analog RGBHV signals typically communicated via VGA, DVI-I or DVI-A interfaces.

Tektronix will also show enhancements to its WVR7100 and WVR6100 rasterizers.

## RF

### A.N.T. Antenna Nord telecomunicazioni

Nord telecomunicazioni will showcase its ANT132 NTSC/PAL/SECAM quality control card.

## Microwave Advances

The MicroSynth is a handheld, lightweight, battery operated frequency generator. The company will also show the MWA-23SM phase-lock loop circuit.

## Modulation Sciences Inc.

The MSI-4400 8-VSB analyzer provides a complete display of critical 8-VSB parameters.

TEST & MEASURE, PAGE 88

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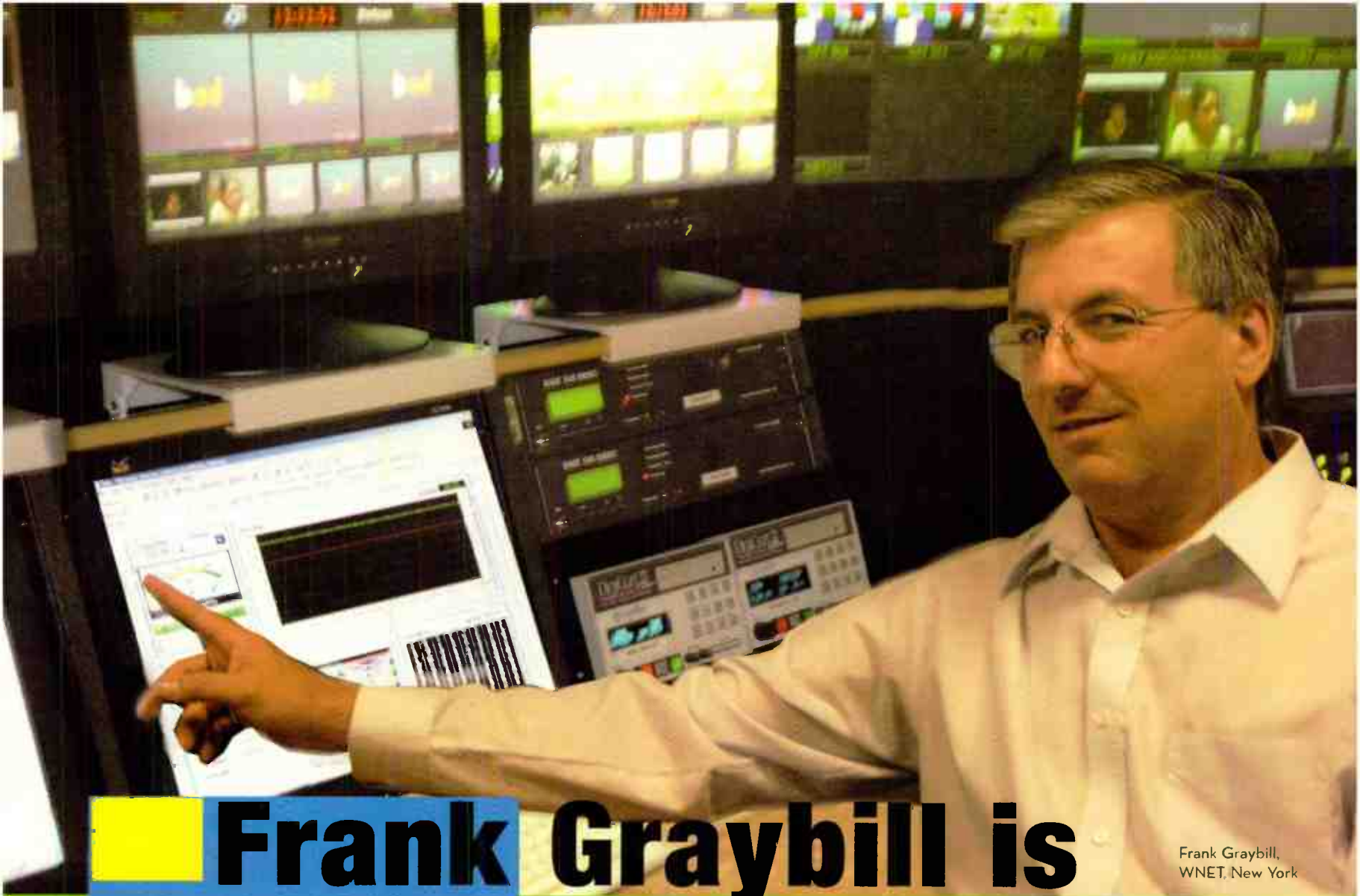
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**NAB Booth SU 796**





Frank Graybill,  
WNET, New York

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*"We needed 8vsb Analyzers for both WNET DT New York and WLIW DT Plainview, NY. I made a list of parameters that we needed to analyze and priced equipment. I thought we'd have to spend \$30,000 or more, then we discovered the 8vsb Analyzer from Modulation Sciences for under \$10,000."*

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## When WNET Needed 8vsb Analyzers, Frank Picked MSI

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World Radio History



## Test & Measure

CONTINUED FROM PAGE 86

### Promax Electronica S.A.

Prodig-5 TV Explorer features new functions for the installation, maintenance and surveillance of terrestrial, satellite and cable TV systems.

### Rohde & Schwarz

The FSH3-TV is a universal combined TV and spectrum analyzer.

Rohde & Schwarz will also demonstrate the SFU, a DTV multistandard platform with digital signals for antenna, satellite and cable.

### Sencore

The Atlas MRD2187A modular receiver decoder provides the same

flexibility as the MRD3187 and provides eight configurable I/O slots.

### Z Technology Inc.

Z Technology will demonstrate several RF measurement tools, including the DM1010 DTV measurement demodulator, WinDM-Pro, DSS5800 DTV coverage measurement/mapping system, DSS5600T system for DVB-T signals, and more.

## SIGNAL GENERATORS & CHARTS

### Astro Systems

The SL-7036 sync generator outputs and genlocks HD and SD, NTSC, and PAL.

### DSC Labs

The RollyChart, DSC Lab's latest variation of precision test charts, features ChromaDuMonde or other CamAlign charts rolled into a slim tube.

### ESE

ESE will display the ES-102U GPS master clock/timecode generator and ESE ES-185U/NTP, an enhancement to the ES-185U that includes NTP output, etc. Also on hand, the ES-110, which generates a stable source of 10 MHz and 1 PPS using GPS data.

### Horita Co.

The UTG-50 universal timecode generator produces LTC at 23.976, 24, 25, 29.97, and 30 fps.

### Lynx Technik AG

The Testor is a multiformat SD/HD video and AES test signal generator.

### RTcomUSA Inc.

The N\$G-525S multivideo signal generator inspects analog, digital, TV, DTV, audio, SPIF and HDMI.

## REMOTE

### Audemat-Aztec

The Transmitter Remote Control IP2 Choice Version 2 is a modular system for remote management and monitoring that can be configured to connect to all the equipment at a remote site on three serial ports, 128 digital inputs, 40 analog inputs or 64 relay outputs.

### Burk Technology

Burk Technology will display new products and updates for the company's line of broadcast facility control systems.

### Davicom

Davicom will demonstrate the next-gen Davicom MAC remote monitoring and control system, and introduce MacComm Version 5 communications software for Davicom MAC units. Davicom will also demonstrate the Scientel dual video presence detector.

### Newpoint Technologies

TrueNorth is a monitor and control solution built on Newpoint Compass Server technology.

The company will also show Newpoint Mercury, a self-contained universal element manager.

### Statmon Technologies Corp.

Statmon will demonstrate Version 6.1 Axxess remote control and facility management system, and the EIF-32+, a 1RU, embedded interface unit.

NAB booth # SU5193

# fischer broadcast connectors

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# Transmission



by Bob Kovacs

The past few years have been a whirlwind for transmission equipment vendors, as the digital transition mandated sales of more than 1,000 transmitters and antennas, and miles of transmission line. In addition, new towers were constructed and old towers strengthened to support digital broadcasting.

Now that the transition is nearly complete, sales of big-ticket items are slowing somewhat. However, many manufacturers wisely took the revenue from the past six years and wisely invested in R&D, leading to many new products and technologies.

## TRANSMISSION

### Acrodyne

The Quantum high-power UHF transmitter, for analog or digital broadcasting is designed to reduce electrical operating costs. Other features include the ability to operate without a sharply tuned filter at the transmitter's output and elimination of crowbar circuits for protecting the digital transmitter's IOT.

### Altronic Research

The 6700 Series of wide-bandwidth, high-power RF loads are constructed

with proprietary film resistors, and provide operation beyond 1 GHz.

### Armstrong

Armstrong will feature solid-state transmitters for VHF and UHF with power outputs as high as 16 kW. The UHF version uses LDMOS transistors for high linearity and smooth bandwidth.

### Axcera

The Axciter is an adaptive ATSC modulator that uses Axcera Intelligent Modulation and adaptive digital equalization to compensate for linear and nonlinear distortions, resulting in an extremely stable broadcast signal. The high-power Visionary line of IOT transmitters for digital and analog broadcasting will also be shown.



Axcera digital transmitter installed at Mt. Wilson

### Bext

The new dual-mode modulator with analog and digital capability can be switched between analog, ATSC and DVB-T and supports 16-VSB and COFDM data rates up to 31.67 Mbps. The company's new DTT solid-state digital transmitters with power outputs up to 10 kW will also be shown

### DB Elettronica

The KD Series is solid-state line of low- to mid-power DTV transmitters with ratings from 2 W to 20 kW.

### DMT

DMT will showcase its line of solid-state TV transmitters and translators with LDMOS technology.

### Electrosys (formerly Itelco)

A new IOT transmitter that's rated up to 100 kW for DTV operation and 300 kW for analog operation will be featured.

Also being shown is the Windows-based ESS Supervisory System for monitoring and controlling transmitters.

### Harris Broadcast

DVB-H and FLO modulation schemes for mobile TV will be spotlighted, along with a new control cabinet for the Harris line of

PlatinumCD VHR DTV transmitters.

### KTech Telecommunications

The KTech HPA-30KU is a high-efficiency L-3 oil-cooled CEA IOT high-power MSDC amplifier producing 30 kW, when driven with a 100-W low-power transmitter.

### Larcen

A range of VHF and UHF DTV transmitters, including the solid-state VHF MD Series will be featured. Also highlighted—the Magnum and Landmark UHF DTV transmitters.

### Pineapple Technology

The LTX is a new low-power transmitter series, available up to 200 W and intended for use as a repeater or gap filler.



Pineapple Technology 1 KW amplifier

### Rohde & Schwarz

The SV702 is a DTV exciter can be used in full-power transmitters and also as a low-power transmitter to fill coverage gaps. The company's line of water-cooled medium-power UHF transmitters will also be on hand.

### Superior Broadcast

Superior will show its SBP30UHF 30 kW UHF Diacode transmitter, Superior 10 kW IOT UHF transmitter, along with its line of medium-power solid-state systems.

### Thales Broadcast (Grass Valley)

The DCX Paragon transmitter combines Soft Arc Technology with MSDC IOTs.

Grass Valley will also show the Ultimate/Optimum for medium power applications.

## ANTENNAS

### Dielectric

The TFU-UT bowtie slot turnstile for low-power UHF broadcasting supports simultaneous broadcasting of

TRANSMISSION, PAGE 92

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## Transmission

CONTINUED FROM PAGE 90

two channels without the need for a separate combiner.

The Dualband-TUV for simultaneous VHF and UHF transmission will also be featured.

### Electronics Research Inc.

A recently developed stretch line channel combiner, a simpler alternative to traditional systems for combin-



Dielectric transmission tower under construction

ing multiple television signals into a single antenna will be featured.

### Jampro

The RCCC DVB-T/DTV mask filter and combiner saves space in the transmitter room by performing combining channels into a single transmission line, as well as providing mask filtering.

### Radio Frequency Systems

A new low-profile superturnstile UHF antenna features a structural fiberglass radome and is capable of 40 kW opera-

tions and with gains up to 16.1 dB.

The 611-CP, a top-mounted circularly polarized omnidirectional antenna for supporting low-band VHF and with single- or dual-feed-line systems will also be shown.

### SWR

The Eclipse is a UHF antenna featuring a slotted coaxial design and fiberglass radome, 240 kW capability and available with custom patterns at no extra cost.

## TUBES & COMPONENTS

### CPI-Eimac

CPI's current line of IOTs includes the K2D130W with 31 kW average power output. CPI lays claim to one-person change-out of its IOTs.

### e2v

The Energy Saving Collector IOT, or ESCIOT, is a multistage depressed collector tube initially targeted for UHF DTV applications, but increasingly used to save on power bills in analog UHF transmitters.

### L-3

The Plug-In IOT 70 can be used in new or existing transmitters and can be installed without the expense of a new trolley. The L-3 version of the MSDC IOT, the Constant Efficiency Amplifier will also be featured.

### Thales Components

Air- and water-cooled IOTs for UHF broadcasting, including depressed-collector versions for high efficiency will be featured. Thales will also showcase medium- to high-power IOTs, available in both standard- and depressed-collector versions.

## TOWERS

### Allied Tower

Allied will show its line of guyed and self-supporting towers as well as accessories such as microwave antenna mounts, ice shields, vertical waveguide ladders, tower-to-building waveguide bridges, platforms and warning spheres.

### Dielectric

Dielectric's line of antenna-support structures includes guyed and self-supporting towers, along with antenna mounts and tower accessories.

### Magnum Tower

Magnum provides tower design and fabrication services, and has a line of knocked-down tower segments with face widths up to 15 feet.

### Radian Communications

Radian will display its extensive line of towers, masts and antenna supports.

### Stainless and Doty Moore

Stainless/Doty Moore provide guyed towers up to 2,000 feet and self-supporting towers of all shapes and sizes.

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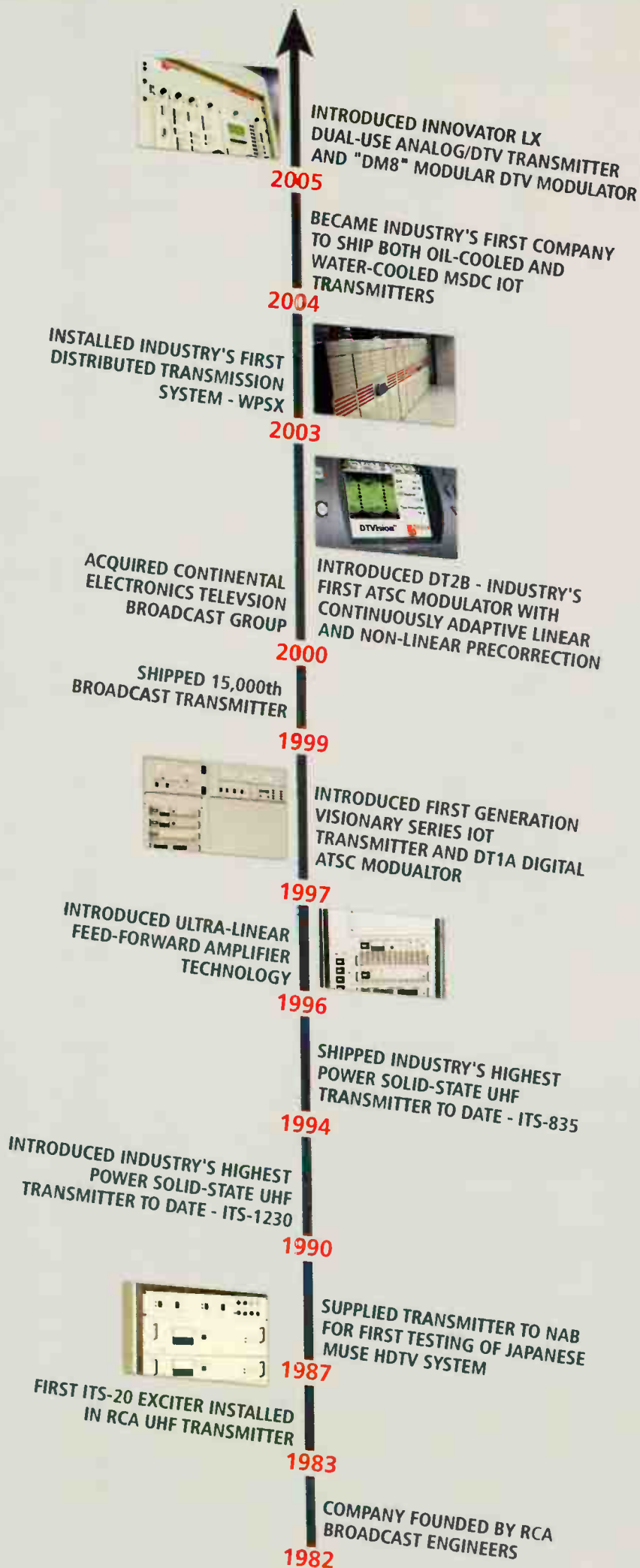
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**Broadcast Engineering Magazine**  
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**TV Technology Magazine**  
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As a leader in DVB-H transmission systems



**Television Broadcast Magazine**  
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"Dual Use" digital/analog transmitter technology

**2004**



**Digital TV/Television Broadcast Magazine**  
Top Innovation Award  
Innovator HX, the first VHF transmitter design of the 21st century

**2003**



**Broadcast Engineering Magazine**  
Pick Hit  
DTxA2B Distributed Transmission Adaptor



**Digital TV/Television Broadcast Magazine**  
Top Innovation Award  
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# Graphics

by Geoff Poister

In a world of expanding viewing options, graphics are becoming ever more important to producers developing content for screens both big and

small. Several of the industry's largest graphics providers have been acquired since the last NAB, but their parent companies continue to show a commit-

ment to expanding and enhancing their popular graphics product lines.

## 3D ANIMATION

### Digital Voodoo/Bluefish444

Symmetry Version 3.0 is a multiformat, Avid-certified digital intermediate acquisition solution.

The company will also debut the Catalyst 2K/HD/SD analog/SDI video card for Windows and Linux.

### Maxon Computer

HAIR is a fully integrated CINEMA 4D module for the creation of hair, fur and feathers.

### Vizrt

The Viz3G graphics motor for mobile telephones tailors transmission to individual phone capabilities.



Vizrt Viz3G

### Noise Industries LLC

Factory Tools for Avid AVX is a collection of 85 effects with a feature that enables users to create their own effects.

Organoptics FX provides subtle organic visual effects for the Avid line.

### Nvidia

Quadro FX 4500 SDI delivers 12-bit uncompressed SDI in 2K, HD, or SD. Quadro FX 540 Professional Video Edition delivers component HD, S-Video, and composite video along with OpenGL graphics acceleration.

Gelato 2.0 with Sorbhetto combines a production-ready final-frame renderer with interactive relighting technology.

### Orad

HDVG (Hi-Definition Digital Video Graphics) HD/SD system eliminates the need for setting a different graphics systems for SD or HD formats.

### Triangle Software LLC

Beat The Traffic for broadcasting traffic reports features 3D animation, a lower-third ticker, information user pages and traffic forecasting.

## EFFECTS & SOFTWARE

### Boeckeler Instruments Inc.

Pointmaker PVI-65 professional

GRAPHICS, PAGE 96

## LINKING TECHNOLOGY DRIVING THE FUTURE

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## Graphics

CONTINUED FROM PAGE 94

broadcast video marker draws on most HD-SDI signals.

### Newsroom Solutions LLC

24-Hour Digital Channel In A Box is a turnkey solution for digital channels that combines locally entered data and Newsroom Solutions 24-hour TickerWire automated content service.

Just In gives viewers nearly instant notification of school closings.

Always On is an isolated listing that cycles through the largest schools in the market.

SMS Service sends school-closing information directly to cell phones or e-mail.

### The Foundry

Furnace 3 for Shake automates time-consuming processes in the creation of digital VFX.

Forge is a new standalone dirt removal application.

## CGs & ANIMATION

### Avid Technology

DekoMOS 3.0 software option for Deko on-air graphics systems features a new playback controller that improves control room efficiency by remotely triggering Deko graphics.

Deko 550, 1000, 3000 and PostDeko systems will also be highlighted.

### Chyron

Lyric Pro, when combined with Chyron interFuse technology, provides the ability to create graphics in pieces. Multi-



Chyron Hyper-X HD/SD

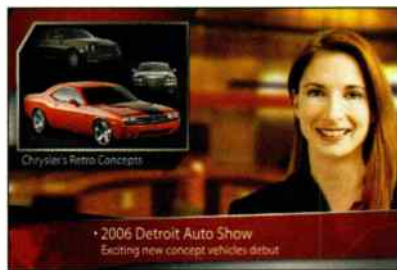
ple graphics can be merged at airtime.

Hyper-X HD/SD features advanced 3D graphics, a compressed, real-time clip player, and two software-switchable HD/SD channels.

Channel Box is an HD/SD switchable, turnkey branding system that can be used as a standalone system or integrated with most automation systems.

### Harris Corp.

Inscriber G3 CG is an HD/SD selectable CG system that offers MOS and automation interfaces and real-time animation.



Inscriber G3 CG

### Orad

Maestro is a scalable SD/HD CG system for introducing state-of-the-art 3D/2D graphics and animations within any type of broadcast. Maestro can start with just a single workstation or configured as part of a multistation environment.

### e-mediavision.com

Point-HD touchscreen broadcast presentation system allows operators to draw onto a TV picture in real time.

### Pixel Power

Clarity3000 is a single-channel HD/SD switchable CG that offers HD functionality and real-time 3D animation.

Clarity5000 dual-channel HD/SD switchable CG is a video and audio clip player option for the Clarity5000 dual-channel HD/SD switchable CG.

Pixel will also demo Newsroom Control Centre Version 4.

### VertigoXmedia

The VxScaler option for VertigoXG is a field-upgradeable module that transforms the VertigoXG CG into a broadcast graphics engine with built-in standards conversion.



VertigoXmedia XG

### Quantel

Paintbox and Picturebox sQ graphics creation and play-out systems will be showcased, both as part of larger systems and in a standalone graphics role to demonstrate integration with real-world workflows.

### VDS

Twister Paint Station is an HD paint, graphics content creation, and I/O system.

Synapse for generationQ gives the Quantel generationQ range operator direct interactive use of hundreds of professional-grade After Effects plug-ins.

FilmWorks is a collection of film effects tools for the Quantel generationQ range. Twister for Orad is a paint and graphics content creation plug-in for Orad 3Designer.

### Zandar Technologies

Z-Configurator layout editing software features a graphical user interface that allows the configuration of layouts and system set-up.

## SETS & TRACKING

### Orad

TrackVision plants virtual graphics over a sports playing field independent of camera motion.

ProSet is a high-end HD/SD virtual set system; CyberGraphics Reality integrates 3D virtual objects into a conventional studio.

## WEATHER

### AccuWeather Inc.

The Local AccuWeather Channel is an automated loop of customized local weather and news information available in HD and

SD with English and Spanish services.

Wireless Weather Premium Version 3.0 wireless weather is now available for Verizon and Cingular phones.

AccuWeather will also show Exclusive Four-Hour Predictive Radar, as well as StormMaster, which delivers precise and localized forecasts of storm cell movement.

### Baron Services

VIPIR 4.75 features a redesigned, more flexible GUI with new color-coded menus containing data product buttons.

### CDR Software

Studio wxSimulator tracks storm cells to find each cell's direction, speed, intensity, size, and integrated reflectivity.

wxView gives viewers free radar and weather forecasting tools on their PC.

wxWireless is an Internet-based Weather Wire that issues alerts for viewers over cell phones or PDAs.

### MyWeather

Weather At Hand for wireless devices provides access from mobile devices.

WeatherPod provides weather Pod-Casting in video and audio.

### Weather Central Inc.

New features for ESP:Live—3D X-Vision, Storm Vitals and TelePath provide a comprehensive set of storm analysis and prediction tools.

3D:Traffic and 3D:Live allow talent to interact with high-resolution mapping.

### Weather Metrics

The 24x7 Digital Weather.Net fully automated weather and news content management system integrates local information and data from multiple sources.

The 24x7 Digital Channel.Net content management system integrates information and data from unlimited sources.

WeatherVision.Net Digital integrates data from a weather sensing device and high-resolution camera.

### WeatherBug

WeatherBug Zoom 2.5 now includes the ability to insert live video from hundreds of hyper-local WeatherBug cameras.

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CrowdControl™ solves a major headache faced by television broadcasters providing stereo and surround soundtracks for live events. In many cases, user-selectable effects such as the so-called "Hyper Surround" mode offered by the majority of today's stereo TV receivers can dramatically mask the announcer, if crowd or audience sounds end up too loud in the surround channels due to an excited crowd or an overly aggressive mix. A new Linear Acoustic DSP algorithm developed specifically for AEROMAX-TV eliminates this problem for stereo viewers prior to transmission without impacting sound quality for surround listeners.

## AEROMAX-TV™



AEROMAX-TV Television Audio Processor is a dynamics unit for two-channel main plus SAP audio, with front-panel display and controls plus Ethernet remote control. The four-channel unit can be configured as 2+2 or 2+1+1 (stereo plus two mono channels). CrowdControl™ Dialog Protection Processing is provided for the main program audio.

**"Why can't our programs offer consistent loudness and still sound good?" - Fixed!**

Until now, solving short-term loudness problems has meant dramatically reducing the quality of the audio soundtrack – simply to fix the impact of one annoyingly loud commercial. Using standardized metadata inserted within the digital broadcast signal just prior to transmission, MetaMAX™ generates dynamic range control parameters more suited to television broadcasting, and delivered to consumer decoders where it is applied by default. Viewers are then protected automatically from loudness shifts, while the audio quality remains untouched for those who choose to experience the original, wide-dynamic range audio.

## MetaMAX™



Located at the point of transmission, MetaMAX Model LA-5151 DTV Audio Bitstream Processor is a 5.1-channel device that operates completely in the compressed domain, and protects dynamic range while controlling loudness. It enables audio to be transmitted the way producers intended, while protecting consumers from loud commercials and programs.

For more information please call toll-free 1.888.292-3117 or 717.735-3611. Or visit us at [www.LinearAcoustic.com](http://www.LinearAcoustic.com).

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# NAB2006 Exhibitors

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Dienstleistungs GmbH

C6607G

seconds to more than 24 hours. It is well suited for use in the transmission of content to different time zones, as well as for local broadcasters who want to delay program feeds for broadcast at a specific local time. among server-based delays, the 2470 is capable of maintaining single-frame accuracy over an infinite time period. Its multidrive RAID array guards against program loss, and the unit is able to restart itself without user intervention in the event of power loss.

**Established Products:** Image Server 2000 family, self-mirroring image servers  
**Philip Cox, Executive VP**  
31355 Agoura Road  
Westlake Village, CA 91361  
818 735-8222  
818 991-0360  
E-mail: [philip.cox@360systems.com](mailto:philip.cox@360systems.com)  
Web Site: [www.360systems.com](http://www.360systems.com)

1 Beyond Inc.

SL942

16x9 Inc.

SU2917

**Intro:** Chrosziel HDV mattebox and 4x4 sunshade for Canon XL-H1, JVC GY-HD100U and Panasonic AG-HVX200 with housing covering 16:9 and 4:3, filterstage for two filterholders, French flag, 16:9 insert mask, side-wing pivot mechanism, etc.; Coco-DVL power converter and Lux-DV onboard camera light for Panasonic AG-HVX200 and Sony HVR-Z1U/HDR-FX1/VX-1000/2000 series and DSR PD150/170 camcorders. Draws voltage from camera battery to operate camera and 12 V accessories.

**Established Products:** Accessories for the Panasonic, Canon, Sony and JVC cameras; 0.7X wide-angle converters; HDV mattebox/sunshade systems, studio rig follow focus, DV camera stabilizers, Bebob Zoe remote zoom controls, Lux onboard camera lights, Noga hold-it mounting systems and Easy Rig camera supports

21st Century 3D

C11631

2s2 Inc.

SL4600

**Intro:** DTS Series 20.1-inch LCD display high-contrast ratios and wide viewing angle; RD1U-F27201 Series configured with many keyboard/pointer combinations; PDD2 Series display drawer sports a 20.1 inch LCD monitor with UXGA resolution; Pivot Display Drawer starts out stored in 1RU drawer, slides out and rotates up; DSS-LEXX Digital Signage Solutions series are HD LCD watertight secured panels in several sizes; RD1U-CAR17170 Series, a rugged 1RU LCD display drawer with an optically bonded and sealed 17-inch LCD monitor.

35Digital

C8935

**Intro:** P+S Technik SKATER Scope is a compact periscope lens system with adjustable tilt element; PL, Panavision, Nikon and Leica M lens mounts; CGP35a for color grading; CineGrade film color space visualizer film-look preview processor; CMS35 color matching system; P+S Technik Mini35 image converter that connects to Canon, JVC, Panasonic and Sony HDV camcorders.

360 Systems

SU2993

**Intro:** The Remote Workstation interface allows any 360 Systems Image Server 2000 operational feature to be controlled from over Ethernet. Individual workstations can be created to perform ingest, trimming, file-management, playlist building, play-to-air, or any combination of tasks. A single Remote Workstation can be switched among many Image Servers, allowing the user to perform many tasks from a single location; designed to compensate for time zone differences in the delivery of video content, the 2470 Broadcast Time Delay can be programmed to any time interval from 20

3G Wireless LLC

C10549

5 Alarm Music

C1246

615 Music C

1959

**Intro:** Promo Accelerator, music themes written for promos for TV/radio.

**Established Products:** 615 Music Library, "Gold and Platinum" collections, Kingsize library, AMP, Promo Accelerator, Music Shop, Music Gallery, Sound Burners FX, and ZEN.

A.N.T. Antenna Nord

C139

Telecomunicazioni

**Intro:** ANT130 protocol converter for remote control/telemetry unit. Connected to radio data front-end becomes an interface to virtually any manufacturer of equipment with a known protocol.  
**Established Products:** ANT132 NTSC/PAL/SECAM quality-control card monitors—sync-tip level, burst level, audio presence and level, RF level, etc.

A.R.A.

C9947

Aastra Digital Video

C2026

**Intro:** VideoRunner Video Networking System. a multiservice networking platform for connecting studios, production centers, and distribution hubs; Model 300 HD IRD combines 4:2:2 A/V, and the latest satellite demodulation technology into a field-proven IRD family; ENC-S21 MPEG-2 encoder provides the latest in DSP-based MPEG-2 algorithm technology; ENC-A11 H.264 encoder provides picture and sound quality at bit-rates compatible with IPTV other bandwidth-challenged links.

AATON

C7737

ABE Elettronica SpA

C2030

**Intro:** DTX series DTV transmitters from 1 W to 5 kW enable analog and digital signal emission, and can be switched on-site or remotely; new digital microwave links for fixed and mobile applications. These are synthesized digital links (available in the 10 and 14 GHz bands; soon also in other fre-

quency bands); MPEG-2 encoders and multiplexers. DME 1000/SL houses a digital modulator for DVB-S or DVB-DSNG (QPSK, 8PSK and 16QAM), up to four MPEG-2 encoders and a multiplexer.

AbelCine Tech

C6136

ACARD Technology Corp.

SL1821

Accenture

SL4767

Access Intelligence

SL4806

—Film & Video Studio Monthly

Accordent Technologies

SL2240

AccuWeather Inc.

C4314

**Intro:** Local AccuWeather Channel, an automated around-the-clock loop of customized local weather and news information in HD and SD, and in English and Spanish; Wireless Weather Premium Version 3.0 is a branded, downloadable, cell phone application for Verizon and Cingular phones; weather programming for IPTV, ITV, wireless, off-deck access, Internet, digital signage, personal video, broadcast and cable; Spanish-language weather; exclusive Four-Hour Predictive Radar provides accurate, highly localized forecasts of the moment, path, growth and decay of storms in a DMA, with optional StormMaster severe storm analysis capability.

**Established Products:** Galileo, FirstWarnNeighborhood Doppler, FirstWarnScreenCrawler, exclusive AccuWeather franchise, WeatherTeam, StormTeam Live

Acoustic Systems

N1614

Acoustical Solutions Inc.

C4817

**Intro:** Studio In A Box, four complete packages for studios including RPG acoustical foam, diffusors and corner BASS traps; Alpha WOODiffusor, new 2-by-2-foot-by-2-inch wood diffusor.

**Established Products:** AlphaSorb and SoundSuede fabric wall panels, SONEX and RPG acoustical foams; AudioSeal sound barrier

Acrodyne (Ai)

C6207

**Intro:** Quantum Depressed Collector Television Transmitter Series is water-cooled, state-of-the-art, LINUX-based, transmission technology, and is available in analog and digital. The field proven plug-in style e2v tube, along with the Ai system integration and LINUX control system delivers outstanding results in power savings and reliability.

**Established Products:** Quantum series of IOT-equipped television transmitters and Rohde & Schwarz solid-state air and liquid cooled television transmitters

Ellen Rainey & Mark Polovick, Marketing Managers

10706 Beaver Dam Road

Cockeysville, MD 21030

410-568-2105

888-311-0859

Fax: 410-568-1546

E-mail: [mark.polovick@acrodyne.com](mailto:mark.polovick@acrodyne.com)

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Acterna (see JDSU)

SU4201

Active Power Inc.

C2257

AD Telecom

C9847

ADAM Audio USA

N4506

ADC

C6526

ADDER Technology Ltd.

SU186E

ADIC

SL195-MR

Adobe Systems Inc.

SL186-MR

Adrienne Electronics Corp.

SL3770

**Intro:** USB-TC reads LTC, VITC and IRIG timecodes, connects and powers via USB cable.

**Established Products:** PCI-TC timecode units, AEC-BOX product family, AEC-1 compact analog A/Vswitchers

Adtec Digital

SL2961

**Intro:** Soloist 4111 HD digital media server for MPEG-2 HD & SD file playback and IP stream decoding; adCode controls professional VTRs over serial RS-422 or FireWire for accurate selection of acquisition material. Live satellite or newsroom feeds can also be recorded on command by adCode.

**Established Products:** Duet commercial inserter, DPI-1200 ad server, TBGS, Edje and Soloist decoders, DTA digital turnaround multiplexers, Edje encoders

ADTX

SL623

Advanced Broadcast  
Systems-ATS

C10118

Advanced Designs Corp.

C5730

Advanced Industrial  
Computer Inc

SL5206

Advanced Microwave  
Components

C5245

Advantech

C8548

Advent Communications Ltd.

C2007B

Advertising Edge Inc.

C2449

Aerial Exposures International

C10547

AEV SpA

N1533

AFC Industries

SL5591

Agiosat

C6547

Global Communications

**Intro:** Satellite-based IP-centric mobile system for global connectivity for voice, data and video. Based upon Inmarsat's BGAN system, Agiosat 3G uses a satellite dish and modem about the size of a laptop; takes





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less than three minutes and no expertise to set up. Data rates of up to 492 kbps are available, including streaming media at rates up to 128 k. Agiosat also lands traffic and distributes it via terrestrial connection or can retransmit the traffic via one of four teleports. Agiosat 3G also provides for termination into the U.S. public telephone network or the Internet. After capital investment, the service is measured so you pay only for data sent over the network; Agiosat

Global Network provides global satellite services and its owned-and-operated network with more than 20 satellite systems at four U.S. teleports. Coupled with Agiosat transponders, this network provides global coverage. Agiosat's network is IP centric, allowing it to carry voice, data and video. Agiosat maintains distribution systems such as its own VoIP switch and its own master control operation so that it can provide a full range of services to its customers.

Agiosat's facilities are C- and Ku-band capable with analog and digital transmissions.

**Established Products:** Satellite phones  
Rick Swiers, VP Marketing  
P.O. Box 7460  
Burbank, CA 91510  
818-526-1700  
Fax: 818-526-1715  
E-mail: [sales@agiosat.com](mailto:sales@agiosat.com)  
Web Site: [www.agiosat.com](http://www.agiosat.com)

## AheadTeK

SU4118

**Intro:** DJR-22 video head drum for Betacam SX VTR, the first alternative to the OEM for replacement video heads on Betacam SX VTRs with extended head life backed by a 2,000-hour warranty; IDX Endura lithium ion batteries with Powerlink for ENG and other portable power uses.  
**Established Products:** Video heads and other VTR spare parts.

## AJA Video

SL4913, SU1525

**Intro:** KONA 3 HD/SD video capture card uncompressed capture card for SD, HD and Dual Link 4:4:4 HD for PCI Express, Apple G5 Power Macs and Apple Final Cut Pro; XENA LS supports SD capture and playback. Products ship with AJA standalone deck control, playback and capture application, Machina, and plug-ins for seamless integration with Adobe After Effects, Adobe Photoshop, Autodesk Combustion and Eyeon Fusion.

## Akiwa Technology Inc.

SL1412

**Intro:** GHI-442 multipurpose rackmount server can be integrated with proprietary add-on cards; GHB-B05 set-top box can hold up to 8x SFF 2.5-inch SATA or SAS drives, designed for media decoding and RAID; GHK-425 5.25-inch can fit 4x hotswap SAS or SATA2 drive, and is made for existing servers that require immediate scalability without a new box.

## Alaise Inc.

C10411

## Alcatel

SU13-MR

## Alcorn McBride Inc.

SL1542

## AldeaVision Inc.

C11435

## Algoith Inc.

SL1216

## Allen Avionics Inc.

C2139

**Intro:** Custom passive electronic components that include precision filters from 20 Hz to 5 GHz and electromagnetic delay lines; diplexers, general purpose delay lines, digital delay lines, video delay lines and filters for NTSC and PAL, attenuators, amplitude and phase equalizers, A/V isolation transformers, hum eliminators, network and electronic time products.

## Allied Tower Co.

N2132

## Alpermann+Velte EE

SU1388

**Intro:** Rubidium 1 and 3 Series redundant timecode system (generator, reader, converter, inserter), GPS locked, SNMP, NTP, LTC, VITC, ATC, UMID, IRI B, HD inserter.  
**Established Products:** Timecode, studio-clock, production timer

## Altera Corp.

C8112

## Altronic Research

N911

**Established Products:** Model 6725D

## AMCC Storage

SU3819

## AMD- Advanced Micro Devices

SL190-MR

## American Cinematographer

C5605

## American Grip

C9541

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**GearLite**  
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**GearLite MD**  
SD / HD Compact Terminal Equipment



**RossGear**  
Terminal Equipment

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SDI Proc Amp



**AT61, AY86, AL86, DE41**  
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American Recordable Media	C10748	Stasis power support system		Intro: The Stantron Broadcast Rack is a low-profile, 22-inch wide solution with several user-friendly features. Established Products: A/V rack, Pioneer enclosure cabinet, Frontier series of sloped consoles	Transport system can be configured to transport from one to 16 A/V channels in all standard digital formats; DV6000 Universal Transport System enhancements include a single slot digital multirate module for HDTV, SDI, SDTI, and DVB-ASI, a multi-port ASI SMPTE 310 module, SONET/SDH capabilities and enhancements to the DAP4 controller module.
American Tower Corp.	N3637	Anystream	SL197-MR, SL2944	Archion	SL1003
Intro: Portfolio of more than 20,000 U.S. towers, from full-power TV and radio RF plants to ENG, traffic cameras and even Doppler radar installations.					
Amino Communications	SL2420B	Intro: Agility VOD 6.0 for automated cable VOD content creation includes Nielsen audience measurement technology; Agility Broadcast 6.0 tapeless workflow solution streamlines media production for version exchange and on-air play-out; Agility Web 6.0 for new media publishing with load-balanced batch encoding capabilities supporting many formats.		Arena Maxtronic	C10412
Amita Technologies	C10125			ARG Electrodesign Ltd.	SU186C
Ampex Data Systems	SU1030	Apac Systems	SU219	Arrakis Systems	N1826
Amphenol	C7216	Aphex Systems	N2906	ARRI Inc.	C6926
Fiber Systems International				Intro: ARRIFLEX D-20 filmstyle digital camera is now available for rent worldwide; FlashMag 112 solid-state recording device; 12 new ARRI/Zeiss Master Prime lenses; ARRIMAX 18/12 combines the variable beam spread of a Fresnel and the light output of a PAR; Automated Stirrup offers remote pan/tilt and focus for large daylight and tungsten fixtures; speed upgrade for the ARRISCAN film scanner includes 3K to 2K and 6K scanning speed; ARRI Color Management System, a software option in ARRILASER image processing that adjusts the image data while recording. Established Products: 235, ARRICAM ST, video accessories, lighting kits, ARRI studio ceramic, ARRI X ceramic, Studio Cool	
AMX	CW11006	APM Associated	C1551	Artbeats	C2055, SL3758, SL123-MR
AnaCom Inc.	C5844	Production Music		Intro: Effects; Nature; Backgrounds; Lifestyles and more.	
Analog Way	SL4170	Intro: MyAPM Music Search and Download System; MyDrive Portable Hard Drive Music Solution portable drive digital music delivery system; new music libraries.		Artel Video Systems	C8541
Anchor Audio	N1322	Apogee Electronics Corp.	SL1941	Intro: DigiLink 4000 Video over Fiber	
Andrew Corp.	C8147	Apple	SL3702		
Animation Magazine	SL4800	Application Science	C9607		
Anixter	C1957	and Technology (AST)			
Established Products: video cable, connectors, patch bays, racks and accessories.					
Anthro Corp.	SL640	Applied Magic	CW11306		
Anton/Bauer Inc.	C5119A	APT	N1217		
Established Products: Logic Series digital batteries, InterActive 2000 PowerChargers, Titan chargers, on-camera Ultralight and					
		APW Enclosure Products	SL2132		
Intro: Enhanced apt-X for Motorola DSP, TI, ADI, Verilog and ARM7 provides high-quality audio for wireless headphones, 5.1 surround and mics.					

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 Northvale, NJ 07647  
 201-767-1200  
 Fax: 201-784-8637  
 E-mail: [systemsales@ascentmedia.com](mailto:systemsales@ascentmedia.com)  
 Web Site: [www.ascentmedia.com/systems](http://www.ascentmedia.com/systems)

Asia Pacific Broadcasting C9312

Aspera Software SL1801

Aspex Semiconductor Ltd. SL1000

**Associated Press R212,**  
*Intro:* ENPS 5.0 features include an updated user interface, Briefing Bar, Editing Window Control Bar and more; SNAPFeed 3.1 has a friendlier interface and offers new options for live reporting via satellite phones or other remote connections; enhancements to ENPS Web publishing and fax receive modules; AP Online Video Network ad-supported news video service that draws on the global newsgathering resources of AP.  
**Established Products:** APTN video content, plus text, graphics, photos, technology and online content for TV broadcasters.

Associated Production Music C1551

**Astro Systems Inc. C3246**  
*Intro:* SC-2055 super scan converter features interchangeable interface options for dual-link HD-SDI, HD-SDI, SD-SDI, DVI, and component, and VBS/S-Video/YpbPr (input only); DM-Series LCD monitors feature two SDI signal input and HD analog signal input jacks; WM-3004 and WM-3007 waveform monitors; SL-7036 sync generator.  
**Established Products:** SC-2055 Super scan converter, DM-Series LCD monitors, WM-3004 and WM-3007 waveform monitors, SL-7036 sync generator, TS-7805 MPEG-2 TS analyzer.

**ATA Audio N4519**  
*Intro:* Scoop E-Z over Inmarsat delivers audio using the new BGAN Inmarsat terminal, can be used over ISDN or IP, coding algorithms of G.722 and MPEG, low delay 7 kHz also available in IP.

ATCi/Antenna Technology C4746

ATD2 C10418B

Ateme SU256

Atempo SL2032

Athan Corp. SU347

**ATS Communications C8115**  
*Intro:* CoolCam portable camera boom with 18-foot length, body harness and tripod mounting; Rock n Roller Multicart moves up to 500 lbs; Zaxcom Digital Wireless Mic; nNovia Quick Capture, a portable digital video recorder with analog and FireWire I/O for SD and HDV recording; M-Audio Microtrack pocket-size stereo flash card recorder.

ATTO Technology Inc. SL1513W

**Audemat-Aztec Inc N2532**  
*Intro:* In 19-inch rack form, the Transmitter Remote Control IP2 Choice Version 2 is a modular system for remote management and monitoring that can be configured to connect to all the equipment at a remote site on three serial ports, 128 digital inputs, 40 analog inputs or 64 relay outputs. All peripherals linked to the IP2choice become accessible with one telecom line (Ethernet, PSTN coming soon). Thanks to its routing functions easily configurable with the associated software ScriptEasy, the IP2choice automatically sets up the suitable TCP/IP link to connect the peripheral with a remote server or provide it directly with Internet access; Remote Control Silver powerful remote control system for permanent monitoring of devices on the transmitter site. The system monitors in real time 16 digital inputs, eight analog inputs, eight relay outputs and one RS232 (for other configurations, consult us). Configuration is easy using the user-friendly Scripteasy software. Compatible with the Goldeneagle range, the Remote Control Silver can also be managed by the Broadcast Manager.

Christophe Poulain, Exec. VP  
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 Miami, FL 33179  
 305 249 3110  
 Fax: 305 249 3113  
 E-mail: [poulain@audemat-aztec.com](mailto:poulain@audemat-aztec.com)  
 Web Site: [www.audemat-aztec.com](http://www.audemat-aztec.com)

Audio Accessories Inc. C3047

Audio Analysts Inc. CW10905

Audio Ethics CW11200

Audio Precision N1317

**Audio Video Design Inc. C8117**  
*Intro:* EasyReader NewsRoom with simultaneous scroll and edit/line up scripts with

dual-screen teleprompter software for Windows XP and EasyReader PRO dual-screen WindowsXP teleprompter software now feature closed captioning; AV15HB Speech/Podium Prompter with vertically-adjustable stage.  
**Established Products:** AV15HB, AV12HB, AV15CA and AV13CV camera prompters

**AudioScience N1514**  
*Intro:* ASI6600 series sound cards include PCI Express interface, eight stereo out, four stereo in, analog and AES/EBU I/O, multi-channel record, playback and mixing.

**Audio-Technica U.S. Inc. N3218**  
*Intro:* AT892c-CO MicroSet omnidirectional condenser headworn mic with a capsule diameter of just 2.5 mm, in cocoa, black and beige, with terminations available for all Audio-Technica and other wireless systems.  
**Established Products:** 4000 and 5000 Series wireless systems; MicroSet omni headworn mics; subminiature lav mics; adaptive-array mic systems; camera-mount wireless systems; shotgun mics; stereo mics; omnidynamic field mic; 40 series production mics; studiomics; Artist Elite vocal and instrument mics; dual-element mics.

Australian Monitor N1822

Autodesk- Media SL3719  
 Entertainment Division

Automatic Duck SL5138A

AutoPatch SL1981

**Autoscript C7415**  
*Intro:* GP-15: GoPrompt-15 wireless self-contained prompting system is the big brother to the GP-12 introduced at NAB2005. The GP-15 features a 15-inch 1,600 nit High Bright screen. Allows studio prompting in the field without laptop computers. The GP-15 is capable of editing in the field via USB or PS-2 keyboard; WFC:

Wireless Foot Control allows your studio to be anywhere. It can be run on AC or DC, eliminating cable runs. The 900 mhz (450 mhz outside the United States), features a 10-channel system to allow multiple units on one system; Plus-L: Plus Light is the perfect fill light mounted to and powered by Autoscript's TFT on-camera prompters. Using an LED array, the Plus-Light offers soft controllable light without conventional tungsten fixtures. Available in daylight and tungsten; WP-VAP: WinPlus is the first Voice Activated Prompter. Sold as an add-on module to Winplus software, the WP-VAP eliminates the need for talent or operator to manually control the spread of the text across the prompter monitor. The VAP simply follows the spoken word, and requires no training or learning cycles; ELP15-PT: On-Camera Prompter for GVG Cameraman allows 15-inch teleprompter to be used with lightweight robotic pan/tilt heads. The carousel mount carries the weight so that the pan/tilt head does not.  
 Mr Michael Accardi, Sales Manager  
 391 Meadow Street  
 Fairfield, Conn. 06824  
 203-338-8359  
 Fax: 203-338-8359  
 E-mail: [m.accardi@autoscript.tv](mailto:m.accardi@autoscript.tv)  
 Web Site: [www.autoscript.tv](http://www.autoscript.tv)

AV Internacional S.L. N4231

AVC Alliance SL1976

**AVECO SL2826**  
*Intro:* AVECO Live Production Automation allows one person to control all news and other live production equipment with live integration to the newsroom system; AVECO Wide Area Media Management features expanded media management capabilities.  
**Established Products:** AVECO TV Automation for Master Control

Avid Technology Inc. SL701

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**Aviom Inc.** CW10505  
16-frequency agile wireless mixer that combines up to two wireless mics, a CD player, mic and line inputs into a rack-mountable two-space control mixer with a wireless transmitter; Mipro MR-90 is a UHF true diversity 100-frequency agile receiver designed to interface with professional video camera applications.

**Avitech International Corp.** SL3004  
Intro: MCC-8000 series multi-image display processors

**AVL Systems Design** CW9900

**AVL Technologies** C3545

**Avlex Corp.** N1324  
Intro: Mipro MA-909 is a UHF true diversity

**Avocent** SU4572  
Intro: AMX5000, an 8x32 analog Avocent KVM switch that supports multiplatform server environments; ESP-2 MI operates independently of specific network operating systems and protocols; Emerge EWMS1000 wireless media streamer can be used for point-to-point video extension or for a point-to-multipoint broadcast applications.

**Established Products:** Avlex, Superlux and Mipro brands of mics, wireless systems and electronics available through independent dealers.

**Avocent** SU4572  
Intro: AMX5000, an 8x32 analog Avocent KVM switch that supports multiplatform server environments; ESP-2 MI operates independently of specific network operating systems and protocols; Emerge EWMS1000 wireless media streamer can be used for point-to-point video extension or for a point-to-multipoint broadcast applications.

**Established Products:** AMX5000, ESP2MI, EWMS1000

**AVP Mfg & Supply Inc.** C551

**Axcera** C8519  
Intro: Innovator MV Mobile Media Basestation integrated mobile media/mobile video transmission system including Axcera transmitters and site controllers, IP encapsulators, satellite receive equipment and microwave STLs, GPS receivers, transmission line and more; second-gen Axciter Intelligent ATSC Modulator uses Axcera Intelligent Modulation and Adaptive Digital Equalization for linear and nonlinear distortions.

**Established Products:** Visionary Series digital and analog IOT transmitters, Innovator HX UHF and VHF high-power solid-state transmitters, Innovator LX low-power solid-state digital and analog transmitters and translators, Axiety3G broadband wireless access systems, BRS/EBS/WCS/MMDS transmitter systems

**Axel Technology Srl** N2433, C111  
Intro: Falcon 50 FM/TV versions with dual LCD display for control and monitoring over all operating parameters; EZ-DML software can be installed on any PC with Windows XP, and records in DVX video and MP3 audio; X-TV, a new digital multiformat and multiplatform system for TV play-out.

**Established Products:** Digi-TV, Digi-Ware, Viper, DML, Falcon 35-TV, Sat Time Synchronizer, Merlin

**Axia, A Telos Company** N2714B  
Intro: Digital audio routers, DSP mixers and processors and software for configuring, managing, and interfacing networked audio systems.

**Established Products:** Axia iPlay, Pathfinder, Axia AES or Analog Nodes, Axia Mic Node, Axia Router Selector, Axia Engine, Axia GPIO Node, Element: modular control surface, Smartsurface: control surface

**Axon Digital Design B.V.** SU1414A  
Intro: Modular Dolby Digital DDE51 encoder is part of the Synapse broadcast system, a forerunner in integrating Dolby by and HD technologies; Synapse TWINS 2HS10 HD-SDI to SD-SDI/composite downconverter; NV8288 mobile digital router provides 288x576 up to 576x576 configurations in enclosures of 10-by-20RU; HXT10 HD combined frame synchronizer, a 16-channel embedder and downconverter.

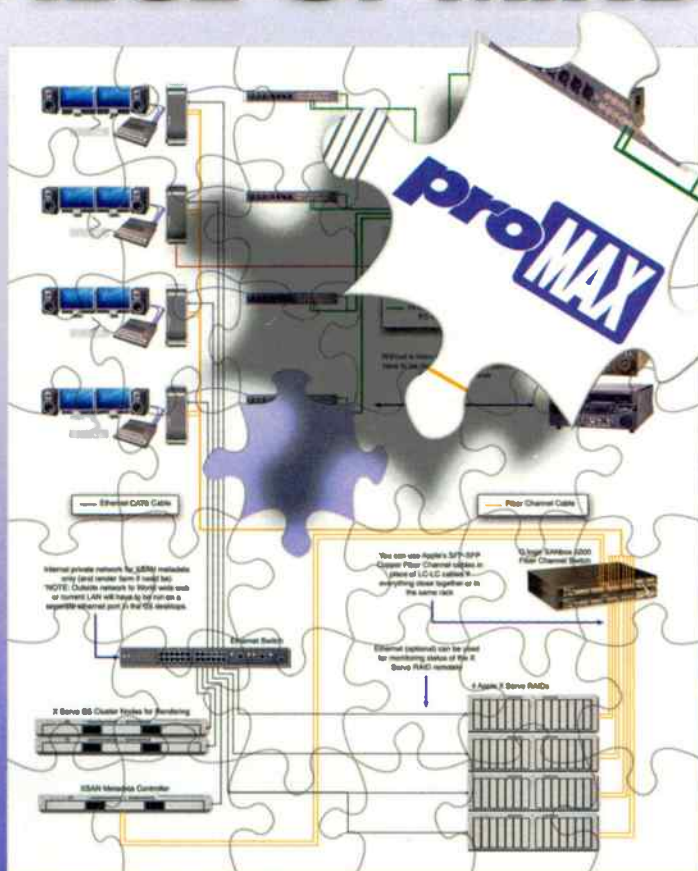
**Established Products:** DDE51, 2HS10, HXT10, 2IX10, 2IM10, NV8288, CR Series of compact routers, TRACS

**AZCAR** SU205  
Intro: AZCAR is a full service consulting, engineering, design, project management, installation and turnkey technology integration company with three decades of experience in the provision of innovative media delivery systems, worldwide. Current emerging and advance technology projects include HDTV, IPTV and video streaming for wireless applications.

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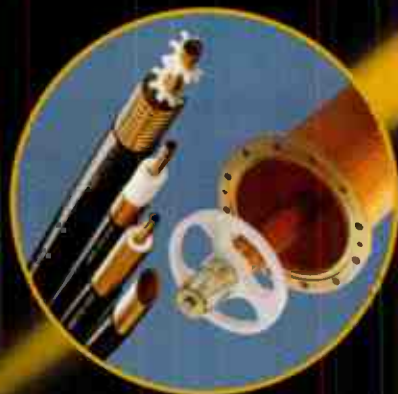
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Azden Corp.	N4218
B&H Photo-Video-Pro Audio	SU128
Backbone Networks Corp.	SL2921
Baird Satellite Supporting Systems	C7441
Balcar-Cokin S.A.	C10227
<i>Established Products:</i> Octalite, Fluxlite, Quadlite, Duolite, Fresny, Spotflux 2, Spotflux 4, Camflux, Twinlite	
Band Pro Film & Digital Inc.	SU2917
<i>Intro:</i> Zeiss Telephoto DigiZoom 17-112 mm T1.9 precision telephoto lens; "green" version of Sony HDW-F900, manufactured to environmentally conscious international standards; Sony HDC-1500/SRW-1/SRPC-1/HDCAM-SR 4:2:2/4:4:4 recording deck; progressive CCD imager, processor and 14-bit A/D converter; ECinema DCM23 critical evaluation reference HDSDI-to-DVI monitor; Chrosziel HD mattebox and Quick-Mount Studio Rig Follow Focus.	
<i>Established Products:</i> Sony HDW-F900/3 and HDC-F950 cameras with Zeiss DigiPrime and DigiZoom lenses; Chrosziel Matteboxes/Sunshades/Studio Rig Follow Focus; Evertz fiber-enabled camera adapter systems; eCinema HDSDI-to-DVI monitors	
Band Pro Film & Digital Inc.	SU2917
Barbizon Lighting Co.	C10141
Barco Visual Solutions	SL3738
<i>Intro:</i> Networked Broadcast Monitoring System allows facilitywide distribution of video sources; LC 42- and 47-inch high-contrast 1920x1080 fanless displays.	
<i>Established Products:</i> iCon H600, Encore	
Baron Services	C7407
<i>Intro:</i> VIPIR 4.75 features a redesigned and more flexible GUI with new color-coded menus containing with easily identified icons. Animated jet streams have been added to the VIPIR displays, as well as bathymetric mapping that depict ocean depths.	
Bavarian Pavilion	C6607P
Beck Associates	SU189
Beehive Systems	SL5355
Belar Electronics Lab Inc.	N2418

**Belden CDT, Electronics Division** C1655  
*Intro:* Shipboard A/V cables meet all shipboard standards for low smoke and zero halogen; CatSnake Tactical Heavy Duty Cat 5e Cables are for use in rugged environments and feature BeldenCDT's bonded pair technology to further increase signal integrity. Stranded conductors and special Matte jackets make them extremely flexible; Mini Hi-Res coax connectors for terminating Mini Hi-Res coax cables, available in BNC and RCA; Mini Hi-Res Component Video Cables are available in 3 through 6 and feature Belden's patented Banana Peel design.  
*Established Products:* Precision video coax, Triax, camera cables, component video cables.

Belgian Trade Commission	C10418A
Bell Helicopter Textron Inc.	C355
Bella Corp.	SL1773
Bexel Corp.	C5119F
Bext Inc.	N3508
<i>Established Products:</i> Dual mode analog/DTV transmitters	

**beyerdynamic USA** N2412  
*Intro:* MCE 86 II condenser shotgun mic, phantom or battery power including suspension mount; MCE 86 IICAM camera mount kit with cable and windscreen.  
*Established Products:* Headphones, headsets, shotgun condenser, vocal, ribbon, announcement, interview and recording mics

**BGS** N2711  
*Intro:* Placed at the tower site, Tower Switch provides tower-specific information and emergency contact information to crews working on the tower; Chy-TV insert crawls and other advertising media on monitors throughout your facility, stadium, church, while basic programming is played; AXIA console and routing allows users to move audio around a facility on Cat 5 or 6 without clashes or dropouts, using off the shelf Ethernet switches and Axia nodes.

Billboard Video Inc.	C9841
Bird Electronic Corp.	N2911
BitCentral	SL2158
<i>Intro:</i> Précis 3.0 news production system; OASIS file share programming, designed to	

allow station groups to share story data and video with instant online searching and proxy viewing of stories throughout the group without moving heavy files.

**Bittree Inc.** C3547  
*Established Products:* Audio, video, data patchbays and patchcords

**Blackmagic Design** SL3791, SL3985  
*Intro:* Multibridge Extreme all-in-one bidirectional converter features a new high-speed 10 Gbps PCI-Express connection.  
*Established Products:* Multibridge Express PCI Express editing and converting solutions; HDLink and Workgroup Videohub. DeckLink, DeckLink SP, DeckLink Extreme, DeckLink HD Pro, HDLink and Workgroup Videohub

**Blue Frog Mobile** C11429

**Blue Fuse Music** C1263

**Blue Order AG** SL3232  
*Intro:* Media Archive 3.0 features enhanced import/export capabilities and several types of watch folders that initiate different types of import process; Media Archive 3.1 with Configurable Relational Data Model enables Media Archive can map program element relations; Master Data Management for Media Archive 3.1 also incorporates the management of master data; New Essence Management Architecture for Media Archive 3.1 features third-party tools such as online and nearline storage for essence data.

**Blue Pony Digital Inc.** C10837

**BlueArc Corp.** SL3238

**Bluetop Technology Co. Ltd** C544  
*Intro:* MPEG-2 transport stream receiving PCI card complies with PCI 2.1 5 or 3.3 V, supports Windows and Linux, records MPEG-2, DVB transport stream, DVB-ASI and DVB-SPI interfaces on a single half-size PCI card; Portable transport stream analyzer BTA-P100 connects with notebook PC via USB 2.0, DVB QAM RF/QPSK RF/COFDM optional RF input, bit-rates up to 120 Mbps; Transport stream analyzer BTA-S100 features 14 analyzing modules; Portable transport stream capturer captures and records MPEG-2 transport stream data.

**Boeckeler Instruments Inc.** C11325  
*Intro:* Pointmaker PVI-65 video marker

draws on most HD-SDI signals up to 1080i and 720p over prerecorded or live images during live broadcast or post-productions.  
*Established Products:* PVI-65

**Bogen** C5119G

**Boland Communications** SU796

**Bomar Interconnect** SL4156  
*Products Inc.*

*Intro:* HD BNC Video connector with improved return loss characteristics with wider range of available tooling; X2 Series dual HD PC Board BNC, fully shielded dual BNC PCB connectors; HD true 75-ohm BNC barrel adaptor.

**Bomar Interconnect** SL4156

**Boris FX** SL1513G

**Bose Corp.** C1963

**BOXX Technologies Inc.** S208

**Boxx.TV** C10521

**Brainstorm Multimedia** C3210A

**Bretagne International** SU2250A

**Brick House Video Ltd.** SU230

*Intro:* Proteus standards converter features a new aspect ratio conversion and addresses lip-sync errors with a fully integrated audio delay and synchronization in a compact unit. Originally introduced at NAB2005, Proteus is currently in use by major broadcast customers worldwide and was used extensively at the Winter Olympics in Torino; new options for the Callisto hybrid SDI/composite switchers will widen the appeal for applications where push button control or automation is needed. A new audio module provides silent audio switching with cross fade options. Another option, Callisto-F incorporates push button controls on the front panel (and the industry standard control interface) to allow direct operation without a remote control panel. The Callisto family carries all the necessary facilities for effective field and in-house vision mixing and is 525/625 compatible; Callisto HD, an HD variant of the Callisto; Proteus HD, a new HD standards converter.  
*Established Products:* Callisto-R, a rack-mount 8-channel framestore SDI switcher with DSK and composite inputs, the Callisto-P portable 6-channel framestore



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**Broaddata Communications/** SU805  
**Physical Optics**

**Broadcast Asia** C605

**Broadcast Electronics** N1808  
**Intro: AVLogger, a complete solution for audio capture and archiving.**

**Broadcast Engineering** C8805  
**Society (India)**

**Broadcast Microwave Services** C2326  
**Intro: Truck-Coder II, digital/analog ENG microwave with 100 user defined presets, Ethernet port, DVB-T complianc and more; Central-DeCoder II, COFDM digital central receive site decoder with digital and analog reception and more; Field-Coder II portable COFDM transmitter features digital transmission with eight presets, etc.; Digital Media Transport Package allows IP data-grams to be routed, simultaneous file and video transmission, etc.**  
**Established Products: Carry-Coder II, Carry-DeCoder II**

**Broadcast Pix** SL2400  
**Intro: Broadcast Pix Scripts, advanced memory system for Broadcast Pix switchers that combines switcher memories with recalls of precise graphics, clips and camera moves; camera-control software enables Broadcast Pix switchers to remotely control up to seven Sony cameras; Version 3 software features PixMaster, an integrated pre-production set-up environment.**  
**Established Products: The Broadcast Pix 2000 includes a character generator, clip store, still store, logo generator, three DVEs, digital and analog I/O.**

**Broadcast Store** C1239

**Broadview Software Inc.** C8031

**Bron Kobold USA** C8945

**Brother International Corp.** SU431

**BSTOCK.TV** SU208

**BTX** C2748  
**Intro: The BTX SnakeJet HD System houses an 18-channel 75-ohm coaxial video multi-connector that delivers a true HD signal, in custom, 50-, 100- and 150-foot lengths; BTX Razor line of HDTV component and dubbing assemblies handmade by BTX Belden Certified Assemblers using Belden serial digital video cable 7787A (three 1855A bundled).**

**Building4Media** SU529

**Burk Technology** N3802  
**Intro: New products and updates for Burk broadcast facility control systems.**  
**Established Products: GSC3000, ARC-16 and VRC2500 broadcast facility control systems with central management software and monitoring accessories**

**Burle Industries Inc.** C2016  
**Established Products: UHF and VHF power grid tubes, cavities**

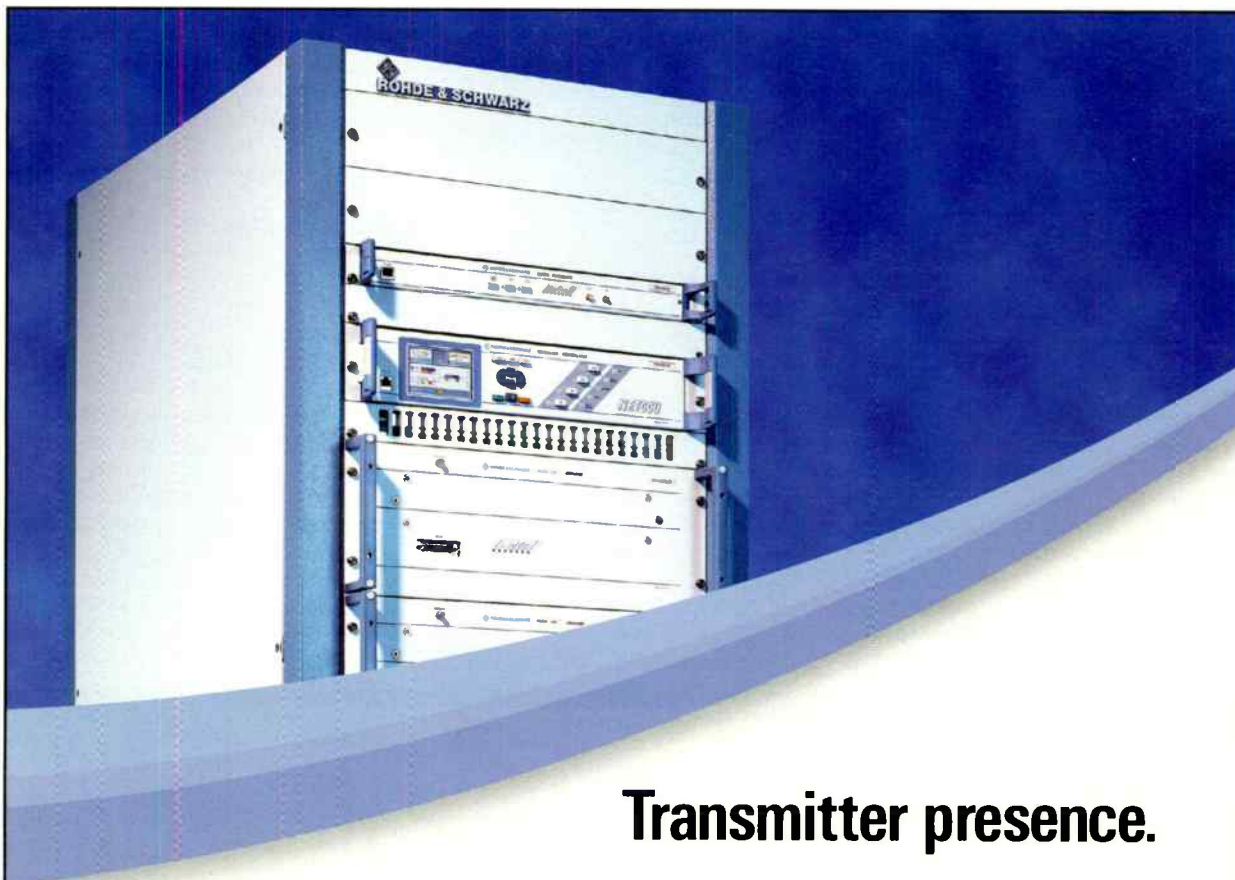
**Burli Software Inc.**  
**Intro: News Podcast Engine**

**Burns & McDonnell** C10835

**Burst Electronics Inc.** C4717  
**Established Products: TBC, logo generator, black burst generator, color bar generator with ID, A/V crosspoint switcher, loss of video detector, 4x1 and 8x1 video switcher, video and audio DA, passive switcher.**

**N800 Cablecam International** C10121

**Cabletime USA** SL629  
**Intro: MediaStar Evolution streams video and other multimedia content across LAN and WAN; New Evolution 760/M2 hardware decoder can decode MPEG-2 and -4, has a built-in scaler to output DVI up to 19.2x14.4 resolution, a WiFi card slot and can store up to 10 hours of video.**  
**Established Products: MediaStar Pro, MediaStar Compact**



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<b>Caldigit</b> <i>Intro:</i> 2.5- and 3.5-inch SATA II Multiple Bay video editing storage products	SL3231	4000 series jib arm, focus, iris, zoom control.	ture the widest focal lengths, highest zoom ratios, and fastest zoom speeds in their class, as well as Canon IF-Pro technology and Shuttle Shot features. <i>Also:</i> HD and SD studio, field, ENG/EFP, and Cine prime and zoom lenses.	Vision2 5201 camera negative stock. <i>Established Products:</i> FURY Film Recorder
<b>Caliber International Corp.</b>	C11437	<b>Cammate Systems</b> C6630 <i>Established Products:</i> 11-foot to 50-foot camera crane systems		<b>Centaur Storage Inc.</b> C11635
<b>Calrad Electronics</b>	C9235	<b>Camplex Corp.</b> SU3019 <i>Intro:</i> Camplex PRO-XCS allows users to convert a Mini-DV/HD camcorder into a live production camera, all signals and power via a Cat-5 cable up to 1,000 feet; Camplex CP-701 component/composite/SDI and Camplex CP-301C composite camera signal multiplexing systems interface with most brands and types of camcorders and TV cameras, a new HD-SDI option will be introduced for the CP-701 and CP-301C; Camplex PRO-XHD System for Mini-DV/HD camcorders converts them into live production cameras. <i>Established Products:</i> CP-701, CP-301C, PRO-X1, PRO-XCS		<b>Chapman/Leonard Studio Equipment</b> SU3793
<b>Calrec Audio Ltd.</b> N917 <i>Established Products:</i> Alpha System Plus, Sigma System Plus, Zeta System Plus, Hydra Networking		<b>camRade</b> C7415A	<b>Canopus Corp.</b> SL544	<b>Checkers Industrial Products</b> C9821
<b>Calumet Photographic</b> C10441 <i>Intro:</i> Cambo V-40 Pro Video Boom has a interlocking joining system expandable up to 20 feet, supports up to 44 lbs depending on the configuration; Cambo V-15 Video Boom offers stability for fixed height shots; Cambo VPS-1 Pedestal with VPD-9 Dolly for cameras up to 44 lbs; Cambo Uni Track System stable, flexible track system; Calumet Studiolute SL455 and SL855 light-banks for film and video. <i>Established Products:</i> Canon, JVC, Panasonic, Sony, Azden, Sennheiser, Portabrace, Kata		<b>Canare Corp. of America</b> SU4164 <i>Intro:</i> Economical BNC connectors; Prism Series video panels; L-4CFTX triax video cable. <i>Established Products:</i> HFO Cable Checker, Cables, Connectors, Patchbays	<b>Capital Networks Ltd SL</b> 1623	<b>Chief Manufacturing</b> SL 2385 <i>Intro:</i> Cinematic Mount automated mounting solutions for flat-panel swing arm mounts, table stands, and flat-panel and projector lifts; Cynergy Series Swing Arm Mounts provide maximum extension or folds flat for a low-profile appearance; View medium and large flat-panel displays from any angle with the new Reaction Series Swing Arm Wall Mounts featuring CableTrac; Fusion Series provides a new generation in fixed and tilt wall mounts; PAC-500 Large In-Wall Accessory and MAC-500 Medium In-Wall Accessory convert swing arm mounts from low-profile to no-profile and flush with the wall.
<b>Camera Turret Co.</b> C10111 <i>Intro:</i> 300 Series Jib Extension extends 300 series jib to 12 feet from the pivot, creating an 18-foot reach; Pan/tilt keypad enables PT20 or PT24 pan/tilt systems to save hundreds of positions and reframe automatically at the press of a button; Precision positioning pan/tilt for high level security and video systems. <i>Established Products:</i> PT20 remote pan/tilt, PT24 remote pan/tilt, 300 series jib arm,		<b>Canon Broadcast &amp; Communications</b> SU131 <i>Intro:</i> The HJ18ex28B IASE lightweight, compact Super Telephoto portable HDTV zoom lens with Canon eDrive; Advanced Focus version of the DIGI SUPER100xs HDTV long field lens; YJ20x8.5B Series and YJ13x6B Series portable SDTV lenses fea-	<b>Caption Colorado</b> SU5156	
			<b>CaptionMax</b> SL4369	
			<b>Cartoni USA</b> C8515 <i>Intro:</i> P90 Pedestal can support up to 90 kilos in two stages and features steering. <i>Established Products:</i> Gamma, Focus	
			<b>Cavena Image Products AB</b> SU4601	
			<b>Cavision Enterprises Ltd.</b> SU5175	
			<b>CCBN</b> C5107F	
			<b>CDR Software</b> C7114 <i>Intro:</i> Studio wxSimulator tracks storm cells for direction, speed, intensity, size, and integrated reflectivity; wxView provides a new look; wxWireless service monitors the NWWS, EMWIN and Internet-based Weather Wire data feeds and instantly issue any alerts to cell phones or PDAs.	<b>Chimera</b> C7526
			<b>Celco</b> C351 <i>Intro:</i> Firestorm 2 digital film recorder has 1.8 second per frame speed, including for HD images onto Kodak 5245 and Kodak	<b>China BIRTV Show</b> C6305
				<b>China Infomedia Co. Ltd.</b> SL824
				<b>Christie Digital Systems</b> SL1519
				<b>Chyron Corp.</b> SU2964
				<b>CineBags Inc.</b> C10147
				<b>Cinegy</b> SL3236

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CineMek Inc. C10738

Cinemills C6311

**Intro:** FilmGear HMI 200 W to 12 kW pars are made of a lightweight composite for cooler burning lights; FilmGear Tungsten Lights from 150 W to 5 kW; FilmGear Tube Flos fluorescent lights, including 4-bank-by-4-foot and 2-bank-by-4-foot tubes with detachable ballast, 4-bank-by-4 foot and 2-bank-by-2-foot tubes with internal dimmable ballast; Silver Bullet 575 W compact unit with one-piece head and high-frequency ballast that minimizes space needs.

**Established Products:** Silver Bullet HMI Pars built in United States

Cine-tal C7729

Cinevation C8935

**Intro:** Cinevator digital film printer and recorder, the first and only real-time integrated digital film recorder and printer; CGP35a Colour Grading Projector delivers quality image with colors that match 35mm film; CineGrade Film Color Space Visualizer film-look preview processor; CMS35 Colour Matching System enables color-grading projectors sustain calibration.

Cinital SL647

Cintel Inc. C9307

Ciprico SL4987

Cixi Weishi Equipment Co. Ltd. C5107A

Clarity Visual Systems SL1810

**Established Products:** Large digital displays

Clark Wire &amp; Cable C6330

Clear-Com C5119D

**Intro:** 1RU four-way Eclipse VoICE VoIP interface frame extends intercom facilities to remote sites; Eclipse Median 6RU matrix with combined interface frame houses nine matrix and eight interface slots.

ClearStory Systems SL3230

Cmotion GmbH C6607Q

CNN Newsource S100

**Established Products:** CNN Newsource

Coast to Coast C2117

Tower Service Inc.

Coastal Satellite Inc. C4543

Coaxial Dynamics N1319

Cobalt Digital Inc. SU4564

**Intro:** 8821 HD and 8822 downconverter cards for Open Gear frames have HD/SD quad reclocked input copies, four SD-SDI/analog outputs with full ARC, embedded audio, timecode and closed-captioning support; 8802 and 8803 HD/SD reclocking DA card; 2U Open Gear Frame with remote control, advanced power and cooling.

**Established Products:** 8024, 8022 and 8021 format converters, 8090 HD/SDi A-to-D converter; 8020 HD/SD D-to-A converter; 8002 reclocking distribution amplifier

CodecSys—A Broadcast International Technology SU850

Coffey Sound N1002

Colem Communications C7846

Colospace Inc. C11331

Comet North America N2511

Comet Video Technologies C10745

CommandSoft Inc. SL3032

Communications Specialties Inc. SL2958

**Intro:** The all-digital fiber-optic Pure Digital Fiberlink 7250 Series transmits RGB resolutions up to UXGA and stereo audio over two single mode or multimode fibers. The 7250 Series is compatible with any display device that supports VGA, SVGA, XGA, WXGA, SXGA, SXGA+ and UXGA, plus HDTV resolutions.

**Established Products:** Deuce video scalars, Scan Do scan converters

Compix Media Inc. SL564

**Intro:** 3D Real-Time Rendering HD/SD character generator, rackmount; LCG9000R HD high and standard definition character generator operating with the popular GenCG software, rackmount; LCG7050R character generator with component RGB/YUV input/output and SDI output, rackmount; LCG5050R character generator with composite and S-Video input/output and SDI output, rackmount; LCG5050D character generator with composite and S-Video input/output and SDI output, desktop case; GenCG 4.0 character generator software; RCES-FX character generator remote create and edit software with preview function.

Comprehensive Video Group SL2919

Communicate Technologies Inc. C5107M

Computer Prompting &amp; Captioning Co. C8933

**Intro:** MacCaption-DV and MacCaption-NLE/MPEG, a closed-captioning system on a CD for the Mac. Caption videos edited with

Final Cut Pro and other editing software. No hardware encoder needed; CaptionMaker-NLE, a complete closed-captioning software system on a CD for Windows; MacCaption, a complete subtitling and closed-captioning system on a CD for the Mac. Subtitle and Caption videos edited with Final Cut Pro and other editing software. No hardware character generator or closed-caption encoder needed; MacCaption-Lite features closed caption encoding software for Macintosh OS X. Takes the place of hardware encoders.

**Established Products:** Closed-captioning software includes the CPC-500 Realtime CaptionMaker using speech recognition (Windows), CPC-600, CPC-700 and CPC-700NLE CaptionMaker for post-production captioning (Windows). CCaption closed caption encoding software (Windows and Mac OS9). Teleprompting software includes the CPC-1000 SmartPrompter and CPC-2000 teleprompting/closed captioning software. Sid Hoffman, Project Manager 1010 Rockville Pike, Suite 306 Rockville, MD 20852 301-738-8487 800-977-6676 Fax: 301-738-8488 E-mail: info@cpweb.com Web Site: www.cpweb.com

Comrex Corp. N2722

Comtech EF Data C3845

COM-TECH Srl RF Filters N105

Conax AS SU5009

Condre Inc. SL2030

Conductix Inc. C11433

Conoa SL51381

Control Concepts C113

Controlware SU1653

Communications Systems Inc.

**Intro:** OpenBroadcast software suite offers management, monitoring, scheduling, switching, and billing, including NetSwitch and EasySwitch, which enable broadcasters to switch video and data connections via a telecommunication network; TVG410/TVG420 video gateways send broadcast-quality video via IP networks; Controlware ASI Recording Server/Logger is a multiport DVB/ASI recorder and analyzer for quality assurance.

Convergent Design Inc. C10845

CoolTouch Monitors LLC C9548

**Intro:** The RX-702AT/RX-702A dual 7-inch and RX-802AT/RX-802A 8-inch rack mounted high-resolution LCD monitors feature audio, composite video and VGA inputs with a built-in scaler up to 1024x768. **Established Products:** The RX-563A is a triple 5.6-inch in-rack LCD confidence monitor with A/V inputs.

Coolux International C11636

Coptervision LLC C7528

COSHIP Electronics Co. Ltd. SU2239

**Intro:** The AnySight600 interactive digital receiver decodes MPEG-2 HD/SD, H.264 and Dolby AC-3 or MPEG-1; AnySight 100CM cable modem supports TCP/IP, DHCP and DNS; CDVB5200CI headend professional decoder; CDVB9200A PVR; CDVB5110DS digital satellite receiver.

**Established Products:** Interactive digital receiver, digital satellite/cable/terrestrial receiver

Countryman Associates Inc. N1131

CPI/Eimac Division C1526, N1611

**Intro:** Water-cooled MSDC IOT high-efficiency DTV/HDTV broadcast amplifier; oil-cooled MSDC IOT high-efficiency DTV/HDTV broadcast amplifier

Crawford Communications C8641

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Createcna XXI S.L.	SL2407G
Creative Cow	SL3121
Creative Handbook	C9835
Creative Network Design Inc.	SL1513J

**Crispin Corp. SU608, R218**  
*Intro:* NewsCat archives news stories and makes them searchable through a browser; Digital Transfer Agent is an intuitive automated interface that seamlessly moves programming from third-party content delivery systems to a video server for play-to-air and eliminates manual tasks such as dubbing or segmenting. Digital transfer from supplier to fully automated on-air presentation is complete. Repeatedly detects re-feeds, programs are re-imported automatically, avoiding missed updates; ArchiveManager with HSM provides near-line storage of media in the automation system; Crispin Archive Manager integrates Hierarchical Storage Management for broadcasting, a policy-based storage and retrieval system that dynamically responds, and is designed around high-density reliable RAID units and PDD disks. Its multi-IP architecture allows facilities to float channel management anywhere on an IP network, including off site. Each control room can be dynamically assigned channels on an as-needed basis. When combined with Crispin redundant system design, secondary channels run in synchronization with the primary

ies and provide playlist and equipment redundancy; CTS suite of applications is built around a Web-enabled asset management solution that offers extensive media management capabilities with a powerful relational database.

**Established Products:** RapidPlayX, DeviceServer, Dubber, TurboBrowser, AssetBase, ArchiveManager, AutoDubber, ClipCopX, CTS, DTA, DubberAssist, LoRez, Mapper, NewsCat, NewsPlayX, NewsWheel and RecordScheduler.  
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**Crystal Vision Ltd. C7912**  
*Intro:* Safire HD for HD chroma-keying fits in the standard Crystal Vision frames and works with common HD formats as well as SDI; ViViD HD video delay line compensates for delays; Tandem HD for embedded audio can be configured as a single embedder or de-embedder and used with one or two groups of audio; Synner HD synchronizer, tracking audio delay and embedder/de-embedder; Smart DA intelligent SDI distribution amplifier.  
**Established Products:** Safire digital chroma-keyer; digital linear keyer; embedding decoder; decoding, encoding and aspect ratio converters; distribution amplifier; video synchronizer for Dolby E; routing

switch; ViViD; ViPA proc-amp; CoCo color corrector; FTX fiber-optic transmitter; Tandem embedder/de-embedder, A-to-D audio converter, AADA416FM analog audio distribution amplifier

**CTE International Srl N1525**  
*Intro:* ED Series DVB-T/H transmitters and regenerative transposers convert a transport stream into COFDM with 10 W rms output power; EK 200 compact DVB-T transposer; DTA 500U 500 W rms DVB-T power amplifier; ACU 1+1 universal automatic, changeover unit controls transmitters and repeaters; CTE-DB Elit Gold Series high-power air-cooled LDMOS TV transmitters.  
**Established Products:** Digital transmitters and transposers, gap fillers, amplifiers, antennas and accessories.

**CTM/Debie C5414**

**CTX Technology Corp. SL1212**

**Custom Flix C10815**

**Cypress Semiconductor C10148**  
**Established Products:** Multirate video equalizer restores signals up to 400 m at 270 Mbps and 200 m at 1.485 Gbps, and is designed to meet SMPTE 292M, 344M and 259M data rates; YLink TX port protection switch offers dual-protected links, automatic rate detection, instant switchover, and more; HOTLink-On-Demand video physical layer devices feature integrated voltage-controlled oscillator and phase-lock loop.

**D&C Electronics N1131A**

**D.A.V.I.D. Systems Inc. N3034**  
**Established Products:** DigaSystem, Database Manager, MTE, DigaCut

**D.Co. Marketing Inc. SU1406**

**D2 Software SL1513DD**

**da Vinci Systems SL713**  
*Intro:* Resolve digital mastering suite has expanded into three configurations: Resolve FX, aimed at budget-conscious studios wanting to offer file-based, nonlinear color enhancement and conforming work; Resolve DI for DI projects with a substantial color-look creation but no need for real-time throughput; Resolve RT for the greatest speed and performance with PowerGrid3, a set of three PowerPlants in the da Vinci's programmable image-processing accelerator; ColorTrace for 2K Plus can update color grading lists to match editorial changes.  
**Established Products:** Resolve, 2K Plus, Revival

**Daktronics SL2404**

**Dalet Digital Media Systems SL1132**  
*Intro:* DaletPlus News Suite offers a complete tapeless workflow through tight integration with Omneon Video Servers and Apple Final Cut Pro editing systems.

**Da-Lite Screen Company Inc. SL5400**

**Dan Dugan Sound Design N1214**

**Darim Vision SL4794**

**Data Check SL3756**

**DataDirect Networks SL2985**

**Datavideo Corp. SL2932**

**DAVICOM/Comlab N1000**

*Intro:* Next-generation Davicom MAC remote monitoring and control system units have secure, 128-bit encrypted IP communications, can accommodate two modems, and are ASCII/Unicode bilingual; MacComm Version 5 for Davicom MAC is included with all purchases of new Davicom MAC units, and is backward compatible; Scientel dual-video presence detector is responsive to the presence of a VIT signal and useful for remote selective switching. All versions sense the presence of NTSC video or sync, and activate a DPDT relay if the signal is lost. Two video signals may be monitored with a single unit.

**DAWNco C7141**

*Intro:* Satellite feed switcher; Super high stability LNBs; Starlook satellite identifier; Satellite fiberlink, outdoor rated; Off-Air 8-VSB digital channel demodulator.

**Established Products:** Satellite antennas, antenna motorization, satellite receivers, LNBs, feedhorns

**DAX Archiving Solutions SL2437**

**Dayang International Ltd. SU4209**

**Dayport Inc. SU1656**

**DB Elettronica N3505**

**Established Products:** MLP Series portable analog or digital television microwave links can transfer up to four video and up to 16 audio digital programs, and one video and up to four audio analog programs. Frequencies range from 1.3 to 24 GHz, while the transmission channel can be chosen through a front-panel switch; MDTL TV digital microwave link series operates in the 1.3 to 24 GHz range and can carry up to four video and up to 16 audio digital programs; MD20000/WKD liquid- or air-cooled television transmitter uses the LDMOS technology and a new PA module design.

**DCIT, s.r.l.—PROVYS C10725**

*Intro:* PROVYS TOffice is an integrated information system covering the key needs of a TV station, including scheme planning, acquisition, rights management, material shipping, long-term transmission planning, program billings, micro-scheduling, promo strategy planning and production, transmission evaluation, project scheduling, tracking and evaluation and more. PROVYS TOffice is configurable modular software used by production houses, public broadcasters, commercial stations, and specialized digital channels since 1997. It covers all the processes for management and operational levels. By integrating other software systems of the TV station, it forms the central informational repository. PROVYS sales2005 software facilitates efficient daily operation and management of airtime sales departments and media representatives. Its use improves the workflow in campaign management, client communication, traffic, and post-transmission operations. Thanks to the use of multiple pricing and scheduling strategies, the system provides many options. Up-to-date and accurate data, available through management reporting functions, improves internal process evaluation and strategic communication with

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**Established Products:** PROVYS TVoffice  
Jan Hrdlicka, Director, PROVYS Projects  
4D Center, Kodanska 1441/46  
Prague 10

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**Decisionmark** SL1796

**Dedotec USA Inc.** C7726

**Intro:** Dedolight DLH200S portable 200 W HMI softlight that accepts daylight and tungsten ceramic lamps; Dedolight DLH400S portable 400/575 W HMI daylight softlight accepts softboxes up to 5 feet and folds into a small package; Dedolight DLOBA2 camera-mount light fixture has zoom focus, is dimmable and has a flip-down daylight conversion filter and flip-up diffusion filter; several new Dedolight portable lighting kits.

**Established Products:** Dedolight

**Delta Digital Video** C10249

**Delta Meccanica Srl** N2834

**Intro:** VHF-B III constant impedance combiner for digital applications with six band-pass sections plus notch. This device combines two adjacent channels maintaining 30 dB of isolation.

**Deltacast** SL5584

**Denon & Marantz Professional** N600

**Intro:** DN-V755 Network A/V player is accessible over a network from any Web-enabled computer and features automatic IP search, 40 GB internal hard drive, support for MPEG-2 and MPEG-4 and more.

**DeSisti Lighting** C9611

**Intro:** Tinteretto chroma-key lighting system uses two blue and two green fluorescent 58 W lamps controlled via DMX, for use behind a chroma screen; Tinteretto fluorescent Cyclorama lighting system uses red, green and blue 58 W fluorescent lamps and is built asymmetrically for even light dispersion.

**Established Products:** TV, film, video and theatrical lighting equipment.

**Deyan Automation Systems** SU5198

**Intro:** AirMaster multichannel automation software for master control that also includes manual control and status feedback of all devices at all times over IP; ClipMaker automated ingest from VTR or DVD to video server and for timed recording and archiving; QBox, 200-button shotbox software with playlist; RecordManager is for automated recording to video server or VTR; BasicPlay is for video server or VTR control through com port or network by multiple users.

**Established Products:** AirMaster, ClipMaker, QBox, RecordManager, BasicPlay

**DH Satellite** C5641

**Dielectric** C2020, N412

**Intro:** MobileMedia antennas and filters for

the 1.67 GHz spectrum, including panel and traveling-wave antennas with various pattern options; M2M condition-monitoring solutions allow users to remotely access, monitor and manage non-IT based assets such as HVAC units, backup generators, security access instruments, street lamps and cooling towers.

**Established Products:** 7C 7P and 7S Series 700 MHz antennas, TFU-UT antenna, TUA mid-power panel antennas

**DiGico**

N1326 LX6464ES PCI network sound cards.  
**Established Products:** PCX882HR, PCX1221HR, LCM420

**Digidesign**

CW11005

**DigiEffects**

SL5138B

**Digital Anarchy**

SL5138F

**Digigram**

N1222

**Digital Broadcast**

C9818

**Intro:** PCX924HR/VX222HR series of high-resolution sound cards; PCX924HR-Mic and VX222HR-Mic stereo cards; ES881/ES1241/ES16161 rack-mountable AES/EBU-to-EtherSound interfaces;

**Intro:** MediaFire HD or SD play-to-air server with built-in automation and direct interfaces to several media delivery services; MediaView server system with ongoing verification of off-air feeds; MediaVault 35 TB,

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blue-laser archiving system; MediaBank Safety Net disaster recovery system; MediaBank Central control system.  
**Established Products:** MediaBank automated master control system, NewsBank automated newsroom

**Digital Cyclone** C10711

**Digital Film Systems** C10846

**Digital Rapids** SL616  
**Intro:** Carbon 1.0 professional multiformat HD/SD DDR with integrated software to manage ingest, trimming and play-out; Stream Software 2.2 encoding/transcoding software provides control over A/V I/Os from one streamlined workflow; Copper Wirespeed secure delivery of media over the Internet with tunable rate control and bandwidth scheduling.  
**Established Products:** StreamZ, StreamZHD, StreamZCP

**Digital Studio** C10128

**Digital Transaction Group** C11031

**Digital Vision** SL517  
**Intro:** DVNR 2K image processing and restoration provides full aperture 2k RGB processing at 15 fps over HDSL links; software-based restoration and image processing; Nucoda workstations; Nucoda Film Master Version 3 incorporates improve-

ments in the user interface.

**Established Products:** Nucoda Film Cutter, Nucoda Data Conform and Valhall Colour Grade

**Digital Voodoo/Bluefish444** SL778  
**Intro:** Symmetry 3.0, a multiresolution, multiformat, Avid-certified digital intermediate acquisition system with a new UI, playlist for clip assembly, XML-based project saves, batch and export lists import and export and extended file format supports; Catalyst 2K/HD/SD analog/SDI video card for Windows and Linux.  
**Established Products:** HD|Lust, HD|Fury, SD|Greed, SD|Spark

**Disc Makers** SL4385

**DiskStream Inc.** SL3031

**Display Devices Inc.** SL4755

**Diversified Marketing** C127

**DK—Technologies America** C2044

**dMarc/Scott Studios/Maestro** N3511

**DMT USA Inc.** C316

**DNF Controls** SU2955  
**Intro:** As-Run log option for the 3040P/DLO playlist, play-out and on-air automation backup system allows for log-

ging of play-out time, duration and errors, and can be uploaded from the 3040P/DLO to a computer via a Windows-based download utility; DMAT-O-EZ sports controller to simplify transition to sports control; GTP-32 GPI tally processor, previously the Tally Interface Box, designed to process and distribute GPIs and tallies among locations.

**Dolby Laboratories** SU2923  
**Intro:** Dolby Media Producer; Dolby Digital Plus  
**Established Products:** DP570, DP571, DP572, DP564, DP569, LM100, DM100

**Doremi Labs Inc.** C5712  
**Intro:** NuggetPro HD plays HD-MPEG-2 4:2:2 video up to 80 Mbps, features SDI, HD-SDI and DVI outputs, up to six channels of analog or digital audio, and control via serial 422 or Ethernet; XDVI multiformat for DVI, SDI, VGA and HD-SDI; V1-HD VDR featuring optional 4:4:4 dual-link I/O and dual-channel playback; DCP-2000 digital cinema server capable of playing DCI-JPEG2000 digital movies at up to 250 Mbps; DMS-2000 digital cinema mastering station DCI-JPEG2000 authoring system that supports bit-rates up to 250 Mbps.  
**Established Products:** V1 video disk recorders, MCS HD and SD video server, HD-MPEG-2 real-time encoder and decoder, HD video test generator, HDV-20 SDI-to-DVI converter

**Dorrough Electronics** C1233

**Dove Systems** C1641

**DPA Microphones Inc.** N608  
**Intro:** New 4090 and 4091, 12 cm mics have an omnidirectional condenser capsule in a lightweight tapered aluminum housing with a 3-pin XLR connector, for use with 48 V phantom powered systems, but operational to 5 V. The 4090 has a noise floor of 23 dBA, sensitivity of 20 mV/Pa, and can handle 134 dB SPL. The 4091 has sensitivity of 6mV/Pa, a noise floor of 26 dBA, and can handle 144 dB SPL.  
**Established Products:** Mics, Windpacs, accessories

**Draper Inc.** SL602

**DriveSavers Data Recovery** SL624  
**Established Products:** Data recovery services.

**DriveSavers Inc.** SL624

**DRM Networks** N1226  
**Intro:** MediaGate online billing e-commerce system for digital management; content management service offers streaming, hosting, transcoding, digital rights and workflow management; device management utility manages content on portable devices.  
**Established Products:** Online employment services for rich media content.

**DS Technologies** SU5178

**DSC Labs** SU4120  
**Intro:** RollyChart precision test charts featuring ChromaDuMonde and other spring-loaded CamAligns charts that roll into a slim tube.  
**Established Products:** Ambi ambient light illuminator, AmbiStand adjustable lamp holder, Combi DX-1 rear-lit test patterns, CamAlign

front-lit test patterns, ChromaDuMonde multihued patterns, White'nWarm cards, Handy and Pocket CamFocus, Handy and Pocket Camette cards, CamFolders, road cases, CaviBlack 3D superblack cavity.

**DSI RF Systems Inc.** C10135

**DTV Innovations LLC** SU4596A

**Duma Video Inc.** SL1206R

**Duplication Factor** C11629

**DVB (Digital Video Broadcasting)** C836  
**Intro:** DVB-H and IP datacast specifications; MHP, OCAP, GEM, open-source middleware for interactive television.

**DVB** C836

**DVEO/Computer Modules Inc.** SU1205

**DVIDS Hub** C10812

**DVS Digital Video Systems** SL2964

**Dylux Technology LLC** SU215

**Dynamic & Proto Circuits Inc.** SU1631  
**Established Products:** Technologically advanced, multilayer printed circuit boards.

**[E3] Engstler Elektronik Entwicklung GmbH** C6607M

**e2v technologies** C1236  
**Intro:** Stellar cool high-powered satellite communications amplifier range now includes 400 W Ku-, X- and C-band, 450 W tri-band, 500 W DBS, 750 W Ku-, X- and C-band feature rugged design and advanced cooling.  
**Established Products:** e2v IOTs, e2v ESCIOTS, Stellar HPAs, StellarCool HPAs

**Easy Cover USA Inc.** SU1329

**Easy Worship-Softouch Development** CW10906

**Ebenezer Technology Inc.** SL1621

**Echolab** C6026

**eCinema Systems Inc.** C2333

**EditShare** SL1410

**Editware** C5136  
**Intro:** Editware is joining Prime Image this year, both companies will show the Time Tailor Post HD/SD combined with Editware Fastrack TT automated system to edit program run has frame accurate time reduction, deletion of unwanted commercial black slugs, etc.

**EEG Enterprises Inc.** SU3601

**Egatel** C8047

**Egripment** C8035  
**Intro:** Sports Dolly built as low to the ground as possible to minimize spectator view obstruction; StarShot remote camera head has motion and smoothness while eliminating some features such as slip rings; Focus Dolly Package adds a set of hard rubber wheels and a lightweight aluminum column and seat system for use with jib arms.

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**Established Products:** Xtreme T12 carbon-fiber telescoping crane with a maximum reach of 33 feet while the maximum height is 40 feet

**Elber Srl** C336

**Electronic Script Prompting** C5514

**Electronic Theatre Controls Inc.** C7732

**Intro:** Congo lighting board controls moving lights, conventional fixtures, LEDs, media servers, and more; Sensor+ SineWave dimming technology.

**Established Products:** Source Four luminaires, Sensor+ dimming, SmartFade light-control board.

**Electronics Research Inc.** N2406

**Established Products:** Trasar antenna, Carina antenna, UHF broadband panel antenna, Crusis antenna, directional combiner

**Electrosonic** SU5173

**Electrosys Srl** C311

**Intro:** BI, BIII and BIV-V air-cooled solid-state modules for high-power, air-cooled TV transmitters; DVB-T frequency-agile transposer/gap filler with several output power configurations; multimode exciter with fully numerical signal elaboration with direct RF modulation.

**Established Products:** Liquid-cooled, solid-state TV transmitter, BIV-V and BII air- and liquid-cooled amplifier modules, IOT dual cast transmitter.

**Elenos** N1513

**Elettronika Srl.** N2436

**ELTI** N1532

**EMC Corp.** SL596

**e-mediavision.com** C11325

**Intro:** X-View multi-image display processors to power high-resolution virtual monitor walls from 4 to 32 inputs for composite video, SDI, HD-SDI, computer and/or IP streams.

**Established Products:** Point-HD, a touch-screen system that allows operators to draw on a TV picture in real time.

**Emerson Network Power** C113

**Empire State Filter Company Inc.** C3343

**EMR Corp.** N1600

**ENCO** N617

**Intro:** DADtv for HDTV packages essential DAD digital audio, delivery software and hardware tools suited to specific requirements of live and fast-paced, television broadcasting in HD with 5.1 surround sound. DADtv is available for in-studio networks as well as field production units.

**Established Products:** DADtv, enCaption

Don Backus, Vice President

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**ENCO Systems Inc.** C2507F

**Enensys Technologies** SU2250C

**E-N-G Mobile Systems** C7446

**Enhance Technology** SL600

**Ensemble Designs** SU2997

**Established Products:** Avenue signal processing and infrastructure for broadcast, HD up-, down- and cross-converters, embedders, SPGs, frame syncs and fiber converters.

Mondae Hott, Sales Mgr

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Web Site: [www.ensembledesigns.com](http://www.ensembledesigns.com)

**Enterprise Electronics Corp.** C7815

**Envivio Inc.** SL4403

**Intro:** Envivio 4Caster HD3 live HD AVC encoder for frame rates between 2 and 20 Mbps; Envivio 4Caster B3 real-time AVC encoder delivers full-resolution and frame rate video at less than 2 Mbps.

**Established Products:** Envivio 4Caster Broadcast Series AVC offline HD and SD encoders; 4View Broadcast Series professional AVC decoders; EnvivioTV AVC desktop or set-top players; Envivio 4Caster Mobile Series of real-time and offline AVC encoders

**EOS International SL** 1833

**Intro:** EOS.Web Media, a highly scalable broadcast media access management system.

**ERG** SU2231

**Established Products:** HDM-EV85, HDM-EV30D

**Ergo 2000** SU546

**ESE** C1639

**Intro:** ES-102U master clock/timcode generator, receives time and date information from GPS satellites and supplies it as SMPTE/EBU, ASCII, TC89 and/or TC90; ES-185U/NTP, an enhancement to ES-185U, offers network time protocol output; 700 Series programmable event controllers provide a number of contact closure outputs at predetermined times; NTP time servers provide a simple method of putting accurate time information onto a network; ES-110 generates a stable source of 10 MHz and 1 PPS using GPS.

**Established Products:** Master clock systems, A/V distribution amplifiers, SMPTE/EBU timecode products, audio level indicators and interfaces.

**Esser Test Charts** C6607E

**Etere Automation** SU129

**Etilux** C10418C

**ETL Systems** C7542

**Euphonix** N1002

**Established Products:** System 5-MC integrated DAW controller for audio post recording, editing and mixing; MC media application controller speeds and enhances control of any professional application on Mac or PC, and can switch between controlling multiple workstations including Final Cut Pro and Avid Media Composer.

**Eutelsat** C4541

**Intro:** Hot Bird series of satellites carries more than 700 TV channels broadcast by five satellites to more than 110 million households.

**Event DV Magazine** SL5597

**Evertz** SU170

**Intro:** 9700 Series logo generator and keyer line, to be deployed as part of the Lidia 4 project; modular Dolby-E codecs to support the AC-3 encoding process; 7772 Series codecs based on JPEG2000 wavelet compression provides 4:2:2, 10-bit processing and outputs at 270 Mbps SDTi; multi-input signal display processing for MVP, VIP and MWP; Quartz router and M/C integration.

**Established Products:** Modular 7700 Series and 500 Series along with multi-input signal display processors, master control switchers, routers etc.

**EVS** C3230

**Exanet** SL1436

**Established Products:** ExaStore NAS solution integrates with any workstation or server, and supports a range of applications using standard protocols.

**Exavio** SL585

**Eyeheight Ltd.** SU147

**Intro:** Eyeheight canalettoMDi digital color corrector for 1920x1080 with 1.5 Gb I/Os, luma, chroma gain, black-level and hue correction; Eyeheight keyEyesMDi keyer HD downstream linear keyer; Eyeheight TB-12 multichannel source identifier; Eyeheight legalEyesSDi legalizer with digital composite signal handling; Payout Application Suite enables

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Eyeheight play-out master control, switcher, bugEyes logo generator and SQ-2 image-squeeze processor to be configured and managed using Windows.

**Eyeon Software Inc.** SL2903

**EZ FX Jibs Inc.** C2847

**EZNews by Automated Data Systems** SU241

**Facilis Technology** SL1600  
Intro: TerraBlock Version 1.5 cross-platform virtual volume SAN.  
Established Products: TerraBlock 24D, TerraBlock 12D, TerraBlock 8XS

**Facilis Technology Inc.** SL1600

**Fairlight** SL2923  
Intro: Multiconfigurable Constellation Anthem digital audio console unites recording, mixing and editing into one unit.  
Established Products: Constellation XT

**FAR** C10418D

**Fast Forward Video** C1851  
Intro: VDR 2005 for video assist, location recording, video analysis and use in inspection systems.  
Established Products: Omega Deck, DigiDeck, Mini DVR Pro, FieldPro DVR, RECON, Outrider DVR

**Fast VDO** C10825

**FB8T** SU186D

**FCC** N2034

**FH Video Inc.** SU1054

**Fiberplex Inc.** N2031  
Intro: LightViper VIS-1832, VIS-4832 and 1808/0808 and LightViper Shadow fiber-optic transport systems.

**Fibrenetix** SL1230

**Field Goal & Rocket** C10129

**FileWave USA Inc.** C9649  
Established Products: FileWave automated cross-platform solution to mass install, configure and manage new software and patches; Asset Trustee, an automated cross-platform solution to collect and report installed software, hardware and system information.

**Film & Data Technologies LLC** C1226

**FilmLight** SL1391

**Final Draft Inc.** SL1376  
Intro: Final Draft AV 2.5 word processor for writing two-column, audio-visual scripts.

**FirmTek LLC** SL1238  
Intro: SeriTek/2EN2 dual-bay hot-swap external eSATA; SeriTek/2eEN4 four-bay hot-swap external eSATA enclosure for extreme A/V storage; SeriTek/15M2 SATA PC card for notebook computers; SeriTek/1eVE4 four-port external PCI-X eSATA host adapter.  
Established Products: SeriTek/1V4 four-port internal PCI-X host adapter; SeriTek/1VE2+2 four-port external/internal PCI-X host adapter; SeriTek/1VE4 four-port external PCI-X host adapter.

**FirstCom Music** C1535  
Intro: MusiQuick Local offers more than 38,000 compositions in 15 libraries, with 100-plus new releases a year, with hard-drive delivery.  
Established Products: Several themed collections

**Fischer Connectors** SU5193  
Intro: SS/ SSC Series shortened connector; WSO Series right-angle connector.

Established Products: 1053 HDTV fiber-optic camera connector; 1052 triax camera connectors for U.S. standard; 1051 triax camera connector for international standards

**Fission Software Inc.** C7907  
Established Products: Fission HDcore, a turnkey hardware/software system created to replace tape playback systems and modernize station workflow.

**Fjord Media AS** SU5016  
Established Products: Free4 multipurpose modular frame concept with routing, optical transport interfaces, distribution, conversion and signal processing in the same frame; Fleetmaster control system in three versions—FMC-SILVER for one user, FMC-GOLD for unlimited users and FMC-WEB for Web-based interface.

**Flash Technology**

N412

**WBS**

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*Intro:* M2M remote monitoring systems.  
*Established Products:* Tower lighting and monitoring.

**FLIR Systems Inc. C6943**  
*Intro:* UltraMedia III aerial broadcast camera systems use the Ikegami HL-59, a 1,000 mm Canon lens, and advanced stabilization technology; UltraMedia HD, a gyro-stabilized HDTV camera featuring the Sony HDC-950 with the Fujinon HA42X13.5 ERD, for HD imagery at 1,140 mm.

*Established Products:* UltraMedia III, UltraMedia HD

**Floral Systems Inc. SU2941**  
**Flying-Cam C10428**  
**Focus Enhancements SL2136**  
**Focus Optics SU5174**  
**For-A Corp. of America C3210**

*Intro:* FRC-7000 HD frame rate converter uses motion compensation processing by vectors to convert field frequencies and enable conversion between different HD formats; FA-9000 HD/SD uses 12-bit internal processing; MVS-16S multiviewer supports analog composite and SD-SDI mixed inputs and can be set up to divide the screen many ways; MC-10AD HD/SD A-to-D converter converts HD or SD format analog component signals into SDI and can be used by all HDV users.

**Force10 Networks C9946**  
*Intro:* Force10 E-Series Gigabit and 10 Gigabit Ethernet switch/routers provide full L2 switching and L3 routing.

**Forecast Consoles Inc. SU146**

**FOXCOM, C4748**  
**A Division of OnePath Networks**

**Fraunhofer IIS C2507M**  
*Intro:* Protected A/V streaming demonstrated at AVC Alliance booth.

**Fraunhofer Network C6607J**  
**Digital Cinema**

**Frezzi Energy Systems, C5726**  
**div. of Frezzolini Electronics Inc.**

*Intro:* Frezzi lithium battery systems; Frezzi Micro Fill lighting stick kits; DV camera application lighting configurations; pan/tilt robotic systems; out-of-box system integration; Frezzi 200 and 400 W full-spectrum portable lighting kits; Frezzi LED on-camera light; LED lighting kits.

*Established Products:* Advanced rechargeable batteries, chargers, on-camera and location lighting in HMI, quartz-tungsten and LED kits, power supplies, robotics for portable and fixed-system integration, complete support equipment and accessories.

**Front Porch Digital SU2236**

*Intro:* DIVAnet Version 2.0 allows leverages DIVArchive to provide advanced content replication, disaster recovery, and business continuance across multiple facilities; DIVArchive 3.10 provides broader interoperability with emerging technologies; DIVAdirector distributed, Web-based content management; DIVAcomplete for complex storage and archive situations; DIVAworks plug-and-play archive management appliance.

*Established Products:* DIVAmirror

**Frontline Communications C4426**

*Intro:* Frontline HD-MSU-4.5 combination C-/Ku-band system using a 4.5 m Andrew tri-fold C-band antenna and an AVL 1.8 m Ku-band offset antenna on a Sterling chassis; Frontline/WFAA-TV ENG-350 HT high top with 81RU built for WFAA-TV; DSNG-350 LT featuring a 1.2 m AVL antenna system; Frontline NT-8EX-C/Ku with conference area and sleeping quarters; HD/Digital DSNG/ENG Sprinter for mobile HD and digital newsgathering technology.

*Established Products:* Frontline HD-MSU-4.5 Satellite vehicle, ENG-350 HT, DSNG-350 LT, SNV NT-8 HD truck, Sprinter ENG/DSNG truck

**Fuji Photo Film USA Inc. SU149A**

**Fuji Television Network C10818**

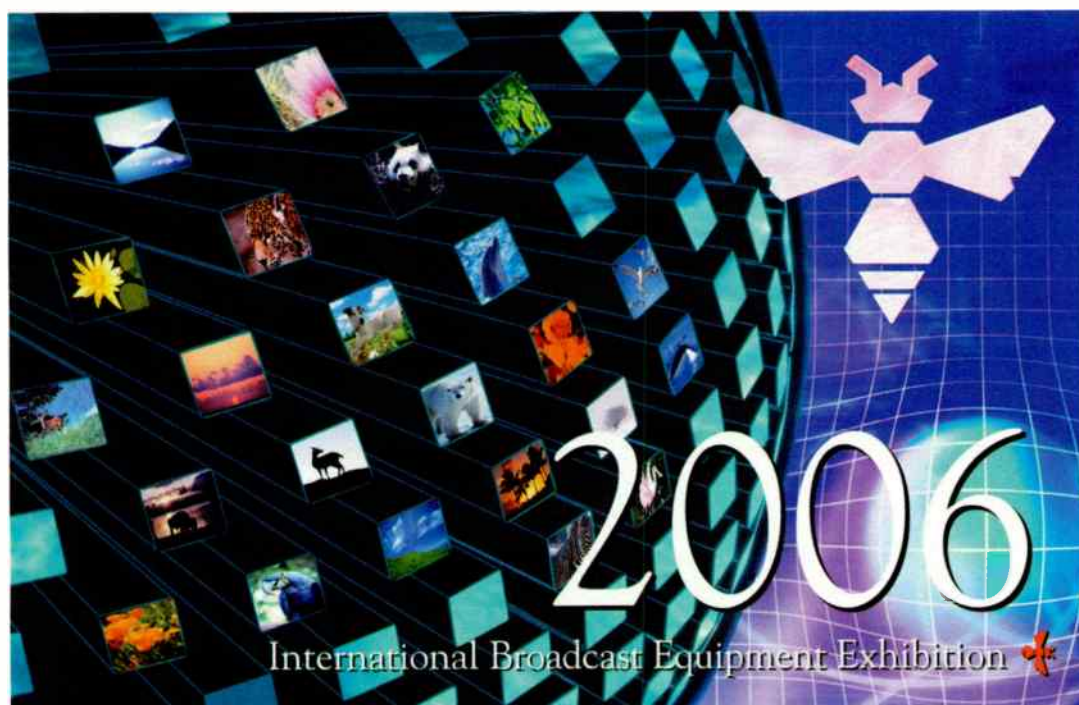
**Fujinon SU149**

*Intro:* HA27x6.5ESM HD studio lens featuring the highest magnification (27x) and widest angle (6.5 mm), higher optical performance, reduced flare, improved color balance, a reduction in operating noise and smaller size and weight; HA16X6.3ERM for cover telephoto and wide-angle requirements, features a 16x zoom ratio, 6 mm wide-angle and 202 mm telephoto focal length with extender.

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### Exhibition Categories

- Audio Equipment ● Cameras and Related Equipment
- Recording Equipment
- Editing and Production Equipment
- Electronic Displays ● System Conversion Equipment
- Output Systems ● Relay Systems
- Transmission Systems ● Lighting Equipment
- Measuring Equipment ● Transmission Cables
- Electric Power Units ● HDTV Systems
- Satellite Broadcasting Systems ● Virtual Systems
- CG Production Systems ● DVD Systems
- Multimedia Systems ● Software ● IT/Streaming Related
- Multiplex Broadcasting Systems ● Others

### Exhibition Application Deadline

**Thursday, April 27, 2006**



Fujitsu Computer Products of America C10211

Furukawa America Inc. C8543

Future Media Concepts Inc. SL113

Future-Medium SL1620

GCS C8535

GE Security—Fiber Options SU2253  
Intro: All-digital A/V data multinode transport.  
Established Products: Data fiber-optic equipment; digital signage, A/V presentation systems and interfaces

Gecko-Cam GmbH C6607A

Gefen Inc. SL541  
Intro: 8x1 DVI switcher capable of connecting up to eight HD DVI sources to one HD DVI display with resolution support up to 1920x1080; DVI-to-SDI conversion unit allows DVI video components to be accessed and integrated with SDI equipment; all-fiber DVI cables.  
Established Products: 4x1 HDMI switcher; 1:8 DVI distribution amplifier; 2:8 DVI distribution amplifier; 2x1 DVI KVM switcher; DVI booster; HDTV extreme cables; 4x2 HDMI matrix

GenArts Inc. SL15135

Gencom Technology SU5199

Genelec Inc. SL4791

Gennum Corp. SU4214

Gepeco International Inc. C5733  
Intro: HDRA hybrid-fiber distribution rack features an angled 2RU front panel that reduces connector protrusion and cable strain; G37 12-channel DT12 connectors feature a hard anodized aluminum back shell.

GestureTek Inc. C9846

Gigabit Sytems SU5190

Gigasat Ltd. OE116

Glidecam Industries Inc. C6030

Global Media Resource Inc. C2549  
Established Products: New and certified reconditioned videotapes

Global Microwave Systems Inc. C8528  
Intro: Configurable Messenger Transmitter for ENG features COFDM modulation with local control and 1 to 7 GHz in-band output frequency; Messenger antenna Array for long distance A/V mobile links; Messenger portable broadcast quality decoder; Block Down Converter Card.  
Established Products: MDT-B, MDT-D, SDMT-C, SDMT-S, DDPC, DMR, MNA-ASI-IP, LMR, MR, SR, XR, CT, HT, MT, NT, ST, RCU, SME, VIEWLOCK

Global Security Systems LLC N2733  
Intro: All-Hazard Alert Appliance.; All-Hazards Alert Command Center Software Integrated Communications Server.

**Globalstor Data SU241**  
Intro: DVD TransPro HD imports time-code/chapter points with scene and take information of HD dailies video to create a disc with complete random access and DVD menu control. A DVD-R drive ensures single-step materials loading/unloading, uncomplicated archiving, cataloging and shipment of dailies. It has a range of specialized production software utility compatibility; ExtremeStor DI Pro dual-core AMD Opteron or Xeon processors provides

simultaneous 32-/64-bit computing, SCSI drives and a BlueFish444 card; ExtremeStor-DI is an end-to-end 2K digital pipeline solution providing 1,000 MBps or Mbps sustained performance in a fault-tolerant HD digital intermediate solution. Incorporate two dozen 250 GB hot-swappable SATA hard drives for 6 TB or two dozen 500 GB drives for up to 12 TB of local storage. This DI system is available in Opteron or Xeon processors; SATALite Series, today's most sophisticated storage

technology for SAS and SATA architecture offering a variety of RAID solutions with various supported platforms and interfaces; CELESTIAL Series Data storage for mission critical data computing applications. Addressing the more important issues like redundancy, performance, compatibility and scalability.

Established Products: DVD TransPro HD, ExtremeStor DI Pro, ExtremeStor DI, SATALite Series, CELESTIAL Series  
Mr. Victor Garcia, Sales Director



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**GlobalStreams Inc.** C9248  
*Established Products:* 1 Ghz switcher card upgrades graphics capability of the GlobeCaster Studio 4000 and 8000; HD output card for the GlobeCaster Studio 4000 and 8000 allows for a variety of HD output broadcast signals; GlobalStreams X1 broadcast-quality, integrated 4-input production switcher, character generator, framestore and chroma-keyer; CS-100 control panel and software upgrades.

**GlobeCast** C1530

**Globecomm Systems Inc.** C6241

**GMPCS Personal Communications Inc.** 4846  
*Intro:* BGAN delivers data rates of up to half a megabit via a satellite terminal about the size of a notebook PC.  
*Established Products:* Satellite communications equipment and services

**gotoBavaria** C6607L

**Grass Valley** SU2906  
*Intro:* Grass Valley Infinity Series digital media camcorder, with HD/SD multiformat support, including 1080i50/60, 720p50/60, 625i50 and 525i60, recording/playback to and from integrated Iomega REV and CompactFlash media, A/V metadata files in an MXF-based wrapper, DV25, JPEG2000, and MPEG-2 support and three USB 2.0, one each FireWire, Gigabit Ethernet and HDMI display interfaces; Grass Valley digital media recorder supporting 1080i50/60, 720p50/60, 625i50 and 525i60, with flexible encoding/decoding options, DV25, MPEG-2 and JPEG2000 support, choice of removable recording/playback media including integrated Iomega REV and CompactFlash media, A/V/metadata files in MXF wrappers and USB 2.0, FireWire and Gigabit Ethernet interfaces; Grass Valley REV Pro drives and removable media combines the nonlinear advantages of a hard-disk drive with the portability of videotape with real-time recording and playback, sustained data rate of 110 Mbps, segmented cache that supports simultaneous read/write, 35 GB per disk, enhanced security and consumer-based disk and drive compatibility; Grass Valley K2 media server and media client scalable storage and delivery system with single server bandwidth rates up to 180 MBps with iSCSI, plus 80 MBps for FTP/CIFS over Gigabit Ethernet, real-time performance with the K2 media using iSCSI over Gigabit Ethernet, remote

client and administrative control over a Gigabit Ethernet, simple redundancy, secure storage based on RAID 10, 3 or 5/6; Grass Valley Ignite HD is available with one to four M/Es, up to 32 control ports, and is scalable from 24 to 93 video inputs and 24 to 96 audio inputs. It offers an integrated video switcher, audio mixer, and teleprompter and comes standard with the Grass Valley QUICbox programmable tactile-interface panel.

*Established Products:* Grass Valley LDK 6000 mk II WorldCam HD camera and LDK 6200 HD Super Slo-mo digital camera systems.  
Russ Johnson, VP Sales  
430 Mountain Ave.  
Murray Hill, NJ 07974  
908-508-0991  
Fax: 530-478-3755  
E-mail: [webmaster@grassvalley.com](mailto:webmaster@grassvalley.com)  
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**Green-Box Technology Co. Ltd.** SL5566

**Gridiron Software** SL5138E

**Gridmedia Americas** SL5000

**GRID-TV GmbH** C6333B

**GVS—Grande Vitesse Systems** SL620

**Gyrocam Systems** C11044

**Gyron Systems International Ltd.** C11539D

**Hamilton Metalcraft** C1248

**Hamlet Video International** C9319  
*Intro:* Flexiscope Micro based on a bespoke host processor developed by Hamlet with plug-in application modules, all of which may be controlled over IP; VidScope-vx, a powerful test and measurement system running entirely in software, available for DV, HDV, SDI and HD-SDI.  
*Established Products:* Monitor Scope, Digi Scope and Protean Axiom

**Hangzhou Linan Wanpeng Telecom Cable Co. Ltd.** C5107H

**HanJiang Feiyu Electronics Equipment Factory** C5107Q

**Hannay Reels** C7836

**Hansen Industries Corp.** C5107L

**Hansun Technologies Inc.** C5107E

**Hardigg Cases, A division of Hardigg Ind.** SL3785

**Harmonic Inc.** SU1383  
*Established Products:* Digital video, broadband networking and IP-delivery systems for cable, satellite, telecom and terrestrial operators worldwide.

**Harris Corp.** SU2929, C807  
*Intro:* NetVX multiservice video networking system; H-Class content delivery platform and application suite; Mobile TV for MediaFLO and Modeo; various infrastructure, broadband software management and distribution equipment for mobile TV head-ends; Platinum multiformat routing switchers; PowerCD high-power UHF ATSC transmitter in a single cabinet.

**Harrison** N1522  
*Intro:* MPC4-D digital film console features LCD display screens above all faders.  
*Established Products:* Trion digital console; X-Range processing and control systems

**Hash Inc.** C9019

**HD News** C11539C

**HD Wireless** C15539B

**Heil Sound** N407  
*Intro:* Heritage Pro vintage design mic with large diaphragm dynamic element.

**Helicopters Inc.** C355A

**Helinet Aviation Services** C10425

**Helius Inc.** C8545

**Hewlett Packard** SL3744

**HHB** N1822  
*Intro:* FlashMic DRM85 digital recording mic combines a Sennheiser omnidirectional condenser capsule with a Flash recorder; CDP-88 professional compact disc.  
*Established Products:* Portadrive PDR2000 location sound recorder; CDR830 BurnIT and CDR830Plus BurnIT Plus compact disc recorders, Portadrive MDP500 portable minidisc recorder; professional recording media

**Hi Tech Systems Ltd** SU4317  
*Intro:* Q-Tracker cue controller for non-technical operators with sources displayed on a touchscreen along with an array of cue management tools; actiV range has new features on an established range of five port server controllers, and comprises the Filer, the Carbox and the Sports forming a range of controllers.

**High Tech Furnishings** SU2230  
*Established Products:* Custom designed control room consoles and furniture.

**High Tech Industries** SU2230

**Hilomast USA** C3341

**Hitachi Kokusai Electric America** C3926  
*Intro:* SK-3010P 24p HD production camera; SK-3010P HD production camera with CMOS sensors; DK-H31 HDTV two-piece camera; digital triax for SDTV production cameras; video over TCP/IP transmission systems.

**Hi-Tech Enterprises Inc.** SU2129  
*Established Products:* Sony, NewTek, Matrox, Adobe, DeSisti, Fuji, Canon, Bogen, Miller

**HM Electronics** C9335

**Hollywood Edge** C1744  
*Intro:* Hi Impacts Series action sounds; Premiere Edition Volume 6; Soundelux Music Library; Sonic Energy Production Elements.  
*Established Products:* Premiere Editions, Animal Trax, Background Trax, Historical Series, Evil Effects, Foley Series and CartoonTrax.

**Holophone** N3931

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*Intro:* Holophone PRO-MINI 5.1-channel surround mic for broadcast cameras; Holophone H2-PRO Rev. 2, 7.1-channel discrete surround mic for high-end audio recording/TV broadcasting. This version includes an enhanced low-frequency channel.

*Established Products:* Holophone H2-PRO

Home Video Studio Inc. C9836

*Established Products:* International network of independently owned home video studios.

Honeywell Obstruction Lighting N2133

Hoodman Corp. C1249

Horita Co. Inc. C9020

*Intro:* UTG-50 universal timecode generator generates LTC at 23.976, 24, 25, 29.97, and 30 fps. The timecode output can be jammed to an external timecode source, an internal real-time clock/calendar or RS-232 GPS data; multiple on-screen menus provide quick and easy setup.

Hosa Technology Inc. SL542

Hotronic Inc. C5515

Hoverlord C10418E

IABM C5246

IBC C305

IBIS Inc. SU183

*Intro:* Highlighter allows the capture of highlights from up to six live feeds at one workstation, being shown with Omneon video server.

*Established Products:* Ingest manager, news play-out, video server management.

IBM SU2976

Iconix Video Inc. SU1650

Ideal Technology (Shenzhen) Co., Ltd. C5107R

Ideasunlimited SU5187

iDirect C7443

IDX System Technology Inc. C4235

*Established Products:* E-10 Endura 98 W-h V-mount battery with PowerLink and Digi-View features at 14.8 V/6.6Ah; X3-Lite LED onboard camera light which draw 11 W for 35 W of illumination; VL-4Si simultaneous multiformat charger for Endura systems; A-E2H1 adaptor plate for Canon XL-H1 camcorder; Cam-Wave camera mount wireless A/V transmission system from WEVI.

IKAN SL1247

Ikegami Electronics C3226

ILC SU3998

*Intro:* MaxView 5.0 for Broadband consolidates management of multiple technology hybrid networks into one view.

*Established Products:* MaxView network control software; transmitter remote control system; CMS carrier monitoring system; chorus trouble ticketing system; ACE alarm correlation; Maestro automation and event manager; Scenario resource

scheduling and allocation

Illbruck Inc./SONEX N218

ILY Enterprise Inc. SL4406

Image Video SU2205

*Intro:* IMD-1, a UMD and tally products extension that provides for in-video UMD/tally with embedded audio metering/demux; VxV-4HD quad split video processor featuring Gennum VXP technol-

ogy for de-interlacing and upconversion.

*Established Products:* TSI-1000 tally systems controller, VxV-16 multi-image display, VxV-4 DVI and SDI quad-split processor; RDU1510 tri-color under-monitor displays; RDU1710 high-resolution under-monitor displays; 7721 static displays

Imagica Corp. of America SL1826

*Intro:* Imager HSX scans 35mm film to 4K/2/K; Imager HSR high-speed film recorder.

Imagineer Systems Ltd. SL5564

Immersive Media SU1831

I-Movix C10418F

Impact Cases Inc. C9337

IMT RF Products N2414

Industrial Acoustics Company N2431



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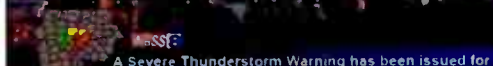


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Garnett scores 22 points, 24 boards in T-Wolves' win...  
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## Industry Advanced Technologies Inc.

**Intro:** Intel-A-Jib Lt. DV camera jib for a 100 mm ball tripod; Lightning Rail DC attaches directly to any drop ceiling T-bar; Firefly Illuminated Cable Protectors.

## Infotrend Corp.

SL1830

## Infosys Technologies Ltd.

SL3235

**Established Products:** Digital Media Exploitation and Monetization for targeted advertisement, subscription and micro payment; Digital Media Archive; Multimedia Distribution for Wireless, Web, VOD and IPTV.

## Inlet Technologies

SL3803

**Intro:** Fathom 2.5 real-time hardware encoder for WMV and VC-1; Semaphore 1.5 and 2.0 updates to Semaphore video analysis software; Neptune uses Inlet's encoding engine in a configuration suitable for live transmission/backhaul.

## Innovision Optics

SU193

**Intro:** Mini DV Probe tubular lens system for Sony HVR-Z1U and HDR-FX1, Panasonic DVX100/A and other DV camcorders; joystick-operated Bird's Nest pan/tilt head for overhead perspective holds up to 12 lbs.; Swenson TerraScope Rolling Camera Platform transports a camera with attached periscope type lens pointing downward; Z Shuttle Camera Tracking System ceiling-mounted track combined with vertical arm. **Established Products:** HD Probe and Mini DV Probe lens systems; Innovision remote camera tracking systems; Movie

Engineering remote controlled camera heads and tracking systems; Radcam Miniature Camera Cars

## Inovonics Inc.

N3206

**Intro:** 261 digital utility audio processor with AGC, compression and limiting; 264 quad leveler, with four independent channels or 2 stereo channels, maintains program average/peak ratios for consistent perceived loudness and system protection.

## In-Sync Publications

C8216

## Intelsat

C3641

## Inter BEE

C2405

## International Datacasting

C5841

## Interra Systems

C10747

## IPV Ltd.

SL2437, SL15130

**Intro:** SpectreView browse encoders support SDI and file-based inputs for transcoding into MPEG and WM9 with multiple audio tracks and animated live logo; SV Server software for turning a PC into a video server.

**Established Products:** Pioneer dual channel encoder, Voyager decoder, Soyuz quad multi-format encoder.

## iQstor Networks

SL1832

**Intro:** iQ2280 SATA II 3RU storage system for diverse media applications supports up to 15 SATA II disk drives providing 7.5 TB of storage with 500 GB drives.

## Irdeto

**Intro:** Psys, a modular large operator conditional access system for any kind of content is transport-platform independent and can be used to secure DVB, IP and mobile content. Psys will subscriber growth; SoftClient, the new secure software client for the Irdeto IPTV, provides multilevel encryption and hardware-like security without a smart card. Not only does SoftClient have the same functionalities as other Irdeto smart cards, protecting against piracy and subscription fraud, but with the added advantage that the security can be updated and the client replaced with newer versions on a regular basis. SoftClient utilizes the bidirectional nature of an IP network to ensure the safe operation of the client in the IP STB through secure authentication and behavioral monitoring. **Established Products:** Irdeto M-Crypt, OMA DRM Clients  
Sam Attisha, Sales Director  
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## IRTE SpA

C10131

**Intro:** Digital microwave links from 2x2 to 2x155 Mbps; COFDM mobile microwave links on 2.4 or 7 GHz; DVB-T/DVB-H transmitters from 1 W and up; DVB-T and -H compact antennas for DVB-H applications. **Established Products:** Microwave and TV antennas, analog microwave links; parabolic

antennas for microwave communications and satellite antennas.

## Isilon Systems

SL2843

## ISIS Group Inc.

SU141

## I-STAR USA Inc.

SL3806

## Iwedia Technologies

C9412

## J A Taylor & Associates

OE323

**Established Products:** Brokerage of pre-owned television production trucks, satellite uplink vehicles and ENG vans and other A/V equipment.

## J.L. Fisher

C5445

## Jadoo Power

C10444

**Intro:** NABII predictable fuel cell power unit with accurate digital power information, continuous runtime and hot swap capability; FillOne portable, single-port refill station; N-Stor360 patented digital state-of-fill indicator and valve and canister design; PowerBase compact desktop stand for the NABII; and PowerTote NABII carrier

## Jampro Antennas/ RF Systems Inc.

C1517

**Intro:** RCCC DVB-T/DTV mask filter/combiner achieves excellent results in the band-pass and channel combining application. Each unit is electrically and mechanically performance tested. Space-saving ceiling mounting is available—high isolation, low-insertion loss, convection-cooled and tem-



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JDSU (Acterna)

SU4201

**Intro:** DTS-330 digital video test platform with added multicast analysis capabilities now enables operators to remotely test IP video quality.

**Established Products:** DTS-200 and DTS-330

JK Audio Inc.

N4215

**Intro:** Four IFB Phone Bridge four-way phone line interface; RIU-IP remote interface providing remote operation for the JK Audio Innkeeper 2 and Innkeeper 4 multi-line digital hybrids.

**Established Products:** THAT-2, QuickTap IFB; Daptor Two; RemoteAmp; AutoHybrid; Compact; RemoteMix 3; Innkeeper 1; Innkeeper 2; and Innkeeper 4

J-LAB Co.

C3241

JLCooper Electronics

SU5158

**Intro:** Gangway 16-port gang roll switcher with 19 RS-422 ports and a RS-422 control input; MCS-3000 XL motorized 8-channel fader controller with high resolution multi-colored, lighted buttons; BusAlyzer serial communications analyzer; MCS-Bridge VF-4 control expander for the MCS-Spectrum; MCS-3000 Ethernet Option Interface Card with Macintosh software.

**Established Products:** ES-Slomo; MCS-Clipshot; MCS-3000; MCS3; Media Command Station; Media Control Station and MCS-Spectrum

Joseph Electronics

C4531

Junger Audio

N3200

**Intro:** Level Magic Surround for TV broadcasting relies on a new algorithm capable of adjusting the correct audio level from any source at any time; HD/SD SDI-interface C8403 dual-mode audio embedder/de-embedder card for the C8000 system; SD SDI-interface C8402 SDI audio embedder/de-embedder card.

**Established Products:** b40 series audio processors including SDI interface, Level Magic, MIX4 digital desktop mixer and dynamic range processors

Just Edit

SL1240

**Intro:** vsnnetsharer content manager allows searches by keywords in an SQL database, creates copies in low-res in WM9 for searches and copies news to the server playlist; vsnairnews live play-out video server controls the video mixer via RS-422; vsnmatic multiformat play-out and video server automates master control; vsnarchive media asset management module with an advanced digital asset manager; vsnstorage supports all workstations working at full capacity.

JVC Professional Products Company

C3217

K5600 Inc.

C8041

**Intro:** Joker Bug 800 W HMI daylight lighting fixture with a wider beam and more output, better coverage and distribution, drawing low current and allowing several combinations on a 15 or 20 amp circuits.

KAE Corp.

SU5160

**Intro:** POS-1-G5 rackmount drawer for one or two Apple G5 PowerMacs with optional cable management; DSS-3-G5 rackmount stationary shelf one or two Apple G5 PowerMacs; FAN-1-T 1RU rackmount triple fan system with thermostatically controlled switch.

**Established Products:** Rack accessories; VTR mounting shelves; stationary shelves; keyboard mouse and monitor drawers; rack drawers; etc.

Kathrein Inc., Scala Div.

C3907, C3907A

**Intro:** FM, TV, DTV, HDTV, DAB and MMDS broadcast antenna systems.

**Established Products:** Analog/DTV broadcast antenna systems

Kay Industries Inc

N2731

KD Kanopy

N4516

**Intro:** Rolling Banner two-sided presentation device.

KDDI R&D Laboratories Inc.

C6936

**Established Products:** NewsStoryViewer segmentation system extracts features from MPEG news video streams online and automatically segments the video accurately into stories; VistaFinder Bx H.264 field coverage system with videophone capability; JH-2000N hardware HDTV codec; MPEG Edit Studio Pro Version 2.0 nonlinear native editing software with long GOP capability; MP-Factory Version 5 universal MPEG SDK.

Keith Austin Inc.

C8217

KenCast Inc.

C4741

Kenwell Inverter Co. Ltd.

C7747

Keywest Technology

SL3119

**Intro:** MediaXtreme MX7 supports two DVI/RGB channels and saves 43 percent over the cost of Keywest single-channel power house for digital signage; MediaXtreme Live allows digital signage management from an intuitive browser; MediaXtreme MX5-Pro robust digital signage platform adds the ability of SDI I/O with keying; LogoSTAR-300D with a SDI I/O keyer.

**Established Products:** MediaXtreme, MediaXtreme Live

Killer Tracks

C1255

Kings Electronics Co. Inc.

C4711

**Established Products:** Video patching systems, 75 ohm HDTV BNC and RCA connectors, camera connectors, termination tools and dies, cable assemblies and accessories.

Kino Flo Inc.

C6633

**Intro:** ParaBeam Studio Luminaires DMX-controllable dimming/switching studio luminaires that display as much softlight as a 2,000 W incandescent fixture at 1/10 the power; Vista Beam Studio Luminaires DMX put out as much light as a 6,000 W tungsten softlight; ParaZip Studio Luminaires DMX variable control fixtures display a wide, natural beam of softlight and can be hung in studios with low clearance; Location Lighting Luminaires can be hand held and deliver soft, controllable illumination; Diva-Lite Interview Lighting Kits.

**Established Products:** Image 85; Image 45; Image 20; DMX studio luminaires; Kamio Ring Lights; 4-foot-4-Bank Systems; Mega Systems; Flathead 80 System; DMX 4Bank and Multi Flo Ballasts; 12 V Single Kit; Mini-Flo Kit; Micro-Flo Kit; and Blanket-Lite softlight.

Kintronic Labs Inc.

N2737

Klein + Hummel

N1822

KLZ Innovations Ltd.

N2830

Knox Video Technologies

SL2141

**Intro:** RSII SDI 16x16 SDI 2RU routing switcher with optional digital audio; RSII with AMX Duet compatibility

**Established Products:** RS Series routers; RSII Series routers; Chameleon Series routers; CAT5 transmitters and receivers

Ko Yong Photo Co. Ltd.

C1844

KOBA 2006 (Korea E&E Inc.)

C8705

Kodak

C5707

Konan Digital Inc.

SL1835

Kontiki

C11431

Kramer Electronics

SL549

**Intro:** SP-10D digital video processor; VS-162AVRCA, a 16 x 16 A/V vertical interval matrix switcher for composite video and unbalanced stereo audio; VA-680D digital audio delay; the 106 mic/distribution amplifier that converts a balanced mono mic input to two high-level balanced mono line outputs; the 904, audio stereo power amplifier with balanced stereo audio input on a 5-pin terminal block connector.

**Established Products:** ProScale digital scaler/switchers; In-CTRL switcher; tools, cables and connectors

Kroma Telecom

C9936

KTech Telecommunications

SU2247

**Intro:** HAC-1000 HDV-to-ASI converter provides flexible interface to HDV camcorders; DVM-2400 IP Gateway provides GigE-to-ASI conversion, GigE-to-NTSC and MPEG-2 A/V decoding; DVM-2000 GigE Decoder 40-channel simultaneous multiformat decoder in a 3RU hot-pluggable chassis; professional 8-VSB/QAM

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receiver/decoder; 8-VSB digital translator model Xtreme-1000.  
**Established Products:** VSB-ENC-150E 8-VSB modulator, VSB-FRQ-200 RF-to-ASI/SMPTE-310M converter; VSB-ENC-200 broadcast modulator with linear/nonlinear precorrection; DDR-150E dual digital receiver, etc.

**Kubotek Corp.** SL5587

**Kupo Company Ltd.** C7849

**KW/2 Lighting Products** C9837

**K-WILL Corp.** C6936  
*Intro:* VP21P picture quality analyzer for HD baseband video in 720p; QuMax-2000 real-time A/V quality analyzer with up to 12 inputs, for detecting lip-sync errors and showing offset in frames, among other features.

**L.T.M. Corp. of America** C4207

**L-3 Electron Devices** C9015  
*Intro:* L-3 Plug-In IOT can be used in new or existing transmitter installations—designed as a replacement for the most build-up style IOTs.  
**Established Products:** L-3 CEA, IOTD 130 IOY, L-4945 Thyatron

**LaCie SL** 1223  
*Intro:* LaCie Two Big ultrafast SATA II RAID array with two hot-swappable drives of 500 GB or 1 TB; SATA II 3 Gbps PCI-X Card 4E has four ports for adding multiple Two Big units.  
**Established Products:** Data storage and RAID units up to 2.5 TB with FireWire, USB and SATA

**Laird Telemedia** SL3769  
*Intro:* LTM-6000D Inertia functions as a standalone A/V signal converter, featuring timecode insertion and an operating menu system; LTM-DV4X1A FireCut Plus 1394 DV switcher accepts FireWire inputs from up to four DV devices; LTM-DVDA5P FireWire DA is a single input/4-output DV distribution amplifier for multiple NLE downloads.

**Lamar Systems** SL1958

**Larcan USA** C4119  
*Intro:* Eclipse analog transmitters, based on the Magnum Series of digital transmitters, available in a full range of power outputs and featuring hot-pluggable modules, etc.; 8-VSB Regent transcoder/exciter; Meridian Series of solid state UHF transmitters.  
**Established Products:** M Series for analog VHF, MD Series for digital VHF; Magnum for digital UHF; Landmark IOT transmitters for analog and digital UHF; MX / MXD Series for analog and digital UHF and VHF; LP translators and transmitters

**Lasergraphics** C8215

**Lawo AG** N2922

**Lawson** SU1647  
**Established Products:** Professional design services, architecture and MEP engineering, project management, owner representation and professional consulting services for broadcast clients.

**LBA Technology Inc.** N4512  
*Intro:* ERM series of communications/com-

mand post trailers deploy quickly and accept a variety of HF, VHF and UHF antennas.  
**Established Products:** Communications trailer/command post

**LEA International** C1642  
**Established Products:** DS30 surge protector, DS21S surge protector

**Leader Instruments Corp.** C7332

**Lectrosonics** N3225  
*Intro:* UCR401, a compact diversity battery- or DC-powered receiver with digital hybrid wireless technology for compander-free audio and compatibility with analog transmitters; SMD miniature transmitter with digital hybrid wireless technology for compander-free audio and compatibility with analog receivers; SMQ high-powered miniature transmitter; RM remote control for SM, SMD and SMQ transmitters using proprietary audio signal.  
**Established Products:** Venue receiver; UCR411A receiver; UM400 transmitter; LM transmitter; DM1624 audio matrix processor; UH400A transmitter

**Leightronix Inc.** SU4593  
*Intro:* Nexus Version 3 includes new options for controlling digital video messaging, playback, and recording; TCD/NX MPEG multichannel video server with special digital video messaging features and USB hard drive media storage.  
**Established Products:** NET-164, NET-EC, and MINI-T-NET event controllers, TCD/IP network managed video system controller

**Leitch/Harris Corp.** SU2929  
*Intro:* Inscribe G3 is an HD/SD selectable CG system that offers MOS and automation interfaces and real-time animation

**Lemo USA Inc.** C3243

**Let It Wave** C9646  
*Intro:* Video upconverter implementing motion compensation "bandelet technology" and restoring HD details provides adaptive spatio-temporal noise removal and video enhancement features.

**Libec USA Inc.** C9621

**Liberty Wire & Cable** SL3362

**LightTech Group Inc.** C7817

**Ligos** SU4596  
*Intro:* MediaRig Mosaic, an IP-based solution for cable, satellite, telco and other video service providers to create and provide multi-program guide and navigation channels. It takes the place of seven, 12 and even 16 hardware decoders and a stack of equipment, all in a single rack unit. It has an integrated decoder, compositing, encoder and multiplexer; MediaRig AVC, a 1RU server-based encoder system for MPEG-4 Part 10/AVC Main Profile Level 3 SD content, highly optimized for speed and quality at 2-3 Mbps.  
**Established Products:** MediaRig Encoder SD Hans-Peter Riecken, VP, Sales 350 Sansome St., Ste. 220 San Francisco, CA 94104 415-249-0100 ext. 110 888-464-8765 Fax: 415-249-0150 E-mail: [mr@ligos.com](mailto:mr@ligos.com) Web Site: <http://www.ligos.com>

**Linear Acoustic** C2507B, C2507D  
*Intro:* AEROMAX-TV Digital Television Audio Processor dynamics unit for 2-channel main plus SAP audio with front-panel display and controls plus Ethernet remote control. The 4-channel unit can be configured as 2+2 or 2+1+1 (stereo plus two mono channels). CrowdControl Dialog Protection Processing is provided for the main program audio, and will solve a major headache faced by television broadcasters providing stereo and surround soundtracks for live events; MetaMAX Bitstream Audio Processor enables audio to be transmitted the way producers intended while protecting consumers from loud commercials and programs. Located at the point of transmission, MetaMAX is a 5.1-channel DTV audio processor that operates completely in the compressed domain, and protects dynamic range while controlling loudness.

**Established Products:** StreamStacker Multichannel Audio Distribution System comprises LA-5421 Audio Bitstream Multiplexer and LA-5124 De-Multiplexer/AC-3, AEROMAX-HDFM Multichannel Radio Processor offers processing for main FM and HD/Digital Radio signal paths in addition to multiband processing for two supplementary channels; UpMAX 2251 5.1 Channel Surround-Field Synthesizer produces a fully mono/stereo-compatible 5.1-channel output from a conventional left/right signal input.

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**Linear Equipamentos Electronicos** C9010

**Linear Srl** N3031

**Link Electronics Inc.** SU4172  
*Intro:* Frame Sync for HD; HD pattern generator; HD and SDI closed-caption encoder; A-to-D conversion with frame sync.  
**Established Products:** HD caption encoder, HD pattern generator, A-to-D/FS, Analog and SDI CC encoders, A/V routers, sync generators, distribution, video proc amp  
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 Cape Girardeau, MO 63703  
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**Link International Inc.** C10744

**Link Research Ltd.** C2007A

**Lipsner-Smith Co.** C2851  
*Intro:* CF9200 HFE ultrasonic motion picture film cleaning system features new solvent reclamation design.  
**Established Products:** BHP Inc. Film Printing Systems wet and dry motion picture film printers, looping cabinets and special print heads for archival films; Calder and Treise film processing systems

**Listec Video Corp.** I1041  
*Intro:* LV-2008P Point-of-View LCD Prompter, 7 lb., 8-inch ENG flat-panel on-

camera prompter with full-sized fold-down mirror/hood assembly for optimal readability; LV-80 POV handheld, 5 lb., prompter featuring a bright 8-inch LCD display. The handheld POV mounts above the lens, securely fitted to the camera's handle; LV-800DV Point-of-View MonoPrompt, an 8-inch LCD display mounted on telescoping stand with tilting panel mount. Its narrow profile makes the Direct-VU POV ideal for placement between seat rows and as a messaging system; A-7000WIN InstantRunorder Program includes all of the features of the well-known A-6000WIN production software, but with the integration of a Runorder Module for News presentation.

**Established Products:** A full range of flat-panel and monitor prompters for studio, field and specialty applications in sizes eight to 20 inches. Complemented by Listec-developed prompting software for Windows.

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**LitePanels Inc.** C9618  
*Intro:* Litepanels 1x1 advanced LED lights in daylight flood or spot, and tungsten flood versions; Litepanels DV battery adapter plate snaps onto head of Litepanels mini flood or spot, allowing it to run off of two standard Panasonic, Canon, or Sony DV camera batteries for up to eight hours; Litepanels mini 32 flood employs LED technology for 3,200 degree Kelvin of warm, projected soft, output; Litepanels DV camera kit, from 5,600 or 3,200 degree Kelvin mini and spot LED head.  
**Established Products:** Litepanels LED lighting systems

**Litton News Services** R325  
*Intro:* BusinessWeek Custom Wall Street Reports; Consumer Reports TV News; Good Housekeeping Reports; Solutions with Jil; Standard & Poors.

**Livetools Technology SA** C5248

**Location Sound Corp.** N3926

**LocoLabs** LLC C11327

**Logic Innovations** C5847  
*Intro:* Content Manager CM-1200 for preview, cataloging and distributing of A/V content.  
**Established Products:** IPE-3000, TSM-2800 and DSTS

**Logic Innovations Inc.** C5847

**Logic Keyboard/BSP** SL4765

**Logitek Electronic Systems Inc.** N2802  
**Established Products:** Mosaic digital audio console; Audio Engine digital audio router; router control panels and software; VU and surround sound meters

**Logus Microwave Corp.** C5249

**Loral Skynet** C2516

**Lowel Light Mfg. Inc.** SU1989



LP Technologies Inc. C9948

LSI Logic SU2431

lynda.com SL1820

*Intro:* After Effects 7 Essential Training tutorial for After Effects; Flash Professional 8 Video Integration tutorial; Photoshop CS2 + Flash 8 Integration tutorials; Carrara 5 Essential Training; Final Cut Pro 5 Beyond the Basics.

*Established Products:* Online training library

Lynx Technik AG C 9246

*Intro:* P VD 5600 SD/HD frame synchronizers offer single- or dual-channel functionality on a single card with optional firmware plug-ins for up-, down- and cross-conversion; Testor handheld multiformat SD/HD video and AES test signal generator with two outputs and a large internal pattern library or provision for loading patterns from compact flash.

M&I Network Inc. SU236

M. Klemme Technology Corp. N4011

*Intro:* Avalon Traveler professional boom pole constructed of aluminum and expanding form 20 inches to 6 feet, 7 inches; Avalon Graphite Boom Poles, lightweight carbon fiber boom poles; Universal Suspension Mount for standard shotgun mics, employing polymer mic suspenders fitted within an aluminum frame.

*Established Products:* Professional boom poles, mic support accessories and Zeppelin windscreens

Mackay Communications Inc. C5543

*Intro:* Mackay will demonstrate the Immarsat BGAN service.

Mackie SL561

MaestroVision SU614

Magma Inc. SL2920

Magnum Towers Inc. N3918

MainConcept LLC SL232-MR

MAM-A CW1050C

Management Science Associates, Inc. SU5014

Manhattan Production Music C1955

*Intro:* All Media Music, a new library from producers of BRg; iPod and iTunes delivery. *Established Products:* Apple Trax, MPM, BRg, Live Trax and Audiophile sound effects series

Manzanita Systems C7112

Marshall Electronics SU4355

*Intro:* V-R231P-AFHD a 23-inch monitor with native HD resolution and Digital TFT-Megapixel system, etc.; AV-840, a pedestal mic integrated with a display; V-R102DP-HD, a dual 10.4-inch 5RU rackmount monitor unit with analog, digital, composite and component inputs; V-R104DP, a 10.4-inch field monitor with V-mount battery adapter, 4-pin XLR power jack, etc.

*Established Products:* LCD/TFT monitors

Martin & Ziegler SL773

*Intro:* Ergo Solo desk with electrically pow-

ered height adjustment, LCD arm mounts and cable management; QR24 Quiet Rack with up to 20 db of sound attenuation and three fans with automatic speed adjustment.

Masstech Group Inc. SU1642

*Intro:* MassDR replicates the content of on-air video servers, ensures against disruption of on-air presentations, and requires no manual intervention; MassLogger Gateway expands the ability of MassLogger by providing management and control interfaces for external devices; MassStore News Interface allows integration of a newsroom automation system with media lifecycle management infrastructure.

*Established Products:* MassStore; MassLogger; MassProxy; MassBrowse; SAVI and Mass Media Box

Master Recording Supply SL5606

Masterclock Inc. C5716

MathStar Inc. C10511

Matrox Video Products Group SL1137

*Established Products:* Matrox Axio real-time multiformat HD/SD editing and finishing system.

Matthews Studio Equipment C10435

*Intro:* Road Flags allows duplication of studio lighting effects have 4-by-4-foot fabrics, breakdown frames and a carrying kit; Mini Max allows placement of most light fixtures almost anywhere; Digital Stands for location or studio; Colornet light modification fabric for changing Kelvin temperature of daylight fixtures.

*Established Products:* Light stands; industry specific hardware and fastening devices; light modification devices; reflectors; scrims; flags; studio camera pedestals; heavy duty location tripods and cam heads

Maxell Corp. of America C6932

*Intro:* Holographic discs feature 300 GB storage capacity, a 160 Mbps transfer rate and superior archival life. A 5.25-inch optical disc can store millions of pages.

*Established Products:* DVD-R BQ 8X series for professional video and data storage applications

Maximum Throughput Inc. SL610

*Intro:* Sledgehammer 2.5 with several additions for centralizing and processing data offers high-speed network attached storage and a DDR; Xstoner 2 is a client/server application allowing Windows and Macintosh workstations to share images

and clips with Autodesk media and editing, finishing and effects compositing systems  
*Established Products:* Sledgehammer, Xstoner

Maxon Computer SL5567

*Intro:* Hair, an integrated Cinema 4D module for the creation of hair, fur and feathers, features minimal use of memory and has intuitive interface.

*Established Products:* Cinema 4D

MaxVision Corp. SL5569

Mayah Communications SL1206T

MCI C307

Medea Corp. SL2387

Media 3 Ltd. C4815

*Intro:* Media 3 Ltd. will demonstrate the technology to go live with its second-gen BureauCam remote LiveShot system. BureauCam provides broadcasters with control, ease-of-use and reliability for pristine on-air appearances from a fully integrated, compact, remote system. Housed in a rugged transportable unit, BureauCam incorporates all functions necessary for local or remote operation via network or dial-up. Designed to be operated by non-technical people, the unit has an intuitive touchscreen interface, interactive help screens and user prompts.

The precision robotic camera positioning and shot control system, integrated CCU, and extensive A/V routing and distribution capabilities achieve smooth on-air shots. BureauCam also features on-air switching, remote lighting and external device control and Web-based local, and remote real-time diagnostics. Advanced communications are accomplished with an integrated intercom system, dual internal IFBs, external IFB insert points and PL/coord for control room communications. Signal monitoring is attained with two integrated high-resolution video monitors, A/V output level indicators and communications and connectivity status indicators. A programmable character inserter for location ID is included in addition to an internal CATV tuner to monitor on-air return signal. BureauCam is delivered with all the components necessary to achieve a broadcast quality live shot, including camera, tripod, cables, microphones, shipping case, without the need for additional engineering.

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Fax: 212-983-5203

E-mail: [mark@liveshots.com](mailto:mark@liveshots.com)

Web Site: [www.liveshots.com](http://www.liveshots.com)

Media Excel Inc. SL4997

*Intro:* SoftStream HERA 3000 a real-time H.264 encoder/transcoder for IPTV, content creation and distribution, and mobile media applications; SoftStream IP-STB 3000 IP set-top box reference design for development of IPTV PVRs.

*Established Products:* SoftStream HERA 3000, SoftStream IP-STB 3000 and SoftStream Mobile

Media Links C9537

*Intro:* MD2500 HD video transport system for HD SDI over 270 Mbps telco circuits; MD2500 over Gigabit Ethernet system for HD and SD, features a 400 Mbps codec with I-frame MPEG compression.

*Established Products:* MD-6000 video over SDH/SONET system; MD-003 video over dark fiber system

mediaproxy C6845

*Intro:* Enigma 6.0, a logging solution to replace VHS recorders for broadcasters.

MediaZone SL2407A

Mediomet C8642

Megatrax C1259, N1500

Production Music

*Established Products:* Megatrax; Amusicom; Intervox; Sensación; ARTS and The Scene libraries and Megasonics

Memory Link SU239

Merging Technologies SL3755

*Intro:* VCube HD-2K 1080 HD Video System for recording uncompressed and HD video; Pyramix Digital Audio Workstation 5 offers up to 128 I/O channels; Isis Remote Controller for Pyramix and VCube; Luxor Media Server System is compatible with Unix, Apple and Windows.

*Established Products:* VCube HD-2K 1080 HD video system

Metaglug Corp. SL1513C

*Intro:* MXFixer unwraps, analyzes, displays and rewraps MXF metadata and has a range of display options; Diffuser enables the specific metadata requirements for an organization to be combined with industry standards to create an evolving master reference; MXFactory products create MXF files that can create proxies from ultra-high resolution telecine outputs; AAFixer links groups

## Hands-on Control

Give your operator one of those other controllers and he'll play out a clip. Give him a Hi Tech Systems controller and he'll play out a program! Oh yes, and build a backup playlist, ingest some new clips from a schedule or a tape, and even select a new highlight on the fly!

Hi Tech manufactures a wide range of video server, DDR, and VTR multi-channel controllers that outperform all others on the market. Their proven performance means you get more out of existing equipment, whether for a spot program payout news or sports. Now that's real value!

Visit [www.diskcontrol.com](http://www.diskcontrol.com) for complete product details.  
Contact [info@cmpsales.com](mailto:info@cmpsales.com) or call 919.451.1722 for pricing and sales information.

actiV Sports



actiV Cart Box



**Hi TECH**  
Putting you in complete control

Dealer and system integrator inquiries welcome



of files together and wraps custom metadata with standard essence and effects metadata into AAF files and also supports integration with XML based systems. *Established Products:* Technical and management consulting services, specializing in metadata projects

**MGE UPS Systems** C7837

**Mi Independent Audio** N4508  
*Intro:* Cedar Tools Retouch allows user-definition of temporal and spectral content of the sound to be removed; Cedar Auto Dehiss removes broadband noise content without introducing artifacts; Cedar Declip is a genuine declipping algorithm to identify and remove most instances of clipping in a single real-time pass; CEDAR Cambridge 2.6 has an advanced interface and an upgraded Debuzz algorithm, plus the addition of two new modules—Vintage Decrackle and DC Filter. *Established Products:* MicMate hot-shoe receiver mount

**Micro Communications Inc.** N418  
*Established Products:* UHF and VHF antennas, RF passive components

**MicroArchives** C6607R

**Microboards Technology** SL532

**Microdolly Hollywood** C9233

**MicroFirst** SU233  
*Intro:* DAS 3200 digital automation system fully expandable and extensible real-time multichannel automation and management system uses specially designed embedded hardware running a real-time OS, eliminating vagaries associated with Windows or other operating systems, and reducing boot time to 10 seconds; MPC-1600/3200 Programmable Multi-port Microcontroller has a real-time, multitasking, preemptive, operating system (WinMOS) that mimics WIN32 API calls; ICS 3200 auto/manual multipoint A/B Intelligent changeover switch enables redundant automation processors in the MicroFirst Digital Automation System. It has 32 A, B and common serial port connections. All devices under the control of the D.A.S. are connected to the common port. The primary AP is connected to the A ports while the backup AP is connected to the B ports. The primary communicates to remote-controlled devices through the ICS-3200. Backup constantly monitors the primary, so if a problem is sensed, backup takes over seamlessly; The DAS NLS control system option automates the hierarchical storage and retrieval video clips existing on nearline networked attached storage disk arrays and professional online video file servers. This intelligent system automatically decides what media needs to be stored on the NAS, as well as when media should be copied from the NAS to a video server for play-out or killed, which can also be done manually. NLS can also attach graphics, audio, and Microsoft format files to a primary video clip. Video file servers and nearline network attached storage disk arrays are all interconnected via a TCP/IP LAN. The system provides easy to operate intuitive GUIs complementing the DAS GUIs and is fully integrated into DAS software applications. The NLS uses Microsoft SQL Server 2000

database and the latest .Net framework. **Jerry Berger, VP/GM**  
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**Microsoft Corp./** SL127-MR  
**Microsoft Digital Theater**

**Microspace** C7741  
**Communications Corp.**

**Microwave Advances** C122  
*Intro:* MicroSynth handheld, lightweight, battery-operated frequency generator provides a tuneable synthesized RF signal source for various commercial bands. The unit covers a 500 MHz or 1 GHz range in microwave bands between 2 GHz and 23 GHz; MWA-23SM, a phase-lock loop circuit that increases frequency stability to 0.001 percent for any microwave link transmitter in the 23 GHz frequency band to meet new FCC frequency specifications. It is used with any new or existing transmitters operating in the 21.2 to 23.6 GHz frequency band. Optional receiver phase-lock loop available. *Established Products:* MPA-1, LNA  
**Erik Stromsted, CEO**  
36 Mt. Lebanon St.  
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Web Site: [www.microwaveadvances.com](http://www.microwaveadvances.com)

**Microwave Radio** C2007  
**Communications**  
*Intro:* PTX-Pro, single box portable, compact and lightweight, A/D switchable, FM video and audio, MPEG and COFDM ready transmitter with built-in AC/DC power supplies; MRX4000 integrated demodulator and decoder for central receive sites with A/D receive capability, internal MPEG decoder, switchable between the legacy and 2 GHz band plans, and comprehensive RX channel performance metrics; SCM4000 single carrier modem with data rates up to 105 Mbps, variable channel bandwidth and support for HD-ENG; LinkHD HD wireless camera system with approximately 60 ms latency has highly robust signal integrity, diversity reception with maximum ratio combining and packet diversity, and support for primary broadcast HD formats. *Established Products:* CodeRunner 2 A/D transmitter; CodeRunner 4 A/D central receiver; TwinStream dual-carrier A/D microwave system; DAR+ high capacity analog or digital microwave system; link wireless camera systems; Advent Mantis 1.0 and 1.2 flyaway satellite systems; plus the Advent NewSwift Drive-away satellite system  
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**Microwave Service Corp.** C539

**Middle Atlantic Products** SL1181

**Mikrom GmbH** C6333A

**Milestek Corp.** C10523

**Miller Camera Support LLC** C5736  
*Intro:* Sprinter II ENG tripod features dual side-action leg locks that let the user independently adjust stages of the tripod using one hand. *Established Products:* Arrow Fluid Heads and Solo Tripod Series

**Mindspeed Technologies** SU03-MR

**Minnetonka** C2507G  
**Sudio Software Inc.**

**Miranda Technologies** SU1341  
*Intro:* MPEG A/V clip play-out capability has been added to the Imagestore Intuition SDI channel branding processor; HD-Bridge DecDxC, a new version of the Miranda HDV-to-HD-SDI interface with multiple new features for newsgathering, editing and transmission; Kaleido-Alto-HD now offers advanced A/V probing including signal black, audio presence, overload, mono and out of phase alarms; new features for the Kaleido-K2 multi-image display processor; Densite Series HD control probe operates with Miranda iControl facility management system to provide HD monitoring over IP with streaming telemetry data; two new picolink 12-bit miniature interfaces. *Established Products:* Miranda Kaleido; Densite imaging series; camera interfaces; iControl

**Mirror Image Teleprompters Inc.** C2255

**Miteq/MCL Inc.** C5145

**Mitsubishi** C11037  
**Electric—Diamond Vision Systems**

**Mitsutech** C4715

**Mixed Signals** SU1636

**Modulation Sciences Inc.** C118  
*Intro:* MSI-4400 8-VSB analyzer provides eye and constellation pattern display, signal strength metering, SNR/MER/EVM charts and more; PRO-3 PRO channel receiver customizable system with three built-in options to handle delay. *Established Products:* Television stereo generators; stereo reference decoder; SAP and PRO generators; PRO channel receivers for 2GHz relocation; SAP receivers; NTSC precision video demodulators; AES/EBU/analog television audio processor; SpiderVision surround sound compatibility analyzer; msi-4400 8-VSB analyzer

**Modulus Video** SU250  
*Intro:* 1RU SD AVC encoder; integration with advanced compression systems management; embedded low-resolution proxy for PiP services in SD and HD; statistical multiplexing in an HD/AVC encoding system. *Established Products:* Shipping versions of the Modulus MPEG-4 AVC platform in HD/SD configurations.

**MOG Solutions** SU5169  
*Intro:* MXFIO for Matrox DSX allows users of the DSX development kit to read and

write MXF files compliant with Sony e-VTR, XDCAM, P2, and Ikegami; MXF2AVI converts MXF files into AVI files; MXFMerger allows generation of one MXF file out of several; MXFKeyFrameExtractor extracts a keyframe in JPEG or bitmap format from a MXF stream; UMIDGenerator building block generates SMPTE 330M media identifiers and enables decoding. *Established Products:* MXFComponentSuite, MXF::SDK; theScribe; MXFExplorer; MXFPlayer

**Mohawk** SU5155  
*Established Products:* HDTV SMPTE cable—studio; tactical field; stadium three-circuit cables

**Mole-Richardson Co.** C4210

**Monitor Media Age** SU209

**Morrow Technologies** C344

**Moseley Associates Inc.** N2402  
*Established Products:* DTV, event HD 2200/6500

**Motion Analysis Corp.** SL4976

**Motorola** SU1752

**MSA Focus** SU5014  
*Intro:* ForeTV automated broadcast management product with enhanced workflow function for sales, scheduling and digital asset management.

**mSoft Inc.** C1242  
*Intro:* VisionClip Version 2.0, digital asset management server system for video or graphics; MusicCue Version 4.0 asset management system for production music. *Established Products:* ServerSound

**MTI Film** SL3800  
*Intro:* Correct DRS 5 features include a new recording console, improved cut detection, record-to-image files three-layer dirt detection, etc.; Control Dailies include a 2K process for delivering motion picture content through a datacentric workflow.

**MultiDyne Video** SU1729  
**Fiber Optic Systems**  
*Intro:* RGB-5000-CWDM 18-channel RGB/UXGA fiber-optic link transport system is now available with a CWDM laser. CWDM optics give the user the ability to transport up to 18 high-resolution RGB/UXGA signals on one fiber. The MultiDyne RGB-5000 single-fiber, single wavelength, RGB/UXGA fiber-optic transport system provides long-haul, transport for UXGA/RGB or VGA video sources via one fiber and performs horizontal genlock for synchronous and jitter-free transport. Video and synch jitter has been reduced 4 to 5 nanoseconds; The EOS-4000 Electro-Optical Switch for transparent point to multipoint switching is a versatile, multipurpose, nonblocking, transparent, electro-optical switch that provides high-speed switching between ports with minimal effect on overall network latency. The 4RU device capable of switching digital signals up to 4.25 Gbps with any of 144 ports. The EQS-4000 is compatible with the MultiDyne digital fiber-optic product line. All optical ports are hot-pluggable SFP transceivers; The RGB-5000-ET



RGB/UXGA fiber-optic transport system with Ethernet and data distributes one RGB/UXGA video signal with 10-BaseT Ethernet and RS232, RS422 or RS485 bidirectional data via one fiber; RGB-5000-DC daisy-chains one UXGA source to multiple monitors; patent-pending solutions for transport/distribution of uncompressed video, audio and data over fiber that simplify the architecture of a fiber-optic network, reducing equipment costs.

**Established Products:** Fiber-optic transport for video DVI SDI HD-SDI audio AES/EBU phone data Ethernet L-band IF CATV; tactical fiber-optic cable assemblies; electrical and optical routing switchers; distribution amplifiers; AGCs; cable equalizers; test and ID generators; XLR adapter panels

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#### Myat Inc. C817

**Intro:** Coaxial Switch, 3 1/8-inch, high-power switch featuring ease of use, high reliability and long life. The advanced drive mechanism allows the unit to trip interlocks before actuating, switch quickly, and then lock securely in the switched position. Manual bypass is quick and easy. The unit is available with a rackmount local/remote switch controller; FM/VHF switchless combiner with modular drive system that allows it to move between positions quickly and smoothly. Dual guide rails and independent switch-mounting provide accurate repeatability; Compact UHF Hybrid is lightweight, and can be tuned to cover the UHF band. It also provides the device with excellent bandwidth over the channel of operation; Myat will be showing two filters designed to meet the demands of the FCC's requirements for mobile media—one for 700 MHz and the other for L-Band applications. Each design is extremely low-loss, exhibits a high degree of rejection and is temperature stable.

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Web Site: [www.myat.com](http://www.myat.com)

#### MyWeather C6014A

**Intro:** Weather At Hand, access current conditions of any location in the world using Universal WML technology on all handheld wireless devices; WeatherPod podcast downloads automatically every day to a computer and can be synced to an iPod. **Established Products:** Live Online; Premium Weather; Weather Neighbor; Venue Forecast; School Closings; eWeather

#### N Systems Inc. C3507

**Intro:** MCS Viewer supports control and display of multiple remote spectrum analyzers per receive site, as well as real-time video display window for the MCS remote control system.

**Established Products:** Superquad and Silhouette central receive antennas; NuPod smart antenna system; Super Pod airborne antenna; MCS remote control system; Cam

#### Pac remote observation system

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#### N Systems Inc. C3507

#### Nada-Chair SL2342

#### Nagra Audio N3202

#### Nagravision—Kudelski Group SU1976

#### Narda Satellite Networks C10144

#### Narrowstep Inc. SL5607

#### NATEXPO C6105

#### National Association of Photoshop Professionals SL5161

#### National Association for the Self Employed C2056

#### National Association of Tower Erectors C123

#### National Captioning Institute C9643

**Intro:** Captioning for emergency broadcasts on an as-needed basis, in conjunction with captioning regularly scheduled local news programming. **Established Products:** Closed captioning in English and Spanish; prerecorded and real-time, multilanguage subtitling, translation, audio description, and captioning for Webcasting and video streaming

#### National Semiconductor SU05-MR

#### National Weather Service N3211

#### ND Satcom AG C6544

#### Nebtek C2747

#### Nemal Electronics Intl. Inc. C744

#### NEP Broadcasting OE307

#### Nero Inc. SL4801, SL193-MR

**Intro:** Nero Digital

#### NES Communication Services C1643

#### Net Insight AB C826

#### Neterion Inc.

SU2031

**Established Products:** Satellite bandwidth, Internet access, occasional use services

#### Network Electronics US SU199

**Intro:** L-Band electrical-to-optical/optical-to-electrical interface LB-EO/LB-OE products offer reliable L-Band transport. The LB-EO/OE transmitter/receiver range is from 328 feet to 30 miles. CWDM optical multiplexing technology enables up to 16 L-Band signals to be transported on a single fiber; SDI Time Division Multiplexer/Demultiplexer SDI-TD-MUX-4/SDI-TD-DMUX-4 is capable of time division multiplexing four SDI, DVB-ASI or SDTI signals into one HD signal in accordance with SMPTE 346M-2000. SDI and DVB-ASI are accepted synchronous or asynchronous and will be format-detected automatically. Loss of input feed while transmitting will not affect the remaining channels. A built-in routing switcher allows channel swapping on MUX and DMUX devices; SDI to IP Gateway SDI-IP-GTW allows the real-time contribution and distribution of SDI over WANs where access to dark fiber or wavelengths is limited; AV-HD-XMUX HD audio embedder/de-embedders embeds four AES streams with selectable sample rate conversion from 8kHz-216kHz, and offers multiformat SD/HD support, and optical inputs and outputs options; VikinX Sublime routing switchers in 8x8 to 64x64 and 128x2; SL-D32P 32-port configurable data router providing a flexible solution for machine control routing in broadcast facilities. SL-D32P ports can be configured as controller or tributary via software or a GPI that is available on each port.

**Established Products:** Comprehensive line of VikinX routers, flashlink fiber-optic transport platform and signal processing equipment.

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Web Site: [www.Network-Electronics.com](http://www.Network-Electronics.com)

#### Network Music C855

#### Neuro TV C10418G

#### Neutrik USA C6033

**Intro:** Sealed Ethercon assembly kit for Neutrik D-Series EtherCon connectors.

#### New Skies Satellites C2330

#### Newpoint Technologies Inc. C5642

**Intro:** TrueNorth monitor and control solution built on Newpoint Compass Server technology simplifies configuration and setup, eliminates non-recurring services and difficulties associated with monitor and control devices; Compass for managing remote satellite transmissions, allowing automation of scheduling and setup of broadcast transmission equipment; Mercury self-contained universal element manager for managing local and remote networks, available with flash memory or hard drive, has four serial ports, can be upgraded to 20 ports.

#### Newsroom Solutions LLC C10115

**Intro:** 24-Hour Digital Channel In A Box provides a turnkey solution for digital channels with Newsroom FreedomFX CG/DVE. Combine locally entered data from NewsTicker, school closings, severe weather information, and our 24-hour TickerWire automated content service for a dynamic channel; Just In gives viewers a near instant notification when their school closes by launching a secondary display within seconds of the information being entered. For even greater promotional impact, add Always On isolated listings that can cycle through only the biggest schools in a market. Viewers see their schools first without waiting for a crawl cycle; SMS Service stations can send school closing information directly to cell phones or e-mails. The easy-to-use form allows a person to enter their cell phone number and e-mail address, and choose multiple organizations to watch. Users are notified within minutes of the organization updating its status.

**Established Products:** NewsTicker, Freedom SD, HD, Regional News Service  
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704-543-0191  
E-mail: [rick@newsticker.net](mailto:rick@newsticker.net)  
Web Site: [www.newsroomsolutions.com](http://www.newsroomsolutions.com)

#### Newtec America Inc. C7144

#### NewTek SL235-MR

#### Nex Computer Inc. C9546

#### Nexas Technologies C11332

#### Nextamp SU844

## Flexible ASI ↔ SMPTE 310M Converters

### Enensys real-time video format converters

- Convert ATSC MPEG-2 transport streams (SMPTE 310M) to DVB ASI, or the other way around

- Convert DVB ASI TO DVB SPI (LVDS or LVDS/TTL) M2S, or RS 422, or vice-versa

- Fault relay alarm, TS packet size changing, and PCR restamping



- Easy front panel setup via LCD
- Can be rackmounted for easy integration in a digital broadcast chain

- Input for optional redundant power supply
- Robust chassis

**NAB 2006**

**Booth SU1205**

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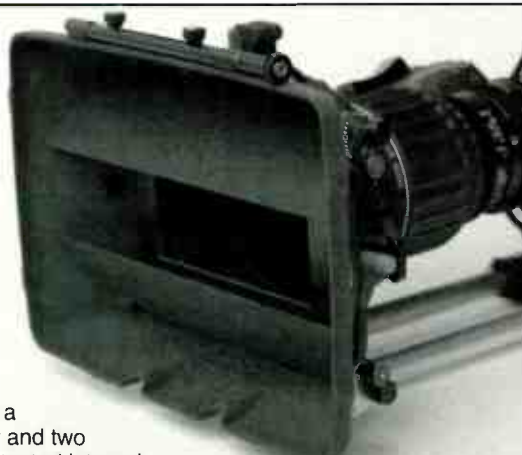


# PRODUCTS & SERVICES SHOWCASE

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The new MB-350 wide angle mattebox from Vocas features two *independently* rotating filter trays and one non-rotatable horizontal tray. It can accept an additional 4x5.6" filter in the hood for a total of four stages! This fourth stage can also be used with a variety 4:3 or 16:9 mattes.

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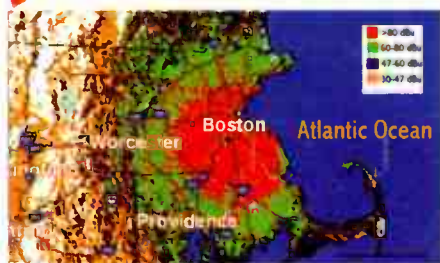
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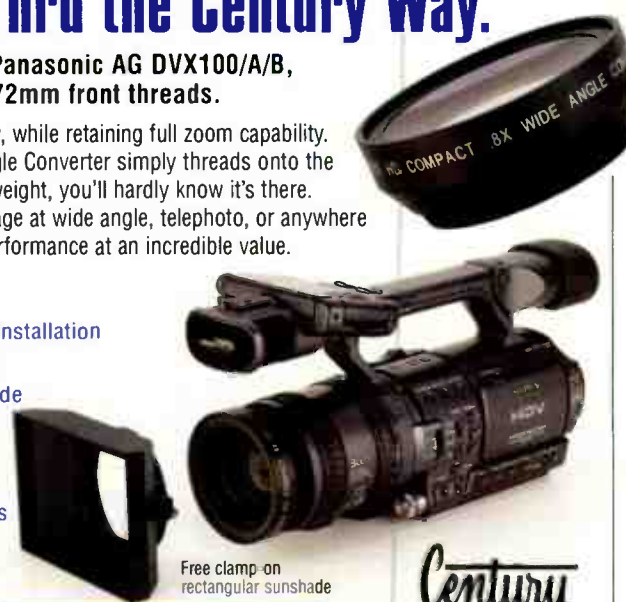
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## PRODUCTS &amp; SERVICES

## SHOWCASE

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**Intro:** NexTracker turnkey system monitors content integrity, corroborates airtime sales and manages broadcasting rights; NexGuard ensures content protection and forensic marking; NexGuard Domain secures the storage, transfer and viewing of critical content; NexGuard Master enables forensic tracking for dailies, SD and HD videotapes, and compressed and uncompressed files; NexGuard Screener combines MPEG watermark embedding with individual DVD burning and label printing; NexGuard forensic marking component complements DRM systems for VoD transactions, IPTV services, and d-cinema.

**Established Products:** NexEmbedder; NexReader; NexManager

**Nicom USA Inc.** N3222

**Ningbo Wanji Electronics Science & Technology Co. Ltd** C5107D  
**Intro:** IP-based digital set-top box supports MPEG-2, MPEG-4, WMV9 and H.264; DVB-T receiver with a C-NOVA AVIA 9700 is compliant with MPEG-2, DVB-T and COFDM at 6, 7 and 8 MHz; DVB-C digital cable receiver where subscribers have access to all digital channels scrambled by Irdeto CA systems in cable and MMDS networks; DVB-S receiver with MB86H25 processor and blind search function.

**NIXUS** SL2941

**NKK Switches** SL4400  
**Established Products:** RGB KP01, RGB SmartSwitch

**NL Technology** SL1513A  
**Intro:** SAT Proxy simultaneously creates Windows Media formatted content for a proxy while recording high-resolution video with matching timecode and metadata—an option for the NLT transport DVR and Ikegami DNG cameras—usable on any PC.

**Established Products:** Transport; FieldPaks; SAT USB/1394 laptop adapter; SAT desktop adapter

**nNovia Inc.** SU216

**Noise Industries LLC** SL1513I  
**Intro:** Factory Tools for Avid AVX include a collection of real-time plug-ins, integrates with Mac OS X Tiger Core Image, Quartz Composer and Spotlight; Organoptics FX visual effects software for real-time, plug-ins are GPU-accelerated, available now for Avid Xpress DV, Avid Xpress Pro and Avid Media Composer Adrenaline systems running Factory Tools for AVX.

**Nokia Communications** SL2414A

**Non-Stop Music** C851

**Norcom Information Technology AG** C6333C

**Noren Products Inc.** SL1141

**Norpak Corp.** C1251

**Norsat** C3848

**Novella SatComs Ltd.** C7845

**NPR Satellite Services** C6841  
**Established Products:** Space segment; equipment; uplink services; system design; engineering support

**NTT Electronics Corp.** SL2391  
**Intro:** HDTV/SDTV MPEG-2 1/2RU, 4.5-lb. encoder/decoder with 1080i and 720p, lip-sync is zero; NA5000 MPEG-2 streaming IP interface unit supports DVB-ASI, transmitted by 10/100/1000Base-T; super high-resolution ES8000/DS8000 MPEG-2, 1RU encoder/decoder; 1RU AVC encoder, AVC MP or HP Level 4 at 1080i and 720p, IP over Gigabit Ethernet, etc.; VASA/C single-chip HDTV MPEG-2 video codec LSI.

**NTT Electronics Corp.** SL2391

**Nucomm Inc.** C320  
**Established Products:** Newscaster VT2 van transmitter; ChannelMaster portable transmitter; CR6D central receiver; CamPac wireless camera transmitter; and Skymaster pod antenna

**Nverzion** C2046  
**Intro:** NcontrolLite is an all-inclusive video server spot play-out software package enabling users to transfer content with frame accuracy.

**Nvidia** SL591  
**Intro:** Nvidia Quadro FX 4500 SDI with Nvidia PureVideo features house synchronization and two programmable channels

delivering 12-bit uncompressed SDI in 2K, HD or 5D; Nvidia Quadro FX 540 Professional Video Edition delivers component HD, S-Video, and composite video along with OpenGL graphics acceleration and display quality to DV and HDV nonlinear video editing applications; Nvidia Gelato 2.0 with Sorbretto combines production ready final-frame rendering with interactive relighting.

**Nvision Inc.** SU1414  
**Intro:** NV8288 mobile digital video router for applications where compact size and low weight are essential, these routers provide signal integrity, robust operation, and feature 288x576 SWB in 10RU, 576x576 SWB in 20RU; CR router series is for applications where low cost, compact size and ease of use are important—supports SD, HD, and AES and is available in 1RU 16x16 and 2RU 32x32 sizes. Integrated front panel or Ethernet control capability.

**Established Products:** NV5128-MC multi-channel master control switcher; NV5128 multiformat 128x128 router; NV9000 router control system, NV8256-Plus expandable 256x256 digital video router; NV5256 expandable machine control router; synapse modular broadcast system

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OBOR Digital Inc.

C11012

**Ocean Optics/SeaChanger C10447**

**Intro:** The SeaChanger Color Engine CYMG color changer for ETC source four ellipsoids. Through patented processes, the ESTA yields the most robust and highest transmission dichroics available. These dichroic-patterned filters allow the user to control color, intensity and saturation of theatrical and studio lighting.

**Established Products:** SEA-SF SeaChanger Color Engine with dimming wheel; SEA-XG SeaChanger Color Engine with Extreme Green filter; extended yoke accessory; high-temperature power cord accessory

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Ocean Systems

SL15138

**Octopus Newsroom Trading Ltd. C5416**

**Intro:** Octopus5 newsroom computer system features a global search engine, keyboard shortcuts, and saved screen recall; Octopus Field Reporter standalone remote finger of Octopus5 dedicated to work without a network connection with any operating system; Octopus Video Twister for multiple encoding and/or transcoding high-resolution video files or feeds into low-resolution; Octopus Track module for Octopus Newsroom features resource planning and costs tracking.

OMB Sistemas Electronicos

N1812

**Established Products:** Transmitters; microwave link; antennas

**Omneon Video Networks SU2959**

**Established Products:** Spectrum media server system; ProBrowse proxy generation system.

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Omnia, A Telos Co.

N2714, N2515

**Intro:** Omnia audio processors for FM, AM, TV, HD Radio and DAB, Internet and audio production.

OmniBus Systems

SU2983

**Intro:** OmniBus iTX stands alone or integrates with video or IT storage to manage video files and act as a server, master control, and graphics and logo inserter with automation, ingest and editing; OmniBus OPUS News and Sports Logging enables fast and intuitive logging of live and recorded events with intuitive on-screen control of live and prerecorded feeds; OmniBus Colossus automation features new highly scalable redundant architecture; OmniBus OPUS Content Management and Workflow Version 1.2 features include archivist keyword metadata, multidomain operation, clip genealogy, and more; OmniBus K2 Inception entry level 1- to 6-channel play-out with Grass Valley combines benefits of Grass Valley K2 server with key features of

OmniBus Colossus automation software.

Omnimusic

C1346

OmniTek

SL5595

**Intro:** OmniTek TQ for SD and HD broadcast monitoring features waveform generation technology; PQA picture quality analyzer Version 2.0 software enhances operational capabilities with a high-resolution proxy; XR Version 2.0 software with full-resolution SD and half resolu-

tion HD proxies.

OMT Technologies

N2908

**Intro:** iMediaTouch automation software is compatible with Axia audio over IP consoles.

ON-AIR Systems Ltd.

SL5158

Onan Corp.

C6843

OpenCube Technologies

SU1129

Optibase Inc.

SL2927

**Intro:** MPEG-4 AVC H.264 HD video processor enables live encoding and transcoding using next generation codecs with Optibase's MGW IPTV platforms into MPEG-4 AVC HD resolution; MGW 200 single streamer combines a compact, single-stream encoder with a back-end decoder to allow users to significantly lower their per-channel costs for video contribution.

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**Opticomm Corp.** SU4183  
*Intro:* Optiva Digital V/A/D 1RU or 3RU digital fiber-optic custom transmission system uses daisy-chain multiplexing to optimize bandwidth allocation, with integratable optical multiplexing and hot-swappable cards, configured standalone, multimode or single-mode over one fiber; Optiva Configurator user design of Optiva series digital fiber-optic transmission system; OLX-3000 OptiLinx optical switching platform multipurpose, non-blocking transparent switch provides switching up to 4.25 Gbps with any of its 144 ports; RGB-4004 digitally transmits a VGA-H/V RGB video signal and stereo audio over one fiber.  
*Established Products:* Optiva Digital V/A/D transmission systems; digital broadcast systems; compact video systems, video, audio and data systems; audio/FSK/intercom transmission; RGB/VGA/DVI/KVM systems; Ethernet/data systems; RF CATV/L-band systems; optical-switching systems; passive multiplexing solutions

**Optimal Solutions Inc.** C7107  
*Intro:* Business Intelligence provides a data warehouse Cube for easy access and manipulation of data from the OSi-Traffic database. Cube provides users with key spot-level information that can be used to customize any type of database query from the OSi-Traffic system. It allows users to drag-and-drop filter, group and aggregate attributes on-the-fly to create endless

reporting views. It offers a module based on Microsoft Sharepoint technology that provides customizable views in any combination of centralized sales and billing data from OSi-Traffic; OSi-Sales reporting and integration tool joining OSi-Traffic and AdConnections with advanced analysis and reporting capabilities to pinpoint where rates can be raised and inventory utilized to increase your bottom line and average unit rate. Integration with CMR and Nielsen AdViews gives users new capabilities to analyze the market.  
*Established Products:* OSi-Traffic  
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**Opus 1 Music Library** C2260

**Opvision Technology Co. Ltd.** C10729

**Orad** SL3776  
*Intro:* TrackVision is a sensor-free HD/SD graphics enhancement tool that allows users to superimpose virtual graphics over a sports playing field and operates in live and replay; Maestro is a HD/SD 3D CG for producing graphics and animations; ProSet virtual set technology and 3D on-air graphics

supports SD and HD from the same platform and uses Orad tracking tools; CyberGraphics Reality integrates 3D virtual objects into a conventional studio setting; Hi-Definition Digital Video Graphics platform for real-time graphics rendering operates in SD and HD.

**Orban/CRL** N1136  
*Established Products:* Orban Optimod-TV 8382 digital audio processor

**Orbital Data** SL1513R

**Outfitter Satellite Inc.** C11328

**Overly Door Co.** N4511

**P.I. Engineering Inc.** SL5165

**P+S Technik** C6607K

**Pacific Radio** C2551

**PACSAT** C6945

**PAG USA** C8515  
*Intro:* PAG V2 Charger two-position charger for PAG and Sony V-Mount Li-Ion batteries comes in tough, moulded, compact and lightweight unit that fits into a camera bag; PAG DV Solutions Range battery power, onboard lighting and shoulder support systems for handheld DV and HDV camcorders; PAG Orbitor advanced shoulder-mounted camcorder support system; PAGlok Power Adaptor for JVC HD100.  
*Established Products:* Paglight onboard camera lights; ENG batteries; battery management systems; charging connectors; camera mounts and accessories

**PanAmSat** C1420

**Panasonic Broadcast** C2518

**Pandora International Ltd.** SL2950

**Paradise Datacom LLC** C7541

**Patchamp** C3045

**Path 1 Network Technologies Inc.** C9535

**Pathfire** SU164

**Peak Communications** C7748

**Pelican Products Inc.** SL1847

**Pentadyne Power Corp.** C6942

**People for the Ethical Treatment of Animals** C10448

**PESA Switching Systems Inc.** SU1370

**Peter Storer & Associates** SL1378

**Pharos Communications** SU186A

**Philips Content Identification** SL1840

**Philips Semiconductors** C10811

**Photoflex** C9121

**Photo-Sonics Inc.** C10737

**Photron USA Inc.** SL3148

**Pictron Inc.** SL1959

**Pilat Media** SL1585

**Pineapple Technology Inc.** N3400

**Pixel Instruments Corp.** SU4319  
*Intro:* LipTracker lip-sync analyzer measures the lip-sync error in a program stream by comparing the relative timing of selected sounds in the audio with corresponding mouth shapes.  
*Established Products:* AD-3100 audio synchronizer with pitch correction; DG-1200 Tally and GPI Interface

**Pixel Power Ltd.** SU4359  
*Intro:* Clarity3000 single channel HD/SD switchable CG offers real-time 3D animation, A/V clip player, dual input 2D DVE squeezeback capability in a 3RU chassis; Clarity5000 dual-channel HD/SD switchable CG supports up to two streams of uncompressed HD video and can be used as full-frame backgrounds or passed through the internal 2D DVE channels and combined with other graphic elements; Newsroom Control Centre Version 4 offers enhanced capabilities for graphics automation in MOS compliant or iNews ControlAir newsrooms.  
*Established Products:* Clarity 100; Clarity 200; Clarity 300; Clarity 500

**Pixelmetrix Corp.** C6616

**PixelTools Corp.** SL1541

**Playbox Digital Media Technologies** SL3038

**Pleora Technologies** C4814

**Plisch Broadcast Asia Pacific Pte Ltd** C134

**Plug In Pavilion** SL5138

**PolyPhaser Corp.** C9238

**Pomona Electronics** C6636

**Popwire** SL1047

**Porta Brace, K & H Products Ltd.** C8531, C11604-MR

*Intro:* CWC 2 case made of reflective white fabric to protect the camera from absorbing heat when exposed to direct sunrays, has special stand-offs that create an airspace behind the zoom control to aid with airflow; Back Pack Extreme BK-EX multifunctional backpack with optional modules; Mini-DV midnight black with red trim camera case with adjustable cradle for camera; Audio harness and belt AH-3H, for viewing of audio mixer, the harness belt clips onto D rings.

**Porta-Jib/Hollywood General Machining** C4511

**Portaprompt Ltd** SU186F

**Post Holes** SL4169

**Post Magazine** SL4982

**Precision Communications** C9321

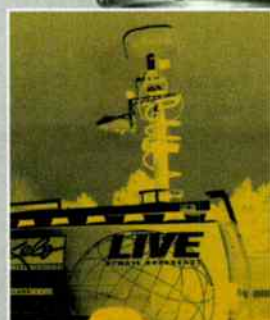
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*Established Products:* Time Tailor; Time Tailor Post; Time Tailor Edit; Pipeline; 50 II; 50 III; Penta II; 10X with 10/2 and 5F10/2

## Prime Image Inc.

C5136

*Intro:* Time Tailor HD/SD digital processor reduces video program run time in real-time without prerecording and preprocessing, has digital I/O, serial D-1, four channels of analog or AES/EBU audio and more; Time Tailor Post HD/SD combined with Editware Fastrack TT automated system to edit program run has frame accurate time reduction, deletion of unwanted commercial black slugs, etc.; Pipeline

PrimeLED Inc.

N3434

Primera Technology Inc.

SL1233

Prism Business Media

SL4750

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N3435

Pristine Systems Inc.

N3502

Pro Consultant Informatique

SL3796

Pro Cyc

C10127

Pro-Bel

SU1749, SU4347

Production Intercom

N405

Professional Label Inc.

C10844

## Professional Sound Corp.

N4022

*Intro:* DV ProMix 6 portable audio mixer with six inputs has quiet pre-amplifiers, switchable low-cut filters, pre-fade listen switches and dedicated line outputs; Elite Series Carbon Fiber 6- to 17-foot boom poles utilize high modulus carbon-fiber tubes, with machined aircraft aluminum fixed threaded mounts and locking collars; DV SGM1 Shot Gun Mic with flat, smooth frequency response and a low self-noise artifact; Miranda audio mixer for field production includes video monitoring capabilities and an array of signal mixing and routing.

*Established Products:* Alphamix audio mixer and expansion module; DV ProMix 3; DV ProMix 1; headset mic; Millimic lavalier mic; universal mic power supply and shock mounts; 48 phantom mic power supply and more.

## Professional Sound Services

C7730

*Established Products:* Wireless mics, boom poles, digital recorders.

## ProMax Electronica S.A.

C9648

*Intro:* The Prodig-5 TV Explorer for the installation, maintenance and surveillance of TV systems provides information about the available channels and quality; MO-170 general purpose 1RU DVB-T modulator supports 2k and 8k modes, hierarchical transmission and can operate in multifrequency networks.

## ProMax Systems Inc.

SL534

*Intro:* G-Max storage for video and other media; SAN workflows is networked storage with enough bandwidth uncompressed HD video; custom turnkey closed-captioning systems; custom turnkey digital asset management systems.

*Established Products:* Custom video editing and storage systems

## Promedia International Inc.

SL1224

*Intro:* Accu-Seiki Series AS-2002 dual-purpose CD/DVD case cellophane overwrapping machine; SKY DVD-R 16 X/SKY Formula DVD 8X, 16 X, SKY DVDR with 10/25/50/100 cake box; CD/DVD package sleeves.

*Established Products:* Blank recordable DVD-Rs; CD-Rs; DVD/CD cases; CD labels and paper envelopes; DVD/CD replicators; printers; floppies and ink suppliers.

## Prompter People

C9241

## Propagation Systems Inc.

C330

*Established Products:* Antennas for digital and NTSC, low, medium or full power, directional, nondirectional, in-panels, slots, dipoles or any other configuration.

## Prophet Systems

N3522, C4431

*Intro:* Acuitas is a station asset management tool. Our centralized approach means any station within the site can use media immediately, with drag-and-drop, on-the-spot programming. Transfer media from site to site over a WAN. Take live cut-ins or network feeds seamlessly, and rejoin regularly

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ProPrompter C4714

PROSONIC GmbH C6607D

**ProSource/BMI C8937**

**Intro:** Vocas Follow Focus MFC-1 compact system enables precision focus control for all DV and broadcast cameras and attaches directly to any 15 mm lightweight support with a quick-lock clamp. It features a rotation stop for DV cameras that provides a hard stop on the focus knob. It can be manually disabled for broadcast lenses. Optional accessories include a flexible cable for remote use and a star knob for more precise focus control; Vocas HVX 200 wide-angle matte box, a Panasonic HVX 200 kit model B3 for use with or without a wide-angle converter. For better support, use the included 15 mm lightweight bars. The new support features a retractable shoulder bracket for more stable handheld camera work. Works with all wide converters larger than 95 mm; Vocas HD-100 wide-angle matte box for JVC GY-HD100 camera kit model H includes DV wide-angle matte box with French flag and two 4x4 filter

frames, flexible adapter ring kit, bars adapter and matte box support; Vocas HD Matte Box, a new HD matte box for preview.

**Established Products:** Vocas; Bron; Panasonic HD; Ikegami; Sachtler; Fujinon Anton-Bauer

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Provys C10725

Proximity Corp. SL2430

PSNI S230

PSSI Global Services C7744

QLogic Corp. SL4801

QTV/Autocue SU4167

Qualcomm-MediaFLO SL2420D

Quantel SL 1544

Quantum Corp. SU783, SU01-MR

**Intro:** The SDLT 600A datatape system with DLTxchange for professional video features a tape-based file system and network-attached storage that is MXF-aware.

Qube Cinema Inc. SU1253

Quest Research & Development Corp. C7916

Quickset International Inc. SL4764

Quintech Electronics and Communications Inc. C5948

QuVIS Inc. SU847

**Intro:** QuVIS Encore records and plays HD and SD in real time.

**Established Products:** QuVIS Cinema Player; QuVIS, Ovation; QuVIS Acuity; QuBit ST; QuBit DS; QuBit EL

QVS SL5173

Radian Communication Services C3814

Radiant Communications SL4401

Radio Frequency Systems C1217, C11600-MR

**Intro:** 611-CP top-mounted circularly polarized omnidirectional antenna for low VHF featuring stainless-steel elements, radiation pattern circularity and a comparatively low wind-load; superturnstile UHF broadcast antenna covers 470 to 862 MHz and exhibits circularity—available in sizes up to 16 wavelengths for the top-mounted model and up to 32 wavelengths for the side-mounted version.

**Established Products:** RF System dDigital monitor; Heliflex range of air dielectric feeders and accessories; PHP/PVP and superturnstile antennas

Radyne SU2033

**Intro:** DM240XR DVB-S/S2 modulator, 1-250 Mbps QPSK/8PSK/16QAM, Gigabit IP/HISSI/ASI/G.703, upgrades to S2 and higher speeds; DD240XR, DVB-S/S2 demodulator, 1-240 Mbps QPSK/8PSK/16QAM, Gigabit IP/HISSI/ASI/G.703, upgrades to S2 and higher speeds; HD4040, 4:2:2/4:2:0 HD decoder with front-panel control; A/V confidence monitors; TDR4022, DVB MPEG-2 integrated receiver/decoder, ASI/QPSK/8PSK/16QAM, DS3, E3, DVB-S2 input options, 4-port RF input switch included, BISS mode 1 and E conditional access, Web browser control

**Established Products:** Encoders; decoders; modulators; demodulators.

Raidon Technology SL2000

Rapidtext/Transcription Inc. C3344

Rathbone Energy Inc. C10621

RDL Radio Design Labs N3331

**Intro:** RU-ADL2 studio-quality, low-noise DSP audio delay, separate time delays for two audio outputs, adjustable delay from 0 to 135 ms, remote controllable audio delay, provision to disable front-panel adjustment, XLR and terminal block audio connections, and RDL Sure-Lok supervision.

**Established Products:** RU-VA2; FP-AVDA4; FP-SVDA4; FP-VDA4; RU-VDA4; TX-VLA1; RU-AVX4; RU-VSQ4; TX-AVX; TX-MVX; RU-VSX4; TX-VCR

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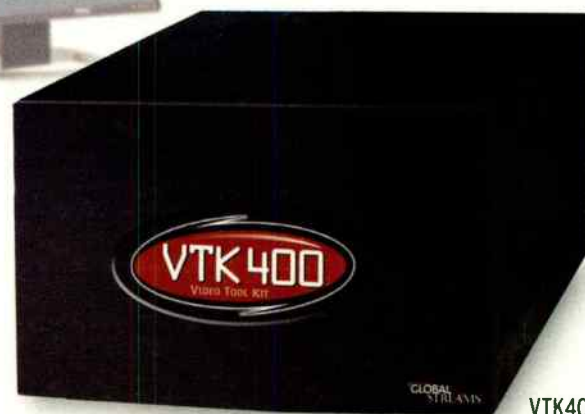
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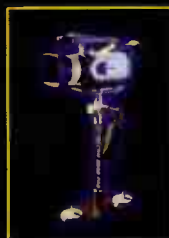


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Re:Vision Effects	SL5138K
Red Digital Cinema	SU1401
Red Giant Software	SL5138C
Rees Associates Inc.	C7426
Remote Audio	N4514
<i>Intro:</i> Speak Easy 9 V battery-powered speaker interfaces with remote audio push-to-talk Boom Box features XLR and RCA inputs; HN-7506 high noise environment headset monitor with Sony MDR-7506 drivers and special baffling; BDSv2 battery distribution system for ENG audio bag rigs; Miracle Whip antenna is available with straight and right-angle BNC, and straight SMA connectors; Remote Audio Ear Bud single earphone with swivel ear hook.	
Renegade Labs Inc.	SU1529
Rentex Inc.	SL4007
Research Concepts Inc.	C7844

**RF Central LLC C820**

*Intro:* RFX-ENG A/D transmitter for ENG with 7 W COFDM transmit power in all modes, QPSK, 16 and 64 QAM; RFX-PHT designed to use the RFX-CMT is a portable 2 GHz digital transmitter with 5 or 10 W power output provides a means to make a news car into a live car, and can be used standalone. Options include car-mounting kit and antenna; RFX-CMT for ENG allows the photographer to go where cables do not allow access. The CMT clips onto the camera battery adaptor plate between the battery and the camera, transforming it into a digital wireless camera. The transmitter operates in the 2 GHz band; RFX-RMR is a A/D receiver for central receive sites and fixed-link applications features a built-in COFDM decoder with QPSK, 16 and 64QAM modulation and thumbwheel channel selection. Three-year warranties on all the above; RFX-NLL is a 5.2/5.8 GHz digital microwave link designed to mount between an ENG camera and the battery. The receiver is designed to be mounted on a tripod or other suitable location. Applications include sports arenas, rooftop-to-rooftop, and camera to ENG truck. warranted for one year.

*Established Products:* RFX-PHT portable 2 GHz digital transmitter; RFX-NLL 5.2/5.8 GHz digital microwave link; RFX-ENG A/D transmitter package; RFX-RMR A/D receiver; RFX-CMT camera-mounted digital transmitter; RFX-RMT 2 GHz A/D transmitter; RFX-PRX digital receiver

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RF Technologies LLC	C120
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RGB Spectrum	SL2159
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Rhozet Corp.	SL4006
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Richardson Electronics	C526
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*Intro:* LDU601C UHF pallet with a 500 Wps outut for common amplification, analog TV, 8 MHz signal, 130 Wrms for DVB-T,

200Wrms for DTV; patent-pending LDU601C includes smart bias system and matching circuit to manage the output power uses Infineon PTFA043002E device and has the same footprint as the MRFA2604 and LDU400C.

*Established Products:* UHF/VHF pallets and power amplifiers; IOTs; and CEAS

Richland Towers	C746
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**Riedel****Communications Inc.**

*Intro:* Connect IP, one of three new connectivity solutions. The 1RU unit allows matrix-to-matrix, matrix-to-control panel connctions and distribution of audio over IP. The interface converts one AES-3 stream. Bandwidth is scaleable, resulting in audio quality up to 20 kHz at 230 kb while standard 3.5 kHz (85dB) needs just 40 kb. Connect IP supports remote user control key panels providing connection of standard Artist 1000 or 2000 series control panels to an Artist

**C8507**

matrix via an IP network; Connect Solo intercom connection systems combine two analog phone hybrids in 1/2-rack unit, allowing two simultaneous connections; Connect Duo provides intercom interface allows two simultaneous connections using two ISDN B-channels and an analog POTS hybrid in a 1/2RU device. It can be configured directly from Riedel Director or optional Windows software. It can also be controlled from the integrated keypad and large full graphic display or directly from the Artist control panels. Solo and Duo inte-

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grates to Riedel Artist matrix and are compatible with other intercom systems; Next Generation Artist Intercom System matrices allow all frame sizes to use the same type of controller and client cards. Other features include increased memory, superior alarm signalization, quiet operation, compatibility with other Artist frames and a flexible fiber option. The series provides three sizes of mainframes with a maximum number of 32, 64 and 128 ports per frame. As with every Artist Matrix, distributed systems up to 1024x1024 can be made. Every frame-size is fully redundant, all modules are hot-swappable while a alarm signalization monitors potential failures as a hardware and software alarm.

**Established Products:** Artist Intercom series; Performer digital Partyline series; digital telephone hybrid interface  
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**Rimage Corp.** SL1843

**Rip-Tie Inc.** C9848

**Rivulet Communications** C10746

**RJS Electronics** C11337

**Rohde & Schwarz Inc.** C830  
*Intro:* FSH3-TV universal combined TV and spectrum analyzer from 100 kHz to 3 GHz features measurement functions for A/D TV signals combined video/ASI output, compact housing, and measurement accessories with a preselector option with 75 RF input; SFU DTV multistandard platform with digital signals for antenna, satellite and cable offers output frequency from 100 kHz to 3 GHz and more; XV7002 UHF DVB-T transposer/gap filler offers quick frequency changes without filter adjustment; DV-ESA software video decoder, streaming interface and further new features for the R&S DVM family; portable R&S DVM400 to view the video contents with the software video decoder directly on the integrated high-resolution display.

**Established Products:** DVM family; low-/medium-/high-power transmitter family; RF TandM equipment

**Roland Systems Group** SL3781  
**Established Products:** V-440HD; PR-80/50; DV-7DL PRO; V-4, LVS-400; V-1, R-4

**Rololight** C10248

**Root 6 Technology** SL1513Z

**Rosendahl Studiotechnik** N1822  
**Established Products:** bonsaiDRIVE miniature hard disc recorder; nanosyncs direct digital audio clock server; nanosyncs direct digital audio clock and video sync generator; MIF3 MIDI timecode interface; WIF2 Word clock interface; BIF Bi-phase interface.

**Ross Video Ltd.** SU1356  
*Intro:* openGear, an open frame standard based on the modular backplane openGear 2RU rackframe that can house up to 10 card modules of any type. openGear modules are available from a selection of openGear partners. Customers are no

longer locked into one manufacturer's frame standard and modules for terminal equipment solutions. openGear also provides the platform for a Web-based control system that allows quick monitoring and control of openGear frames and modules on the network.

**Established Products:** Synergy SD digital production switchers; Synergy MD/X multidefinition production switchers; OverDrive production control system; RossGear terminal equipment; GearLite compact terminal equipment; NK compact routers; Kondor routing systems  
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**R-Quest Technologies LLC** SL4807

**RTcomUSA Inc.** C6613  
*Intro:* DVI multiplexer switches up to several DVI sources from remote host computers; NSG-525S multivideo signal generator inspects analog, digital, TV, DTV, audio, SPIF and HDMI; HDMI Link HD-D105, D110, D205 and D210, HDMI distribution amplifiers allow one digital A/V source to be split into multiple digital displays; HDX fiber-optic extension optimized for HD multimedia.

**RTI-Research** C2851  
**Technology International**  
*Intro:* Pro Line 4100 DLS Betacam Recycling & Rejuvenation System for Betacam cassettes features new LaserSCAN detector system; Pro Line 5100 DVCPRO and DVCAM Recycling & Rejuvenation System accommodates all sizes of DVCPRO and DVCAM; RTI Professional Tape Erasers tape degaussers in sizes and capacities for professional audio, data and videotape recycling; TapeChek Videotape Inspector professional videotape care products; Optical Disc Restoring Machines remove deep scratches, clean and return discs to like-new condition.  
**Established Products:** TapeChek Pro Line Videotape Recycling and Rejuvenation System

**Rushworks** SU5011  
*Intro:* RE:PLAY 1 to 4-channel digital capture and playback solution that integrates instant-replay capability with extensive data management and archiving; Newsrush news content creation and management system integrates rundown with control of pan/tilt/zoom cameras, teleprompters, CG, etc.

**Established Products:** MasterPlay, EasyPlay, MultiZone, ToastMaster

**Russ Bassett** SL3787

**RYMSA** C307A

**S.two Corp** SL632  
*Intro:* New D.MAG digital film products; DFR digital film recorder features direct dock for Venom flashpack, etc.; FDOCK fiber-channel docking station for D.MAG Digital magazines; ADOCK auto archive station for D.MAG Digital film magazines now supports LTO3 datatype.

**Established Products:** C.DOCK

**Sabre Towers** N2831  
**Established Products:** Towers and tower components

**Sachtler Corp. of America** C5119B

**Sadie Inc.** N402

**Samy's Camera** C6813

**Sanken Microphone/Plus24** N4011  
*Intro:* Sanken C0-100k Studio omnidirectional condenser 100kHz mic for professional recording; CS-1 Short Shotgun 3.5-oz. mic has a 7-inch housing for mounting on video and film cameras.

**Sanyo Fisher Co.** SL4944

**Satellite Engineering Group** C4443

**Satnrex** C11025

**SatNews Publishers** C7746

**Satvision Technology International Inc.** C6941

**ScheduALL Software** SL1955  
*Intro:* ScheduALL Media Connection Services allows bidirectional API access for strategic third-party companies with industry standard media partners; ScheduALL Microsoft Outlook and Exchange Interface delivers a simple interface with MS Outlook and Exchange; ScheduALL for the Web provides API Interface and .NET support to clients for Web-supported operations; EDGE solution-in-a-box for ScheduALL boutique and smaller post users.

**Schill GMBH & Co. KG** C339

**Schneider Optics** SU4122  
*Intro:* Century Universal HD compact 0.8X wide-angle converter threads onto front of 72 mm lens to provide 20 percent wider coverage throughout zoom range. Fits Sony HDR-FX1 HDV/HVR-Z1U, Panasonic AG DVX100A/B, Canon XL-2 and more; Century Lens accessories for Panasonic AG-HVX200 include a .6X wide-angle adapter; .75X wide-angle converter; Super Fisheye adapter; 1.6X Tele-Converter; achromatic diopters; Century lens accessories for JVC HDV GYHD100U; Super Fisheye; 1.6X LC Tele-Converter; Century lens accessories, etc.  
**Established Products:** Glass filters including Classic Soft, Digicon, Black Frost, White Frost, Low Contrast, Neutral Densities and more.

**ScienCentral Inc.** C1939  
*Intro:* Brain Food mobile content, news stories repurposed for mobile phone market.  
**Established Products:** Science, health, and tech news stories

**Scientific-Atlanta Inc.** SU1608

**Scopus Video Networks** SU4175  
*Intro:* UE-9218 DSNG platform features simultaneous MPEG-2, MPEG-4 SD encoding with built-in DVB-S2 modulation and upconversion in a 1RU chassis; IRD-2900 receiver decoders modular platform in a 1RU chassis; IP-based video networking solutions.  
**Established Products:** Intelligent Video Gateway IVG 7000 Series; universal encoders

UE 9000 Series; decoders; universal IP decoders; common interface decryptor; statistical multiplexer; network management systems; Piccolo headend in a box

**ScoreBox/Howard Zuckerman** SU854

**Screen Service Broadcasting Technologies** C333

*Intro:* DTV modulators and transmitters with SFN/MFN capability, adaptive precorrection and dual-mode functions; A/D MMDS headend solutions for DVB-T; digital transposer with automatic echo canceling—new generation of digital repeaters, in regenerative and nonregenerative techniques, allows coverage of dark areas in urban and hillside areas; Agile high- and medium-power solid-state UHF and VHF transmitters.

**Screen Subtitling Systems Ltd.** SU4598

**SDS** C9119  
**Established Products:** SDS\Broadcast Microsoft Windows-based broadcast software incorporates sales, traffic, programming, operations and billing; SDS\Traffic; SDS\Proposal; SDS\AR

**SeaChange International** SU1393

*Intro:* MediaClient codecs support MXF, QuickTime and AVI, together with the MPEG-2 program stream and transport file formats for compatibility with existing systems; VOD: IP-based video solutions pre-integrated and deployed with the ability to implement 5,000-hour libraries that can scale incrementally to 100,000 hours; VOD system includes the Axiom video operations services software, which leverages IT and DTV standards. Together, with hybrid MediaCluster servers, it forms a pre-integrated system.

**Sencore Inc.** SU3009, C3810

*Intro:* VideoBridge 200 series is focused on assuring service delivery for MPEG over IP links and IPTV networks and features GigE interface support, MDI media window, enhanced MPEG analysis, thumbnail decoding and channel view; Atlas MRD2187A modular receiver decoder retains the same flexibility of the MRD3187 and provides eight configurable I/O slots; Atlas Management System for organizing, maintaining, and monitoring Atlas network; DVBS2 interface module for supporting optimized contribution links; GigE interface module, full 10/100/1000 support including Pro-MPEG COP3 FEC, DVB; MIP1860 MPEG-over-IP cross layer analyzer for the design and verification of all MPEG-over-IP devices and networks provides stream duplication for hundreds of streams created in seconds, generates different impairments for reproducing real-life situations and real-time monitoring for hundreds of MPEG-over-IP streams simultaneously.

**Established Products:** VideoBridge 100 series; receiver decoders; video servers; IPTV service monitors; MPEG service analyzers; MPEG transport monitors; RF analyzers; MPEG and RF laptop adapters; IP gateways; MPEG-2 to MPEG-4 transcoders; picture quality analysis; MPEG to PCI adapters

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**Sennheiser** N1822  
Intro: SK 5212 features a 36 MHz tuning window to access up to 7,200 frequencies in 5 kHz steps, across the UHF spectrum; NET1 Network System acts as a hub for up to 10 Sennheiser wireless systems and automatically configures frequencies for all connected components and portable units through wireless sync; 3250 wireless monitors; A 5000 CP passive antenna for transmitting and receiving RF signals throughout the UHF spectrum.

**Sentivision** SL2407C

**Server Technology Inc.** SL2847

**SES Americom** C4145

**Shenzhen** C51070  
**Av Frontier Electronic**

**Shining Technology** SU5172

**Shotoku** C7336  
**Broadcast Systems**

Intro: TG-19 and TG-17 robotic pan/tilt heads support 154 lbs. The new TG-19 pan/tilt head allows large lens, camera and prompter combinations to be controlled. The TG-19 is capable of manual control, and can learn the movements of its operator for replay—high-resolution intelligent optical encoders allow virtual reality outputs without modification to the head. The TG-17 standard configuration includes drive electronics for the pan/tilt, with lens functions integrated into the head; i-Height robotic height control pedestal allows a variety of shooting angles to be achieved from a single camera position and holds payloads up to 154 lbs. from 2.5 feet to 4.4 feet; TR-88 robotic control system offers 10 shot storage per camera and up to eight cameras available at any one time; TP-90 pedestal is a compact 3-stage, minimum height pedestal with a column stroke reach of 37.2 inches and a payload of 132 lbs. Located under the carriage, the TP-90 cable guards can be height-adjusted by turning a knob on the side of carriage. Safety features include a new and improved column lock as well as a brake ring placed within reach of the camera operator; CrescentM Fluid Head mid-size fluid head capable of mounting a small to large cameras. The lightweight CrescentM launches with the same smoothness of its namesake, Crescent, and uses the same balancing technology that allows the operator to easily achieve perfect balance. The technology and mechanism make the head's balancing range the widest in the industry and provides for extremely light movement.

Established Products: Manual and robotic camera support equipment including the TG-18 pan/tilt head, TR-8S control panel and TR-8T control panel with touch screen. Naoki Ebimoto, President  
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Torrance, CA 90501  
866-SHOTOKU  
E-mail: [info@shotoku.tv](mailto:info@shotoku.tv)  
Web Site: [www.shotoku.tv](http://www.shotoku.tv)

**Shure Inc.** N408

**Siemens** SU19-MR

**Sierra Automated Systems** N907  
Established Products: Digital audio routing switcher and communications

**Sierra Video Systems** SL549  
Intro: Lassen digital routers offer high bandwidth for serial digital video signals, and 2-channel digital audio or analog stereo audio options in the same frame; Lassen HD high bandwidth routers for HD/SDI signals employ multirate digital video boards to pass SMPTE 292 HD video, SMPTE 259 SDI/DVB-ASI, or SMPTE 310 MPEG-2 video; RGBHV or SDI/HD Ponderosa routers in stereo analog or AES digital audio in 64x64, 128x128-sized and 256x256 matrices.  
Established Products: Sierra Pro RGBHV routers; Lassen analog routers; Yosemite routers; Sequoia routers; DigiLinX modular systems.

**SignaSys Inc.** C11539A

**Sigmum Bildtechnik GmbH** C6607H

**Silhouette FX LLC** SL5138D

**Silicon Color Inc.** SL1816

**Silicon Graphics (SGI)** SL3764  
Intro: Next-generation Silicon Graphics Prism with The Pixel Farm PFRestore 64-bit Linux system allows users to configure any combination of blades—including CPUs, coprocessors, memory, storage, I/O and graphics; PFRestore, The Pixel Farm's new digital restoration system for 4K digital cinema remastering; SGI InfiniteStorage 6700 storage system provides 2.5GBps throughput.  
Established Products: SGI Altix 4700 server; SGI InfiniteStorage TP9700; SGI InfiniteStorage NAS 330; SGI InfiniteStorage CXFS Filesystem; SGI Data migration facility

**SintecMedia** SL4979  
Intro: Revenue and Inventory Management interactive report and graphical analysis tool;; Internal Process Controls and Sarbanes-Oxley provides broadcasters with more control over establishing, managing, and reporting on internal processes that meet Sarbanes-Oxley; Multicampaign Promo Optimization optimizes the placement of multiple promo campaigns simultaneously; eTV Support management tools

has been built into OnAir to manage streaming of video and data in parallel to regular events.

**SISLink** C4731

**Sky Micro** SL847

**Sky Perfect Communications Inc.** SL2916

**Skyline Communications** SU5189

**SkyStream Networks** SL2987

**SLI** SL2647

**Slik Broadcast** C8044

**SmartJog** SL2636

**Smartsound Software Inc.** SL2955

**Snell & Wilcox** SU156  
Intro: Kahuna IMPAKT 3D DVEs offers up to four twin-channel 3D DVEs that users can apply in SD and HD; 2 M/E and 3 M/E panels enable users to integrate Kahuna in space-constrained environments; IQ modular products for decoding and upconversion, including IQDEC modules with 12-bit Golden Gate premium decoders, synchronizes, and audio embedders with noise reduction on a single compact card; 12 new entries in the Kudos Plus TBS time-base synchronizer and CVR converter and synchronizer series; 3RU Memphis stand-alone, high-quality SD/HD MPEG-2 encoder features Ph.C phase correlation motion estimation and Prefix compression pre-processing.

**Softel-USA** SU3605  
Intro: Swift 5 caption and subtitle preparation system; Swift TX, for automated caption and XDS transmission; Reeltime for live captioning adds the power of live subtitling to the standard Swift subtitle workstation; ADePT A/Vdescription audio description tool with a customizable interface; MediaSphere TX for interactive TV includes powerful DSM-CC object carousels and other tools key to a successful iTV play-out facility.

**SoftNI Corp.** SU3788, SL1513H  
Established Products: Subtitled Suite for preparation and output of subtitles and captions; CaSat Suite for transmission.

**Solid State Logic** N822  
Intro: C100 dedicated broadcast console

incorporates an all-in-one rack design, scalable control surface, TFT channel metering displays and full 5.1 surround capabilities; AWS 900 Analog Workstation System combines the dual benefits of SuperAnalog processing and digital control to provide a solution to the use of digital audio workstations in professional audio applications; XLogic rackmounting outboard signal processing units featuring SuperAnalog audio quality; XLogic X-Rack modular rack system.

**Songs To Your Eyes Ltd.** C2163  
Intro: STYE 142-Metal Rock Riffs and Heavy Beats Vol. 3; STYE 140-Lounge/Groove/Electronic Vol.3; STYE 136-Hip Hop Instrumentals Vol.4; STYE 133-Trailer Music Vol.2; STYE 132-Vocal Cocktail Vol.2.  
Established Products: Production music library; custom scoring; music consultation; clearance

**Sonic Solutions** SL3750

**Sonifex Ltd.** N4507  
Intro: DHY-03 digital telephone hybrid offers quality audio performance over a standard analog telephone line without compression; RB-ADDA2 combined A/D & D/A 24 bit 192kHz, 1RU converter; RB-DS2 is a stereo audio delay synchronizer for resynchronizing audio to video following delay processes; RB-DA6G is a two input, 12 output amplifier with individual adjustable output gain control; RB-DA4x5 is a four input, 20 output combined distribution amplifier and mixer.  
Established Products: Redbox range includes digital audio converters; word-clock; audio and headphone distribution amplifiers; mic and matching amplifiers; mixers; source selectors; silence detectors; limiters; a power controller and stereo to mono converters

**Sony Electronics Inc.** CW1030, SU1070

**Sorenson Media** SL1513D

**SOS Global Express Inc.** C4533

**Sound & Video Creations** C10712

**Sound Broadcast Service Ltd.** N3805

**Sound Devices LLC** N3915  
Established Products: MixPre, 302, and 442 field mixers, 7-Series audio recorders.

**Sound Ideas** C2151

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*Intro:* Series 6000 Extension VI is an addition to the General Sound Effects Series 6000 collection; Headline News Music; Club Elements; Twisted Tiger Music II.  
*Established Products:* Sound Ideas Sound Effects; Elements Cafe, Big Whoosh

Soundfield Ltd. N1326

*Intro:* ST350 portable surround mic system includes a lighter mic for boom poles, lower noise floor, and the ability to feed B format and stereo signals simultaneously.

Soundminer C2063

Specialty Data Systems Inc. C9119

Spectra Logic SL1601

SpectSoft LLC C2548

Speedsix Software SL2947

Spider Support Systems C6816

*Intro:* Spider Pod Version 2.0 elevates a tripod and camera two feet.

*Established Products:* Expansion Web; Scorpion Pod

Spinner GmbH C6607B

SPL Innotech Pte. Ltd. SU253

Sprint Nextel C11035

Square Box Systems Ltd. SL2438

SRS Labs Inc. N4208

ST Electronics C7442  
(Satcom & Sensor Systems) Pte. Ltd.

Staco Energy Products Co. C107

Stagetec N4211  
(Salzbrenner Stageteck Mediagroup)

Stainless LLC C2447

*Intro:* Analysis for 222G—Stainless has updated its proprietary software to do structural analysis on towers under the new TIA/222G tower specification that took effect in January.

*Established Products:* Towers and tower modifications; analysis/engineering studies; installation and maintenance services

Statmon Technologies Corp. C8511

*Intro:* Axxess Remote Control and Facility Management System Version 6.1 product suite exploits the power of IP for multisite, multi-user facility control and management, including EAS remote operation, SNMP monitoring, MODbus communication, integrated SQL database and more.

STE-MAN Inc. C8515

StorageTek SL3809A

Stradis Inc. SU3996

Strand Lighting Inc. C1230

Stratacache SU231

*Intro:* OmniCast Media Scheduler provides a simple, informative and intuitive tool for authoring media combining video, audio, text, animation and graphics.

*Established Products:* OmniCast is a specialized data distribution software

Stratos International SU3006

*Intro:* Hx1080 SMPTE-compliant fiber optic connector for broadcasters implementing fiber cabling for live remote telecasting. The Hx1080 is a simple upgrade butt-joint technology; Miniature, ultra-high-density media converters provide media conversion between BNC-equipped 75-ohm coax and LC-connector equipped 9 µm single mode fiber-optic cable. Smaller in diameter than a BNC connector, the units allow the tightest possible unit-to-unit pitch. Transmitters and receivers are compliant with SMPTE 292M/297M/259M/305M/310M protocols and support data rates from 19.4 Mbps to 1.485 Gbps. The electro-optical performance meets or exceeds all SMPTE specifications. Options include CWDM and DFB transmitters; 18-channel HD/SD video media converter rack for Stratos video media converters provides up to 18 channels of BNC-to-fiber conversion in a 19-inch 1RU space. It provides a platform for managing the power, monitoring and cabling on coax and fiber side of high-density broadcast video transport networks; digital fiber media adapters feature flexible, throw-down design, accommodates 4-channel AES embed/de-embed-to-HD video, 4-channel SD-to-HD video mux/demux and video media converter tx/rx units with X integrated 4 channel DA; Z-link digital fiber-optic camera link, a highly capable, easy-to-use link, fits a variety of cameras. For camcorders, popular battery plates provide a secure mount and power connection for the rugged yet light and compact camera unit. The base unit fits into a 1RU enclosure.

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sure and presents the SDI and analog signals as picked up in the camera. Stratos is expanding the range of connection interfaces to fit with more types including standard studio system cameras.

**Established Products:** BNC-to-fiber media adapters; harsh environment connectors, SFP/SFF modules; 8-channel SD-SDI SMPTE 259M mux/demux engine cards  
Mark Benton, Dir., Product Mgmt., Video  
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Web Site: [www.stratoslightwave.com](http://www.stratoslightwave.com)

#### Stratos Lightwave C9843

**Intro:** Broadband Global Area Network mobile satellite service provides simultaneous high-speed data (up to 492 kbps) and voice connectivity using a satellite terminal about the size of a laptop PC.  
**Established Products:** Inmarsat; Iridium; Globalstar; VSAT.

#### Streambox Inc. SL581, SU25-MR

**Intro:** SBT3-7500 is built on the Streambox ACT-L3 codec and advanced proprietary video compression technology, matches MPEG-2 video quality at a 75 percent lower data rate, and is up to 50 percent more efficient than MPEG-4; SBT3-7400 uses the ACT-L3 codec with advanced IP networking capabilities.

#### Streamtel SU617

#### Studentfilmmakers.com SL4587

#### Studer N2426

**Intro:** Call Management System uses VoIP technology to replace the physical telephone hybrids and codecs. The control and signaling systems of the hybrids and codecs are integrated parts of CMS that interface to most PBXs with VoIP interfaces, direct with ISDN lines or to the Internet. It also allows the control of POTS lines.  
**Established Products:** Vista 8 digital live production mixer

#### Studio Network Solutions SL5350

**Intro:** globalSAN X-4 for Pro Tools, Final Cut Pro, Avid.  
**Established Products:** globalSAN, A/V SAN PRO, iSANmp, SANmp

#### Studio Systems C10126

#### Sun Microsystems SL3809

**Intro:** Sun Media Asset Management offers storage and multiformat distribution, is Java-based for standardized integration into existing systems and runs in heterogeneous operating environments; Sun MAM Reference Architecture; Sun Storage Technologies multitiered media archive deployed Avid, Thomson/GVG, Ascent Media and SGI.  
**Established Products:** Media Asset Management; Information Lifecycle Management/Storage

#### Sundance Digital Inc. SU1425

**Intro:** FlexEvents enables complex secondary event command sets to be organized into named macros placed within the station's traffic log; FastBreak NXT Xpress offers an automation solution ideal for

operator-supervised program playback and spot insertion. XPress adds switch events, clock triggers, and automatic or manual Join-in-Progress cues. The base configuration provides two Sundance workstations, Media Prep for ingest and content management and Air Control to supervise the actual play-out. All the company's workstation computers are heavy duty, enterprise-grade, rackmountable machines delivered with multiple cooling fans, dual RAID-1 hard drives, and independent, hot-swappable power supplies. FastBreak XPress is upgradeable to FastBreak NXT and Titan automation; Sundance Digital Web Inventory has undergone a complete overhaul with a new user interface based on Microsoft .Net technology. The application, which comes with the company's optional SQL DataServer, lets authorized users access and view active Titan and FastBreak NXT playlists, server and/or tape inventory database information, Intelli-Sat schedules, and lo-res browse copies on internal or secure private networks; additional redundancy options added as a standard feature of Titan and FastBreak NXT series systems with the introduction of N+1 capability. Unlike Sundance Digital full N+N TitanSync or ListSync configurations, the new N+1 is a middle-ground solution that uses one or more spare server outputs in the event of a play-out port failure. The automation automatically senses any sudden absence of status, cues the spare server port and performs an Auto-JIP to join the playback stream on-the-fly within 15-20 seconds; Network Attached Storage provides an economical nearline spinning disk-based storage solution as a alternative to more costly online storage. Offered in a range of standard RAID configurations and capacities, NAS bundles include the storage, and disk/archive management applications.

**Established Products:** Sundance Digital will also demonstrate improved functionality, enhancements and upgrades to its award-winning product range with Titan, Intelli-Sat, NewsLink, Seeker, and FastBreak NXT Automation.

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#### Supacam SU806

#### Superior Broadcast Products C131

**Intro:** Solid-state RF amplifiers and transmitters for digital and analog.  
**Established Products:** Broadband panel antenna systems; narrow or broadband slot antennas; transmission line and connectors

#### Superior Electric N708

**Established Products:** Stabiline power quality products include automatic voltage regulators, uninterruptible power supplies, transient voltage surge suppressors and power conditioners.

#### Sure Shot Transmissions Inc. C4441

#### Surface Heating Systems Ltd. C8049

#### SWIT Electronics Co. Ltd. C7612

#### Switchcraft Inc. C9316

**Intro:** EH series of connectors mounted in an XLR panel housing. BNC, RCA, USB, FireWire, DB9, DB15 styles, and more; RGB series video patchbay are midsize video patchbays formatted for RGB, RGBS, and RGBHV formats. Variety of configurations and rack heights.

**Established Products:** Video patchbays and patchcords

#### Switronix Inc. C963

#### Symetrix Inc. N2414

**Established Products:** GENx192 ultralow jitter studio master clock offers eight word, four AES-11 and two S/PDIF clock outputs divided between two banks allowing different clock multiples to be output simultaneously; 88192 8-channel A/D-D/A converter offers 24-bit audio conversion up to 192 kHz; 6200 digital voice processor features two voice processors in one box; 528E voice processor offers six processes.

#### Synergy Broadcast Systems SL776

#### Synthetic Aperture SL5138G

#### Systems Wireless C5119E

#### Systor Systems Inc. SL4355

#### Tajimi Electronics Co. Ltd. C8116

#### Talking Type SU5197

#### Tandberg Television SU1164, OE122

**Intro:** TT1290 professional 1RU receiver and multiformat MPEG-2/MPEG-4 AVC decoder is for the high-end contribution market; a new range of HD MPEG-4 AVC DSN solutions enable the bandwidth efficient acquisition of HD content.

**Established Products:** Multiformat SD and HD encoding and headend solutions in full working systems alongside on-demand and interactive solutions

#### Tascam SL2913

**Intro:** HD-P2 HD portable stereo recorder, up to 192 kHz/24-bit recording, two built-in XLR mic-ins with phantom power, records to Compact Flash, with timecode input.

#### Tata Elxsi Ltd. C9849

#### TBC Consoles SU1390

#### TC Electronic C2507E

#### TDK Electronics Corp. C10741

#### TEAC AMERICA Inc. SU1053

#### Techflex Inc. C941

#### Techni-Lux Inc. C9641

**Intro:** Gaffstage Tape non-residue adhesive that doesn't leave gooey mess on cables.  
**Established Products:** SGM automated lights; Studio Due; Elite fogging and haze liquids; dimmers; controls; Par-cans; fresnels; ellipsoidals; fog machines; etc.

#### Techni-Tool C7826

#### Technocite C10418H

#### Technocrane C2036

**Intro:** Technodolly crane for computer-generated movements.

**Established Products:** Supertechno 30, Supertechno 50 and Techno 15 Telescopic camera cranes

#### Technologies for Worship CW9902

#### Technology Exchange Ltd. SU5176

#### TecNec Distributing C5541

**Intro:** Jackreel-3 steel-frame cable reel featuring holds 300 feet of Rg59 coax or Quad Star mic cable, and well over 400 feet of CAT5; DELV-LCD1 Combo Stand and VESA LCD Mount allows LCD monitors up to 20 inches to be used in the field or studio; DELV-G1080-1 Handle Bracket for Sony HDV/DV/MiniDV cameras; DELV-G1080-SP skid plate that fits Sony HD Handycams.

#### Tecnovision SL1373

#### Tedial SL1236

#### Tektronix Inc. SU4141

**Intro:** The new 3RU half-rack MTX100A is based on the MTX100 but uses off-the-shelf PC components including Windows XP and a Tektronix architecture that provides a high-powered and portable solution for MPEG stream capture and playback. The large internal storage, DVD-ROM, and Ethernet download capabilities help customers store, download, and play-out test patterns that continue to increase in file size as HD program content increases in size; RTX100A ISDB-T RF signal generator expands the capability of Tektronix's MPEG generator to include RF signal generation. It supports ISDB-T; new VGA option for the VM5000 Automated Video Signal Analyzer automates video signal analysis and VESA standards compliance testing for analog RGBHV signals typically communicated via VGA, DVI-I or DVI-A interfaces; automated VESA Video Signal Standard speeds product verification and compliance testing for PC graphics devices and components, enables scalable and repeatable test capability in globally distributed organizations; VM5000 provides an automated measurement for measurements of component analog video signal outputs for pervasive SD, HD, and VGA image formats; enhancements to WVR7100 and WVR6100 Rasterizers include eye pattern display, jitter measurements and cable length measurement for HD-SDI and SD-SDI signals. Also included is support for monitoring ancillary data that conforms to the Association of Radio and Broadcast standards used in Japan; WVR7100 and WVR6100 rasterizers for composite, SD and HD video and/or analog, digital, Dolby Digital and Dolby E audio, provide and easy-to-use monitoring that ensure production and broadcast of quality content that adheres to legal specifications. The addition of new eye pattern and jitter measurements on the WVR7100 and WVR6100 provide quick insight to the presence and severity of a problem at the physical layer; Support for Ancillary Data Conforming to ARIB standards. A specialized ARIB data display allows more detailed examination of this information.

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**Telairity Semiconductor** SU1639  
*Intro:* TVM264 video encoder with ClarityHD board enables broadcast OEMs to accelerate time to market by using an H.264 video; video servers for storage and archives; professional video editing and authoring.  
*Established Products:* T1P2000 video processor; T1P2000EP evaluation platform; T1P2000TK Software Toolkit.

**Telecast Fiber Systems Inc.** SU4717  
*Intro:* G2 CopperHead camera-mounted transceiver is based on the CopperHead system; SCAMP optical repeater and power amplifier for SMPTE 311 hybrid cables can be installed in the middle of a cable run, functioning as an optical repeater and taking power from the SMPTE cable, or can be locally powered to boost electrical power; Teleport-X expandable to up to 16 bidirectional wavelengths. Using CWDM technology, each single-mode fiber can now support up to 40 Gbps; MX Connector available in two- and four-core configurations.  
*Established Products:* HDPOV; Cobra-D; DiamondBack II; SHED; Viper II

**Teledyne MEC** C7915

**Telemetry Inc.** C4141

**Telesat** C8948

**Telescript Inc.** C5116  
*Intro:* TeleScript FLIP! prompting software flips the image on the prompter display while keeping the computer screen correct; TeleScript FPS200 In-Studio 20-inch on-camera teleprompter mount for full-size studio cameras with box lenses weighs 30 lbs.; TeleScript Tablet120 for convertible laptop or tablet PC as the prompter display weighs under 10 lbs. and offers fold-and-go quality hardware; TeleScript DV8 allows the user to go handheld with shoulder-mount, DV camera hardware, and attach the TeleScript DV8 teleprompter; TeleScript FreeStand enables users to quickly go from on-camera to freestanding.  
*Established Products:* TeleScript AV; TeleScript PRO; TeleScript PRO News; TeleScript Jr; FPS120F; FPS150F; FPS130V; FPS150R

**Telestream Inc.** SL2781  
*Intro:* Flip4Mac FCP import and export components provide file compatibility and direct file transfer of MXF media into Final Cut Pro systems from Sony XDCAM and Ikegami Editcam broadcast cameras, and file transfer of GXF and MXF media between Grass Valley K2, Profile, Turbo, and M-Series servers and Final Cut Pro systems; Flip4Mac WMV components extend QuickTime-based applications to enable Mac users to play, import, and export Windows Media A/V files on Mac OS X systems; FlipFactory HD automates file-based media exchange.  
*Established Products:* FlipFactory models; MAPreview; MAP Media Access for Microsoft SharePoint; Launch personal IP media delivery applications for Mac and PC, ClipMail MPEG encoding and IP media delivery appliances

**Teletest Ltd.** C9935

**Television Engineering Corp.** C5141  
*Intro:* Express ENG and DSN trucks based on Ford E350 or the Dodge Sprinter. The TEC Eagle Eye camera system includes a 16x zoom lens from atop the ENG truck mast and variable speed pan/tilt movements.

**Telex Communications Inc.** C4535

**Telos Systems** N2714, N2515  
*Intro:* ISDN, coded audio and telephone interface products for talk shows, teleconferencing, audio production, remote broadcasts and intercom applications.  
*Established Products:* Pots or ISDN codecs; ISDN hybrids; talk show systems; logging Software

**Tentel** C2118  
*Established Products:* Tools, training, parts.

**Tenues Systems GmbH** C66071

**Teracom Components** C2033

**Teranex Inc.** SU4983

**TESSCO Technologies** C10827

**TextCaster** C10247  
*Intro:* TextCaster wireless communication infrastructure, a FCC Can-Spam compliant permission-based text message delivery to cell phones, PDAs and pagers with optional support for e-mail; GeoMatrix feature lets clients target information delivery to specific zip codes; iBAS single point-of-entry software gives law enforcement personnel at the local level the ability to assemble public safety information and feed it to EAS as pre-recorded audio from public information officers.

**TFT Inc.** N2012  
*Established Products:* Modulation monitors; emergency alert systems

**Thales Angénieux** SU4125  
*Established Products:* ENG lenses; studio/OB lenses; film lenses

**Thales Broadcast & Multimedia** SU2970

**Thales Components** C9007

**THAT Corp.** N1224

**The Electronic Farm** SL4964

**The Foundry** SL643  
*Intro:* New plug-ins for the Furnace 3 for Shake suite of 30 image processing tools, many of which automate time-consuming processes in the creation of digital VFX; Forge standalone dirt removal application; Demonstrations of the Foundry's plug-ins, Tinder, Furnace and Keylight, on a range of host platforms including Autodesk Media and Entertainment Systems, After Effects and Shake.  
*Established Products:* Furnace 3 for Shake, Forge, Tinder, Furnace, Keylight

**The SCO Group** SL2407H

**The Tiffen Co.** SU2989  
*Intro:* Steadicam Merlin Limited Edition Signature series handheld camera stabilizing system weighs 12.8 oz. and measures as little as 3.5-by-2-by-11 inches when folded in

shoulder mode; Davis & Sanford Carbon LiteX10 Tripod features ultralight carbon fiber and magnesium construction; ProVista Airlift Tripod heavy-duty tripod for a variety of applications.

*Established Products:* Steadicam camera stabilizer system, tripods, camera filters

**thePlatform** SL1210

**Thermo Bond Buildings** N4222

**Thermodyne International Ltd** SU743

**Thomson Content Security** SU844

**TI Broadcast Solutions Group** SU3014A

**Tieline Technology** N3215  
*Intro:* i-Mix G3 is an audio codec capable of wireless Internet remote broadcasting over a broadband cellular network. Tieline audio codecs are the first to offer broadcast quality stable links from your remote to the studio over the user's choice of any five networks: the Internet (wired and wireless), broadband cellular networks including 3G EVDO, GSM Wireless, POTS and ISDN links.  
*Established Products:* ProSolutions A/Vproducts.

**Tightrope Media Systems** SU2030  
*Intro:* Cablecast 4.4 station automation for PEG access centers has a Web-centric interface compatible with all major web browsers. Features include an integrated program library with permanent show history; integrated reporting with charts and graphs; integrated support for live and VOD streaming. Optional built-in on-air CG for community bulletin boards that automatically updates programming information. Optional bug/crawl generator system; Video Spyglass by Media Control Systems features intelligent monitoring of motion, sync loss and audio, six timers work together to prevent false triggers and safely monitor on-air problems. Included software provides email and audible warnings.  
*Established Products:* Carousel, VS4 Video Servers, Video Spyglass.  
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612-866-4118, ext. 201  
866-866-4118  
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Web Site: [www.trms.com](http://www.trms.com)

**Tokina Co. Ltd.** C7736

**Toner Cable Equipment Inc.** C11335

**Toon Boom Animation Inc.** C10512

**Torpey Time** SU946  
*Intro:* Model CLK-29 compact clock display is the latest addition to the wide range of clock displays, featuring compact size, large digits, and complete versatility to display time information from Leitch, ESE, SMPTE, EBU, DQS, IRIG-B, NPR, or NMEA-183 codes.  
*Established Products:* Clock and timer products, with compatibility with all codes used in the broadcast industry, including ESE, SMPTE, NPR, DQS, IRIG-B, and NMEA.

**Toshiba** C5126

**Total Immersion** C10808

**Total Training Inc.** SL1942

**Tote Vision** C9937

**Tower Consultants Inc.** N4518

**Tower Elevator Systems Inc.** C2116  
*Intro:* Smart Reel Control System, a patented direct wired controls for tower elevators, replaces wireless controls and adds a dial tone capable intercom communications system; Trac-Cab gear-driven elevators for towers, rack and pinion safety and low maintenance for outdoor installation on towers.  
*Established Products:* Tower elevators and service.

**Tower Engineering/KPFF** N3037  
*Intro:* Tower Engineering/KPFF is a civil and structural engineering firm that specializes in the TV, radio, and telecommunications tower industry. Services include analysis, inspection, retrofit design, specifications for new towers, and construction observation.

**Towerline Software LLC** N4522

**Traffic.com Inc.** C9615

**Transaudio Group** N4524

**Transmedia Dynamics Ltd.** SU186H

**Transvideo** C7428

**Trapcode** SL5138H

**Triangle Software LLC** C9313  
*Intro:* BeatTheTraffic offers a complete solution for the broadcast of traffic reports, featuring consistent on-air and online components, 3D animation, lower third ticker, information user pages and traffic forecasting; Online Mapping is also available online, in the form of interactive, zoomable traffic maps showing traffic flow and up to the minute traffic incidents. Interactive mouse-overs provide the detail of real-time traffic speeds and incidents. Information manually enhanced/input by on-air talent is reflected instantly online, providing consistent value and coherency online and on-air.

**Trilithic** C9547

**Trilogy Communications Ltd.** C4743

**Triveni Digital Inc.** SU1999  
*Intro:* StreamScope M-40 remote monitoring appliance monitors, measures, records, and analyzes DTV streams features 64/256QAM, ASI and GigE, QPSK, and file inputs, interfaces to GuideBuilder metadata management system, etc.; SkyScraper Content Distribution platform enables point-to-multipoint delivery of digital content over cable, satellite, terrestrial and IP networks; SkyScraper Emergency Services Network provides reliable, secure, timely and efficient distribution of disaster alerts, training materials and operational communications to emergency responders.  
*Established Products:* StreamScope; GuideBuilder; SkyScraper Library Builder; StreamBridge

**Troll Systems** C125



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## Trompeter

**SU3006**

*Intro:* Studio-Grade F connectors include the PL130 is for high-frequency applications like HDTV, DTV, and two-way high-speed Internet connections, the PL100 three-piece RCA jack for high-end audio systems

Tron-Tek Inc.

**C942**

TSL

**SU1433**

*Intro:* AMU HD range migrates existing SD A/V monitoring to HD, including a built-in monitoring quality aspect ratio converter; AMU2 8HD range offers eight channels of HD/SD embedded audio, Dolby E and Dolby Digital signals to be accurately monitored in many applications; In-Monitor-Display embeds dynamic UMD information and tallies to be displayed directly in-picture on flat-screen monitors; TM1 and TM2 are 1RU and 2RU self-contained tally control systems.

T-Systems International GmbH

**C1546**

Tut Systems

**SL635**

*Established Products:* Astria family processes analog and digital video streams from multiple satellite and local sources in many formats. Astria content processor supports MPEG-2 and MPEG-4 AVC, local ad insertion, forward error correction and more; Astria video services processor provides the highest density, carrier class, single chassis product for the delivery of IP video over coax and FTTP.

TV One

**C347**

*Intro:* C2-7300 dual-channel HD video processor is the ultimate bridge between SDTV and HDTV, between digital and analog. Its 12 inputs and two independent channels provide flexibility in converting and processing HD-SDI, SD-SDI, DVI-I, RGB, YUV, CV and SV. Sixty-four channels of audio processing for full SDI audio embedding and de-embedding for SD and HD; CC-300 CORIO console provides a video production switcher-type interface for C2-7000 HD video processors. Two rows of 14 buttons are provided for preview and program functionality of mixed format sources. Fades and wipes may be automatic with preset times or manually controlled via fader bar. The joystick allows precise positioning of P-I-P inserts and other functions; PX-720 Worldwide Standards Converter handles PAL, SECAM and NTSC. Motion compensation improves the conversion process. The integral time base corrector with full synchronization allows the unit to be genlocked to a composite video source. The TBC is active in the bypass mode. Internal 10-bit accurate A/D-D/A conversion circuitry is employed.

*Established Products:* C2-7200 dual-channel HD, C2-5200 SDI and C2-4100 RGB-YUV video processors; IM-400 series matrix routing switchers; SD-200 series SDI-analog converters; LM series broadcast video monitors; PD series distribution amplifiers; DV1394-A70 DV-analog converter; TV One-task video converters and processors; CORIOscan computer-to-video converters; Z-Plus HD A/V cables.

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Erlanger, KY 41018  
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800-721-4044  
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E-mail: [dan.gibson@tvone.com](mailto:dan.gibson@tvone.com)

Web Site: [www.tvone.com](http://www.tvone.com)

Tylooon Inc.

**SU853**

*Intro:* Tylooon online yellow pages and local search engine in English, Spanish, Chinese or a mixture, soon with Japanese, German, and French support; Tylooon China; Tylooon Canada.

TV Technology/  
IMAS Publishing

**SU217**

TV-Animation

**C10513**

T-VIPS AS

**C9544**

*Established Products:* TVG410 SDI-to-IP video gateway transmits broadcast-quality uncompressed SDI video over IP in the professional backhaul and media exchange markets; TVG420 MPEG-2 to IP video gateway transmits and receives compressed video over IP; T-VIPS Connect connection-oriented management solution for control and supervision of professional video over IP networks.

TWR Lighting Inc.

**N4527**

U.S. Army Forces Command

**C10828**

U.S. Helicopters Inc.

**C8026**

UAL—Moore Wallace

**C2339**

U.K./U.S. Partners Pavilion

**SU5188**

Ultimatte Corp.

**SL3726**

Ultralight Control Systems

**C10838**

Unimar Inc.

**N2134**

*Established Products:* Obstruction lighting products for towers and hazardous areas; strobes, incandescent, LED, dual lighting, custom design solutions.

Unlimi-Tech Software

**SL5407**

*Intro:* FileCatalyst file acceleration software used to send large digital files over slow or congested networks; Files2U Web-based file-sharing solution.

UNI-SET Corp.

**C939**

Unitek Video

**SL5582**

University Products Inc.

**C9549**

Unlimitech Software

**SL5407**

Utah Scientific Inc

**C-4507**

*Established Products:* Digital routing switchers

Utility Tower Company

**N2522**

*Established Products:* broadcast towers.

U-Turn Media Group

**SL2420C**

Vaddio

**SU247**

Valcom Ltd.

**N4532**

Vancouver Film School

**SL1173**

Vantage Point

**SL5593**

Varizoom Lens Control

**C7412**

VBrick Systems

**SL2576**

*Intro:* VBrick WM Windows Media-based video appliance for encoding and delivering high-quality video over IP networks; EtherneTV 3.0 IP-based video distribution system for delivering live and stored content to PCs, Macs, and TVs; PresenterLive! software-based presentation tool delivers rich media and video over IP networks.  
*Established Products:* MPEG-2 and MPEG-4 video appliances.

VCI

**C2543**

(Video Communications Inc.)

*Intro:* New graphical user interface for Orion, enhanced XML interface, embedded OneDomain Director, a seamless sales proposal to traffic system with drag-and-drop make-good functionality and new tools for sales management.

VCom Inc.

**SU547**

*Intro:* CableVista edge decoder performs MPEG decoding, analog modulation and upconversion for up to 24 NTSC/PAL channels in a 1RU chassis; VistaLynx Edge QAM high-density, Gigabit Ethernet-to-QAM product offers non-stop operation for VOD services and complements the Vcom CableVista Edge Decoder; VistaMAX products for wireless broadband based on the WiMAX standard provide coverage options for densely populated urban environments; Power over Ethernet network management and subscriber provisioning utility.

VDO

**R243A**

*Intro:* Broadcast design and animation studio, specializing in custom graphics for news and entertainment channels.

VDS

**SL4573**

*Intro:* Twister Paint Station HD paint, graphics content creation and I/O solution runs standalone or as a plug-in for several systems; Synapse for generationQ allows the Quantel generationQ range operator direct interactive use of hundreds of professional-grade After Effects plug-ins from within the iQ, gQ, eQ, QPaintbox and QEffects; reQuest, reConnect and psdQ utilities for Quantel generationQ; Twister for Orad paint and graphics content creation plug-in for the Orad 3Designer.

*Established Products:* Twister Paint; Liberty; Mapcube Media; Synapse; request; GameTrak; GameBug; DigiSnap; PromoCrunch; AutoClips Intelligent Branding & Promo Suite; ComingUps; News Ticker; SmartRoute; Station In A Box; MOS Suite; AirPlot; Elections Suite; HotBoards; News Ticker

Veelectronix Inc.

**SU4117**

Vela

**SL2936**

*Intro:* Argus 200/250 4:2:0 encoder boards support MPEG-2 and MPEG-4 and encodes rates up to 15Mbps; Argus HD Transport Stream encoder captures HD-SDI video and embedded audio; CineView HD Pro simultaneously outputs SD and HD; CineView Quad half-size, multichannel A/V decoder supports four independent channels of high-quality MPEG-1, MPEG-2, MPEG-4 decoded A/V; MediaAdvantage 5000 server allows operators to choose the combination of video inputs or outputs.

*Established Products:* Argus 200/250 encoder; Argus HD encoder; Argus MX encoder; Cineview XLE; HD Pro/LE; and Quad decoders; MediaAdvantage 5000 server

Venaca Inc.

**SL1603**

Venera Technologies

**C10623**

Venue Services Group

**C7047**

Verimatrix

**C10727**

*Established Products:* Verimatrix Content Authority System (VCAS).

Verity Systems

**SL5586**

Verizon

**SL522**

Business—Digital Media Technologies

*Intro:* ICF Media Platform ingests live or non-live broadcast-quality masters, and stores content within a digital asset management system; In-A-Box Edition is the complete ICF Media Platform in a form factor that is easy to deploy and manage yet powerful enough to handle business critical requirements such as multichannel distribution; NetEdit Live and SDK offer interface for viewing and editing frame-accurate Windows Media content.

VertigoXmedia

**SL4726**

*Intro:* Xstation media platform helps create, schedule, automate, and air infochannels and DTV subchannels incorporating national, local, and hyperlocal content; VxASI Option for VertigoXG provides four DVB-ASI inputs with real-time demuxing and decoding of MPEG-2 A/V streams; VxScaler Option for the VertigoXG is a field-upgradeable module that transforms the VertigoXG CG into a broadcast graphics engine with built-in standards conversion; VertigoXmedia has partnered with Stats LLC to provide a seamless means for delivering live sports information to air. Vertigo Xstation system includes a parser for data feeds provided by Stats.

*Established Products:* VertigoXG; Xmedia Suite Version 3.7

VFGadgets.com

**C10621, C10622**

*Intro:* The lenslite 6000 K white light source is a versatile, lightweight and portable LED ring light system providing solid-state illumination; Pro Gripper Quad DV camera car mount is easy to set up with four telescoping hard anodized arms with suction cup mounting; BA-613PS lightweight AC adaptor addresses the low power requirements of the broadcast camera systems; ArmBones Monitor Mount works with heavy-duty camera handles to provide an articulating LCD monitor arm system.

*Established Products:* HD/SD heavy-duty camera handles and brackets; Viewfinder extension arm systems; lensliet LED Ringlight System; Holophone Surround Sound Mic; Red Eye wide-angle lens adaptor; shooter scooter portable camera dolly system; camera power supplies; HDV camera handle brackets; LCD monitor mounts; AV converters.

VFinity

**SL3033**

Via Satellite

**C7847**

ViACCESS SA

**SU4405**

VidCAD

**C8526**

Documentation Programs Inc.

Video Accessory Corp.

**SL3147**

Video International Corp.

**SU214**



# IN-DEPTH WITH HDV

## What is HDV?

HDV is a new video recording format that enables High Definition video to be recorded onto MiniDV tapes. This revolutionary technology provides almost 6 times the picture information of standard definition, while keeping the cameras small & affordable. Just like standard DV, the HDV signal can be transferred to your computer editing system via Firewire. This keeps the HDV edit workflow easy, familiar and manageable.

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**Video Products Group Inc.** C10137

**Video Technics** SU3014

*Intro:* NewsFlow Version 4.0 is a scalable, tapeless newsroom production, play-to-air, and archive system featuring digital and analog Apella servers integrated with MAC- and PC-based nonlinear editors within NAS and SAN storage devices; Apella SDS and Apella HDS line of multichannel, multiformat media servers support a mixed database of DV, MPEG-2, HDV, DVCPRO100, HDCAM, and uncompressed 10-bit 4:2:2 video; Apella LCS all-inclusive 3RU scalable server.

*Established Products:* NewsFlow, Apella SDS and HDS, Apella LCS

**VideoBank** SL606

*Intro:* VB Live Encode/Logger combines live video capture with data tagging in one interface; VB Lite, a scaled-down version of its standard production-level suite, from still-image management through DV FireWire capture; VB Scheduler is a server side application that controls any number of VideoBank processes including encoding, transcoding, migration, etc.

*Established Products:* VideoBank Encoder/Logger; VideoBank Play-List Producer; VideoBank Vault; VideoBank Production Suite; VideoBank Web Express; VideoBank Video Express

**VideoCodes Inc.** C863

**Videoframe Inc.** SU5164

*Intro:* VTECS 2 Control Panel VF0054 intelligent knob-per-function frame sync or proc amp control panel for master control splash or QC positions. Controls interface and processing equipment from multiple vendors using Videoframe Interface VNODES. Interfaces to routers to follow the X-Y panel, or to cause monitors to follow this panel. Multiple pages of controls per router source or processing channel. Interface VNODEs are available for Snell & Wilcox, Grass Valley, Leitch, Videotek, TC Electronic, Pro-Bel and Evertz products; 96 FlexGPI Tally Mapper VF0073 intelligent flexible stand-alone tally router with relay outputs. Point-and-click to create multiple maps on a Windows PC, connected via RS-232 serial or over TCP/IP 100Base-T Ethernet. The unit includes an SNMP agent for monitoring optional redundant power supply, GPI inputs, and relay output states. Up to 19 expansion units may be connected via Ethernet to form a matrix of up to 1,920 I/Os; 96 FlexGPI Tally Expander VF0074 connects to the 96 FlexGPI Tally Mapper via Ethernet to increase matrix size. Each port may be configured as a TTL or opto-isolated input, or an isolated dry contact closure output; DB-8 Interface VNODE VF0066 interface allows any Videoframe control panel to control the TC Electronic DB-8 audio processor; TSI-1000 Interface VNODE VF0072 allows integration of Videoframe control panel systems with the Image Video TSI-1000 tally processor for master control bypass when combined with the Videoframe CP16 or CP32 control panel, any interface VNODEs for routers, and Videoframe HD, SD and RS-422 transfer switches.

*Established Products:* Signal monitoring VNODEs, Interface VNODEs, VTECS control panels, tally mapper, tally expander. Margaret Little, Mktg. Dir. 101 Providence Mine Rd., Ste. 103

**Nevada City, CA 95959**

**530-477-2000**

**E-mail: margaret@videoframesystems.com**

**Web Site: www.videoframesystems.com**

**VideoHelper Inc.** C1659

**Videomagnetics Inc.** SU747

*Intro:* Repair and full service for DVCPRO VTRs.

*Established Products:* Service on all Betacam SP, Digital Betacam, DVCAM, Refurbished video heads and scanners and parts for Betacam SP, Digital Betacam, DVCPRO, Ampex/Sony/Hitachi 1-inch type "C," 3/4 Umatic, Ampex/RCA 2-inch Quad.

**Videomaker Inc.** C4433

**Videoquip Research Ltd.** C6736

*Intro:* Phase 3 SDI-CON converts SDI digital video to composite, Y/C, component and YUV, can operate in NTSC or PAL, and has an internal color bar generator; AVD-2 incorporates A/V detection with a 2x1 video and stereo audio switching for main and standby video and stereo audio signals; AVU-8H 8-channel high-resolution meter for digital AES/EBU audio signals.

**Videssence** C7116

*Intro:* Power Key Series now includes a single 55 W bi-ax lamp unit and a four-55 W bi-ax lamp unit; Baby Basekit lightweight kit features three small versions of our Baselite Series fixtures. The miniature, fully loaded, weighs 34 lbs; Shooter Kit lightweight kit features two small Shooter series fixtures with one mini Shadowcaster; 50 W PAR 20 Shadowcaster has barn doors, gel frame, folding stand, mounting spud, power cord and lamps; Mod Kit lightweight kit features two mini versions of our Modular Series fixtures, complete with stands, remote ballast box, two sets of lamps (daylight and tungsten), power cords and mounting adapters; Softlight series fixtures for video/teleconferencing multi-use spaces.

*Established Products:* Softlight series; Baselite series; V-Beam series; Modular series, Architectural Soft series.

**Viewcast Corp.** SL2840

**Vimsoft** C10848

**Vinpower Digital Inc.** SL4585

*Intro:* Titan Pro large capacity robotic CD/DVD autoloader duplicator duplicates up to 1,000 CDs or DVDs overnight; Titan lite 100-disc capacity robotic CD/DVD autoloader duplicator with the ability to run day or night unattended; SharkCopier standalone DVD/CD duplicator features standalone operation; multiple language capability for the text on the LCD screen to be displayed in English, Spanish, French, Japanese and more; Auto-Counter Technology displays total number of discs successfully copied compared to desired output for each project.

**Vinten** C5119C

*Intro:* Vinten Radamec Controller sits behind current user interfaces and enables operation of all of the current Radamec and Autocam branded products; Vision Ped Plus features camera balance developed from the Osprey pedestals; Osprey light pedestal 40 kg capacity pedestal with full steering capability; Quattro-L and Quattro-SL pedestals

feature improved column balance profile reducing user fatigue, and column height marker strips for help with repeat shots.

**Virage Inc.** SL1020

**Virtual Katy** SL1513F

**Vision Research** C10225

*Intro:* Phantom HD high-speed digital video camera can run at up to 1,000 pictures per second at resolutions of 1920x1080 pixels. Higher frame rates are available at reduced resolution. Other camera features include 14-bit encoding, 800 ASA rating, PL-mount, HD-SDI output, flash magazine, fiber out and much more.

**Allen de Marcken, Sales Mgr.,**  
100 Dey Rd.

**Wayne, NJ 07470**

**973-696-4500**

**800-737-6588**

**Fax: 973-696-0560**

**E-mail: phantom@visionresearch.com**

**Web Site: www.visionresearch.com**

**Visionary Solutions** SL2247

**Vista Systems** SL626

**Visual Data Media Services** SU1630

**Visual Europe Ltd.** C9646

**VitalStream** SL4207

**Vitec Multimedia Inc.** SU210

**Vity Technology** SU2250B

**Vizrt** SL1323

*Intro:* Viz|3G graphics motor for mobile telephones, based on the Vizrt Viz|Engine renderer and Adactus MPEG-21 standards-based multimedia delivery platform.

*Established Products:* Upgrades to Viz|Weather; Viz|Virtual Studio; Viz|Ticker; Viz|Content Pilot; Viz|Arena; Viz|Artist 3.0.

**Vocality International Ltd.** C4542

*Intro:* V25 miniature multiplexer and router supports two telephone circuits including secure voice, network connectivity and four wire audio circuits; V200 multiplexer and router supports satellite-accelerated TCP/IP alongside multiple redundant and individual dual port routers, voice compression cards and serial data.

*Established Products:* V50 multiplexer; V100 multiplexer; Satellite Simulator2; ISDN products

**Volicon** C2316

*Intro:* Observer broadcast monitoring and logging system with upgraded Observer 2.0 software includes new features such as closed-caption display, Exportview for scheduled archiving, support for Front Porch Digital archiving and Sundance automation solutions as well as multiple rate streaming for simultaneous coding of channels running at multiple bit-rates; Observer Uno for single-channel environments.

*Established Products:* Observer broadcast monitoring and logging system

**VSE IT & MEDIA GmbH** C6607C

**V-Shine Co. Ltd.** C5107I

*Intro:* H.264 encoder; MPEG-2 IP encoder; DVB IP remultiplexer; DVB remultiplexer; IP

Video Gateway.

*Established Products:* Encoder; remultiplexer; scrambler; QAM(QPSK) modulator; (E1,DS3,STM-1) adapter; decoder; ASI optical transceiver; ASI splitter; multiple TS monitor; satellite receiver

**V-Soft Communications** N3922

*Intro:* Probe 3 mapping and signal propagation prediction program predicts radio propagation in the 20 MHz to 20 GHz frequency range; SearchTV performs DTV and NTSC full-service VHF and UHF channel searches using FCC minimum spacings; Terrain-3D uses OpenGL graphics technology to model RF signals from 20 to 20,000 MHz over a true-to-life 3-D terrain graphic.

**Vyvx** C8537

**W&W Communications** SU5205

**Wacom Technology** SL4597

**Wagner Media Inc.** SL4173

**Ward-Beck Systems Ltd.** C326

*Intro:* POD31 HD/SD demuxer is a multidefinition audio disembedder that can extract digital audio signals from an HD or SD video signal, and can decode Dolby E/AC-3 with the optional Dolby decoder; POD32 HD/SD Muxer is a multidefinition audio embedder that can embed digital audio signals into an HD or SD video signal; AMS8 series multichannel audio monitors sport audio level meters on all inputs; SLM-8E stereo loudness meter has four discrete AES/EBU inputs or Dolby E/AC-3 input with Dolby decoder installed.

*Established Products:* PODS, SLM series stereo loudness meters; Serialboxx distribution amplifiers and converters; 8200 Series distribution amplifiers and converters; IMP series AES/EBU baluns; AMS4 audio monitors; XTM4 extended range test meter; Audio Bit Buddy and Audio Bit Spitter

**Wavestream Corp.** C5947

*Intro:* 25 W Ku-band 9-lb. feedmount block upconverter for satcom terminals; 16 W Ku-band fanless block upconverter for satcom terminals.

**Weather Central Inc.** C6014

*Intro:* New features for the ESP:Live system include 3D X-Vision, Storm Vitals and TelePath to alert, forecast, and report every kind of severe weather threat; 3D:Traffic offers real-time data and mapping at the click of a button; 3D:Live allows talent to interact with high-resolution mapping.

*Established Products:* WxWarn2, Storm SentinelDV, Super MicroCast, MetroVision, Live, FutureCast, ScreenWriter, online and wireless solutions.

**Weather Metrics** C7212

*Intro:* 24x7 Digital Weather.Net fully automated, weather and news content management system that integrates local information and data from multiple sources and displays it in a single screen; 24x7 Channel.Net content management system integrates information and data from unlimited sources and outputs a digital channel ready for air; WeatherVision.Net Digital is a fully automated, real-time weather data and image acquisition system.

*Established Products:* City Weather.Net; Mobile Weather; Internet Weather



**WeatherBug** N105  
*Intro:* WeatherBug Zoom 2.5 upgrade of WeatherBug Zoom features live video insertion from hundreds of hyper-local WeatherBug cameras; WeatherBug VideoCast all-live, all-the-time weathercast for the Web featuring hosted live weather conditions and forecasts.  
*Established Products:* WeatherBug desktop application; live and branded SMS Alerts delivered to mobile phones/devices; custom broadcaster Web pages.

**WeatherData** C5114

**WebCheckout Inc.** C10749

**Wegener** SU1376  
*Intro:* Unity 550 Enterprise Media Server allows users to increase productivity and network efficiencies with hands-free satellite downlink operations powered by Wegener Compel network control. The Wegener Unity 550 supports all media formats with MPEG-2, MPEG-4/H.264, standard and HD video decoding options. The unit is available with DVB-S2 modulation support; Wegener iPump Broadcast News Distribution solution allows 24-hour news operations to combine elements of digital asset management with Wegener satellite network control and allows affiliates to simplify operations, allowing scripts and video news clips to remain linked; MediaPlan ingests, encodes, tracks and archives news information as digital assets. Each digital asset includes video clips, low-resolution video clips for desktop viewing, metadata, script information and associated graphics.  
*Established Products:* iPump media servers; broadcast and professional media receivers; IP set-tops; Nielsen NAVE IIc encoder; Compel network control; transport stream processors/multiplexers  
 Raj Babbar, VP, Worldwide Sales  
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 Web Site: [www.wegener.com](http://www.wegener.com)

**Westcott** C8941  
*Intro:* Spiderlite TD3 on-location light allows the use of three 50 W tungsten halogen or three 27 W daylight fluorescent lamps.  
*Established Products:* Spiderlite; Spiderlite TD5; Spiderlite TD3; Scrim Jim; softboxes; chroma-key.

**Wheatstone Corp.** N1815  
*Intro:* D-7 console and D-12 TV console-on-air and production.  
*Established Products:* D-9 TV console; D 5.1 TV console; SP-8 TV console; digital AES audio routing system

**Whirlwind** C6541

**WhisperRoom Inc.** SL4387  
*Established Products:* Sound isolation enclosures

**White Sands Engineering** C739  
*Established Products:* Mini RG-59 one-piece connectors; BNC, F, RCA and specialty-crimp and compression; Mini RG-59 23 AWG Precision Video cable; one-piece RG-59 and RG-6 connectors.

**WhiteBlox** SL2407E

**WideOrbit** C361

**Widewine Technologies** SL2407F

**Will-Burt Co.** C7543  
*Established Products:* Telescoping pneumatic ENG vehicle masts and accessories.

**Winsted Corp.** SU1390, SU741  
*Intro:* Talon Console free-standing desk/console with multiple talons for supporting large flat-screen displays offers a 19-inch rackmount base option, complete cable and wiring management and multiple colors; Encompass II workstation offers wire and cable management, 45- and 90-degree corners, beveled front work surface edges and curved side returns, multiple color options, Truform tops and side panels, tiered risers for electronics and overhead lighting.  
*Established Products:* Slim-line consoles; LCD/3 rackmount consoles; monitor walls; Pro Series II vertical racks.

**WireCAD** C9310  
*Intro:* WireCAD Version 4 brings new functionality and ease of use. Create DWG-compatible drawings and specialized reports (cable labels, run-sheets, bills of materials). New functions include AutoRack and AutoScheme. Users can now build complete rack layouts and drawing sets from imported lists. Additionally, WireCAD now maintains conductor-level data, creating lists (pin-outs) and conductor detail drawings.  
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 661-253-4370  
 Fax: 661-310-9251  
 E-mail: [sales@wirecad.com](mailto:sales@wirecad.com)  
 Web Site: [www.wirecad.com](http://www.wirecad.com)

**WireReady** N500  
*Intro:* AlertReady is a standard PC program automatic alert notification system for EAS receivers and Amber Alerts; MpegReady automatically converts and archives MPEG and WAV files on a LAN; PodcastReady can automatically record, compress and paste together playlists of standard WAV or MP3 files and then Web publish podcasts in one or more friendly formats.  
*Established Products:* CallTaker32 and StormReady automated school closing system

**Wohler Technologies** C5132  
*Intro:* Touch-it is a dual 7-inch, high-resolution touchscreen LCD video monitor with 12 composite video inputs, 12 stereo analog audio inputs, internal speakers and mini router. Thumbnail images on the left touchscreen with selectable image appearing on right screen at full size. HD/SD-SDI desktop monitor converter converts HD/SD-SDI to a computer monitor in XGA, WXGA, SXGA and 852x480 for plasma display.

**Wolf Coach Inc.** C3835

**Work Microwave GmbH** C6607F

**WorldTech Devices Inc.** SU5168

**WSI Corp.** C4519

**Wuxi LeiHua** C5107B  
 Network Technology Co. Ltd.

**WWComs** SU5205  
*Intro:* A licensable High Definition 1080p H.264 video codec with full development platform.

**XenData** SL2635

**Xicom Technology** C5448

**Xilinx Inc.** C10515

**Xytech Systems Corp.** C860, C11610-MR  
*Intro:* Shift scheduling; article management; quality control.  
*Established Products:* Enterprise version 8.5.

**Yamaha Corp. of America** N731

**Yang Ming International Corp.** SL3047

**YEM Inc.** SL241-MR

**Z Technology Inc.** C2039  
*Intro:* DTV1010 DTV measurement demodulator outputs SMPTE310M, ATSC and A/V; WinDM-Pro PC software reports important DTV parameters including constellation, eye and spectrum displays; DSS5800 DTV Coverage Measurement/Mapping System is an automatic signal coverage measurement system documenting ATSC and NIST-traceable RF parameters; DSS5600T system is available for DVB-T signals; R-507 Programmable Field Strength Meter provides NIST traceable signal strength measurement over a range of 5-1000 MHz, with range extenders covering frequencies above and below; DM101 is an ATSC Transport Stream Demodulator for translator applications that provides a SMPTE310M Transport Stream output from an off-air Channel 2-69 ATSC signal.

**Zanalyzer** C9949

**Zandar Technologies** SU1033  
*Intro:* FusionPro+ signal monitoring system supports composite video, SDI, HD-SDI, RGBHV and DVI computer sources and audio, as well as UMDs, tallies, clocks and timecode. It also has video, audio and system fault detection, alarms, and optional dual redundant power supplies, and is manageable with Z-Configurator software; ZdH Zandar Dual Head display facility converts a standard MultiViewer into a wall processor capable of driving two displays as one virtual super-screen; Predator HD8 MultiViewer offers Z-Configurator and dynamic ZdHTM Zandar Dual Head display facility and has eight auto sensing inputs allowing HDTV 720p or 1080i and legacy SDI signals to be used together. The Predator HD8 can display eight images on one ultra-high resolution display or mode-switched for eight images across two displays. In standard operation, the HD8 provides a single high-resolution output up to WUXGA or 1080p for HDTV monitoring and a duplicate of that for a redundant monitoring. ZdH enables Predator to be a wall processor. Other features include input source auto-detection, embedded audio monitoring, GPI inputs and outputs, and user-configurable alarms; Z-Configurator

Layout Editing Windows-based software comes standard with the FusionPro+ and Predator HD8 MultiViewer Series. The intuitive graphical user interface allows the configuration of layouts and system set-up.  
*Established Products:* Fusion MultiViewer series; Predator HD MultiViewer series; DX MultiViewer series; Zandar Remote Panel.  
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**Zaxcom Inc.** N4227  
*Intro:* TRX900 and TRX990 digital wireless mic transceivers now have an optional time-code transmission feature that allows users to transmit two channels of audio and time-code to just one receiver on the camera. Timecode sync, including tri-level, NTSC, and PAL, are generated during recording. Another new feature is a patent-pending recording feature to record up to six hours of audio directly to a Flash memory card and then transfer the WAV files to a PC or Macintosh for editing; Deva Mix-12 is a mixing surface for Deva IV and Deva V hard disk audio recorders.  
*Established Products:* Deva IV and Deva V hard disk audio recorders; stereo ENG digital wireless.

**Zaxel Systems** SL637

**Zaxwerks** SL5138L

**Zero Manufacturing Inc.** C1463

**Zylight** C9410  
*Intro:* Zylight Z50 intelligent led lighting instrument is able to instantly change from 5600K to 3200K white light with the push of a button. When switched to creative color mode, the Z50 can output any color of the rainbow including pastels, eliminating the need for gels. Finding the color you need is fast and easy, and presets are provided for storing your favorites. The flat-panel technology packs over 230 LEDs into 1 square inch, producing a soft, wide output with no hotspots. An included adapter allows professionals to mount any existing 3-inch lighting accessory they may already have, such as a barn-door or snoot. The palm-sized Z50 can be powered from any 9-20 V source such as an Anton Bauer PowerTap, or powered from AC. Available kits include all necessary cables and mounting adapters, and the flexible NOGA arm for easy camera mounting.  
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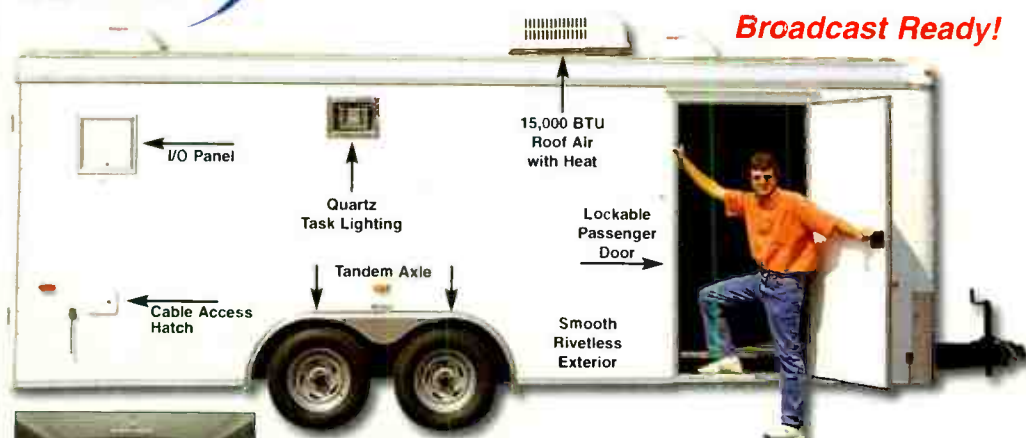
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- Pricing Analyst/Contract Specialist (job 15)
- Production Specialist (job 16)
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# TV TECH BUSINESS

## Panamax Acquires Furman Sound

PETALUMA, CALIF.

Panamax has acquired Furman Sound Inc., a developer of audio and video signal processors and AC power conditioning and distribution products. Financial terms of the purchase were not disclosed.

Panamax, a privately held company owned by Carlsbad, Calif.-based Linear LLC, a subsidiary of Nortek Inc. in Providence, R.I., makes a wide range of power conditioning products for home theater electronics. The Max home theater component family of products includes its Max In-Wall flagship line.

Founded in 1974, Furman manufactures audio and video signal processors for professional audio/video products. The company branched out in 2001 to include its CE line of AC power management products specifically engineered for home theater systems.

## Paxson Now Ion

WEST PALM BEACH, FLA.

Paxson Communications Corp. is in the process of changing its identity, which includes a new name, a new logo and a new vision.

Now known as "Ion Media Networks," the company presented a new corporate logo and began doing business under its new corporate name in February. As part of the new corporate identity, the company's ticker symbol on the American Stock Exchange will change to "ION" after the company's stockholders approve the name change at its annual meeting in June 2006. Until then, it will continue to trade under "PAX."

These changes follow the November departure of Lowell "Bud" Paxson, the company's former chairman and CEO.

"This new corporate identity mirrors our renewed commitment to find the best utilization and value proposition for our nationwide TV distribution and digital network platforms," said CEO Brandon Burgess.

The company is looking to strengthen its position by focusing on enhancing program offerings on its flagship "i" network; developing new digital multichannel services for underserved audiences; and capitalizing on its digital data delivery capability to generate additional revenue opportunities by delivering content and data to new platforms.

The format change has reportedly prompted DirecTV to threaten to drop Pax channels from its satellite lineup. DirecTV claims that the change violates the content restrictions of their affiliation agreement. Paxson claims that if dropped by DirecTV, they could lose 5.5 percent of its U.S. households. The two companies were in negotiations at presstime.

The company expects to fully adapt to its new identity by summer.

## Harris CFO Retires

MELBOURNE, FLA.

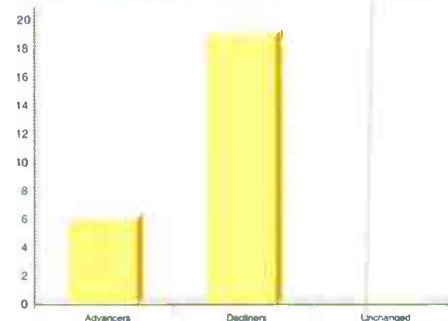
After 22 years with Harris Corp., CFO Bryan R. Roub will retire in June, and stepping into his shoes will be Gary L. McArthur.

Roub, 64, joined Harris in 1984 as senior vice president-finance.

The company said McArthur's new role, as CFO is effective in March. McArthur, 45, was previously vice president-finance and treasurer for Harris, which he assumed in 2005. Prior to this position, he was vice president-corporate development for the company. McArthur started at Harris in 1997 as a director of corporate development.

Charles J. Greene, 51, will succeed McArthur as vice president-finance and treasurer for Harris.

## WIN-LOSE RATIO



To have your company listed, contact Melissa Sullivan at [msullivan@imaspub.com](mailto:msullivan@imaspub.com).

### TOP ADVANCERS BROADCAST STOCKS (FEB. 17 - MARCH 3)

Paxson +11.36%  
Nexstar +6.38%

### TOP DECLINERS BROADCAST STOCKS (FEB. 17 - MARCH 3)

Young -15.17%  
Lin TV -12.25%

### TOP ADVANCERS TV TECH STOCKS (FEB. 17 - MARCH 3)

Belden +4.28%  
LSI Logic +2.20%

### TOP DECLINERS TV TECH STOCKS (FEB. 17 - MARCH 3)

SeaChange -7.77%  
Scopus -4.76%

## TV Tech STOCKS as of March 3

Company Name	52-Week Range	Feb. 17	March 3	% Change
Avid	35.78 - 68.35	47.50	46.08	-2.99%
Belden	17.65 - 27.72	25.72	26.82	4.28%
Ciprico	3.70 - 6.06	5.96	5.80	-2.68%
Harmonic	4.08 - 11.53	5.80	5.67	-2.24%
Harris	27.25 - 49.78	47.83	47.28	-1.15%
LSI Logic	5.01 - 10.75	9.55	9.76	2.20%
Scopus	5.80 - 8.35	7.14	6.80	-4.76%
SeaChange	5.07 - 14.29	9.39	8.66	-7.77%
Tektronix	20.97 - 31.69	31.41	30.63	-2.48%

## Broadcast STOCKS as of March 3

Company Name	52-Week Range	Feb. 17	March 3	% Change
Acme	3.30 - 6.19	3.57	3.75	5.04%
Belo	20.74 - 24.96	21.70	21.30	-1.84%
Emmis	15.29 - 24.49	16.96	16.36	-3.54%
Entravision	6.80 - 9.50	7.25	7.71	6.34%
Fisher	41.43 - 52.60	43.25	42.96	-0.67%
Gray	8.11 - 15.15	8.55	8.17	-4.44%
Hearst Argyle	23.15 - 26.34	23.77	23.74	-0.13%
Nexstar	3.93 - 8.12	4.23	4.50	6.38%
Lin TV	8.83 - 17.90	10.12	8.88	-12.25%
Paxson	0.37 - 1.56	0.88	0.98	11.36%
Sinclair	7.18 - 10.07	7.86	7.35	-6.49%
Univision	23.52 - 35.65	33.85	33.73	-0.35%
Young	1.70 - 9.36	3.56	3.02	-15.17%
Tribune	28.40 - 41.22	30.97	30.64	-1.07%
Meredith	44.51 - 55.84	55.41	54.90	-0.92%
EW Scripps	44.85 - 52.91	49.88	48.24	-3.29%

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