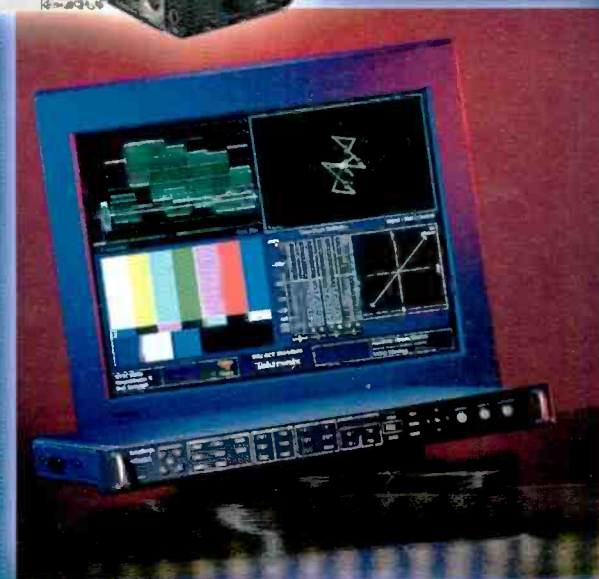
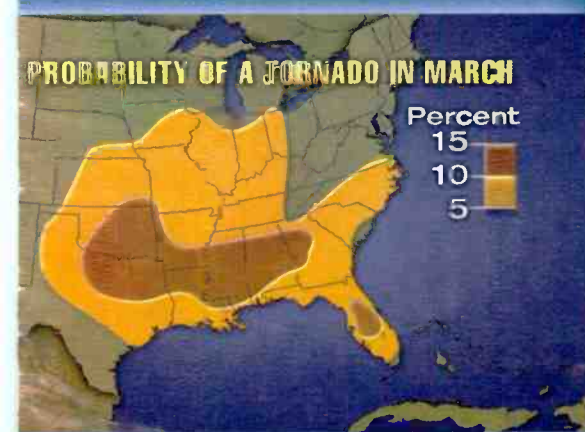
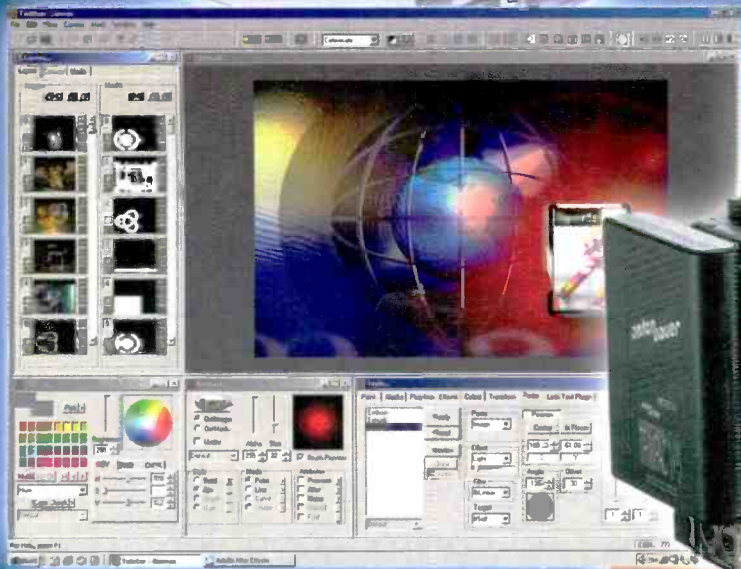
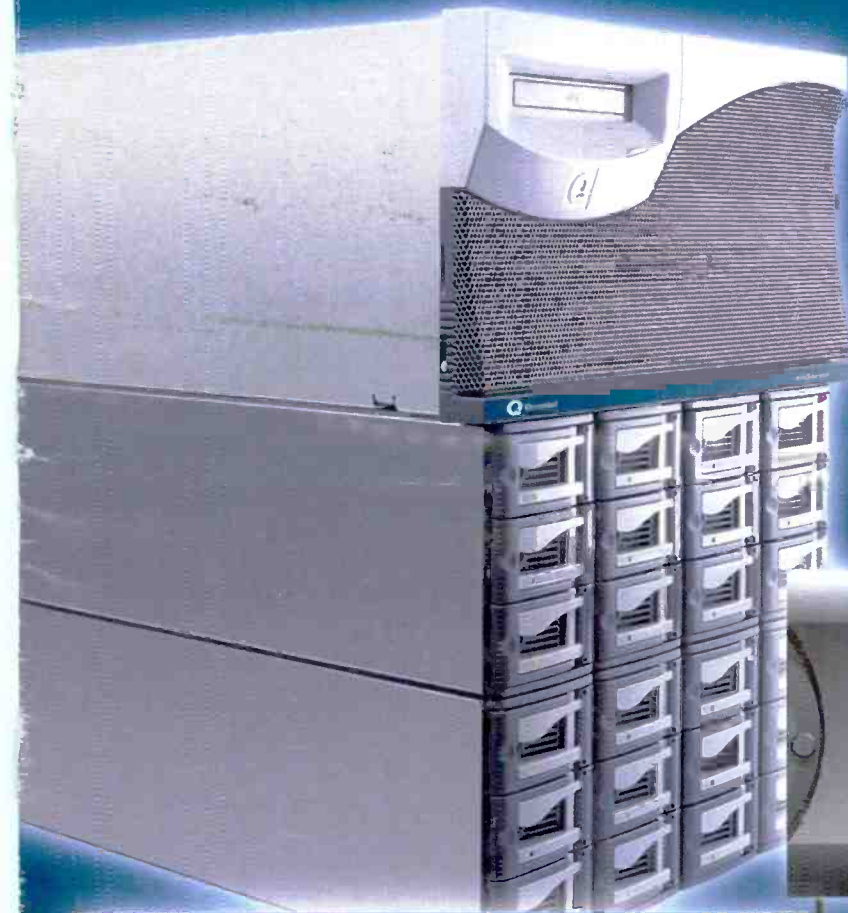


# SPECIAL REPORT

# REPORT

**Hot** new products from NAB2003





# WHEATSTONE D-9

## DIGITAL AUDIO MIXING CONSOLE



 *Wheatstone Corporation*

IN 1993 WHEATSTONE began manufacturing the D-500 digital audio mixing console for the radio broadcast industry, and after 10 years of experience in the field it was only natural we would apply this digital technology base to the surround television market.

The new WHEATSTONE D-9 DIGITAL AUDIO CONSOLE, despite its compact footprint (25 inches front-to-back), is FULLY loaded with all the functions and control capability needed by most television broadcast facilities. With integrated routing, multiple outputs, surround sound, subgroups, DCM masters, full monitor functions and powerful communication circuits, the D-9 offers a wealth of operational choices for the most demanding of live television applications.

 *Wheatstone Corporation*

600 Industrial Drive, New Bern, North Carolina, USA 28562  
[www.wheatstone.com](http://www.wheatstone.com) / [sales@wheatstone.com](mailto:sales@wheatstone.com)

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## Special report: NAB new products

As NAB has grown, so too has the number of new products and technology demonstrations at the convention. There's frankly just too much there for any one person to see it all. To help those who attended the show find what they may have missed and to highlight for non-attendees the solutions displayed, we've developed this post-NAB Special Report on new products and technology.

Our team of engineers and editors spent four days touring the show floor, exhibit booths and private demonstrations to bring you this special coverage. Through their eyes you'll be able to get a snapshot of the hundreds of exciting new products and solutions at this year's show. In the special report, we've provided descriptions and full contact information on more than 200 new products. And for direct access to the manufacturer, just go to the *Broadcast Engineering* Web site; [www.broadcastengineering.com](http://www.broadcastengineering.com). This entire report is posted there, complete with hot links direct to each product's manufacturer. A few clicks and you're there.



Brad Dick, editorial director

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**TRANSPORT STREAM SERVER****DOREMI LABS TSS-100**818-562-1101; [www.doremilabs.com](http://www.doremilabs.com)

Performs time delay of any ATSC digital television format, including HD and SD formats; a SMPTE 310M signal fed to the input BNC on the back of the unit can be delayed up to 13 hours; all video, audio and ancillary data on the signal are fully preserved; all functions are controlled by a Java-based software application via 100BaseT Ethernet. ■

**TRANSMISSION SOLUTION****TANDBERG TELEVISION DSNG**407-380-7055; [www.tandbergtv.com](http://www.tandbergtv.com)

Digital satellite newsgathering (DSNG) technology that is a fully integrated 2U digital flyway, capable of bi-directional transmission of audio, video and data feed from a remote transmission site; provides two-way phone, data and IP communications between the satellite downlink and remote transmit site; set-up is quick and simple, permitting broadcasters to get on-air faster. ■

**INTEGRATED WIRELESS INTERCOM****DRAKE FREESPEAK**+44 1727871214; [www.drake-uk.com](http://www.drake-uk.com)

**PICK HIT**  
Broadcast Engineering  
2003

Provides users with digital audio-quality sound; offers all the functions found on a traditional desk-mounted intercom; allows users greater mobility and freedom of movement through wireless connectivity. ■

**MULTIMEDIA RF-VIDEO GENERATOR****SENCORE VP301 VIDEO PRO**605-339-0100; [www.sencore.com](http://www.sencore.com)

Features HDTV and SDTV video format outputs, 4:3 and 16:9 aspect ratios, NTSC RF TV-channel output, composite and S-video NTSC/PAL outputs, and component and RGB signal outputs. ■

**TRIPOD****VINTEN FIBERTEC**888-284-6836; [www.vinten.com](http://www.vinten.com)

Reduces the risk of wind buffeting and camera shake; "channel" leg sections are made of carbon/glass composite; is lightweight; lever action clamps are positioned adjacent to each other; ensures more secure locking; minimizes cable snags and accidental breaks. ■

**AUDIO SIGNAL PROCESSING SOFTWARE****SYMETRIX SYMNET DESIGNER VERSION 3.5**425-778-7728; [www.symetrixaudio.com](http://www.symetrixaudio.com)

Upgrade to the SymNet Audio Matrix audio signal processor; new software version includes basic time alignment to compensate for DSP latency within the SymNet hardware; features graphic EQ processing modules in mono and stereo; ramps up volume after downloading for loudspeaker protection; supports a new hardware device known as Control I/O, which connects via RS-485 and offers expanded external control options. ■

**MONITORING SYSTEM****PIXELMETRIX DVSTATION-REMOTE**954-472-5445; [www.pixelmetrix.com](http://www.pixelmetrix.com)

Smaller version of Pixelmetrix's DVStation "Preventative Monitoring" solution; consists of one of four book-sized Pod modules and a single 1U rack-mounted remote controller; the system is operated through a LAN or dial-up telephone, allowing database or user access from a personal computer; designed for either the smaller facility that might not need the full 21-module capability of the DVStation, or a complex digital network that requires simple single source monitoring at multiple locations; provides the same level of in-depth signal monitoring and analysis as the full DVStation. ■

**MICROPHONE****SENNHEISER MKE PLATINUM**860-434-9190; [www.sennheiserusa.com](http://www.sennheiserusa.com)

Reduced size subminiature condenser lavalier has an ultra thin cable, with only 1mm thickness and low capacitance manufactured with Kevlar wrapped copper core; optimized high-end response provides more headroom at the bodypack; has improved rejection of handling noise and an embossed "umbrella" diaphragm that protects the microphone against moisture and sweat. ■

**DECODER****SCIENTIFIC-ATLANTA D9010**770-236-6190; [www.scientificatlanta.com](http://www.scientificatlanta.com)

The latest addition to the Continuum DVP family; when combined with the D9020 encoder, this decoder creates a dynamic headend transport solution for efficiently delivering MPEG-2 video between headends; offers a space-efficient method for recovering programs from the MPEG-2 transport stream at remote hubs for the analog tier. ■

**VIDEOCASSETTES****FUJIFILM SR351**800-800-FUJI; [www.fujifilm.com](http://www.fujifilm.com)

Videocassettes for the new HDCAM SR format high-definition portable and studio recorders; uses proprietary ultra-thin magnetic coating technology with a strong PEN base film for high output and a lower error rate; large version will be available in lengths of 124, 94 and 64 minutes, and small version in 40, 33 and six-minute lengths. ■

**UPCONVERTER AND NOISE REDUCER****TERANEX VOLARE 210**407-517-1086; [www.teranex.com](http://www.teranex.com)

Includes proprietary PixelMotion, and advanced noise reduction; features 3:2 detection and scene change detection algorithms; includes analog and digital interfaces and dual hot-swappable power supplies. ■

**CA SYSTEM****NDS IVIDEOGUARD**949-725-2500; [www.nds.com](http://www.nds.com)

Enables users to introduce traditional pay-TV business models including subscriptions and pay-per-use; features secure return path and store and forward, profiling and targeting, and secure application download. ■

**SMART ANTENNA SYSTEMS****NSI NUPOD**800-SPEC-NSI; [www.nsystems.com](http://www.nsystems.com)

Smart antenna system for transmit and receive applications; features embedded control for automatic alignment of the directional antenna; offers two modes of automatic antenna alignment — selection of a fixed location for mobile transmit operations or selection of an incoming telemetry datastream for mobile receive operations. ■

**MINI MASTER CONTROL SWITCHER****EVERTZ PKGHD9625SW**905-335-3700; [www.evertz.com](http://www.evertz.com)

Allows the user to control up to 12 input video signals and up to 48 AES audio inputs; voice-overs, wipes, fades, fade to black and several other features can be performed, all from the single remote control panel. ■



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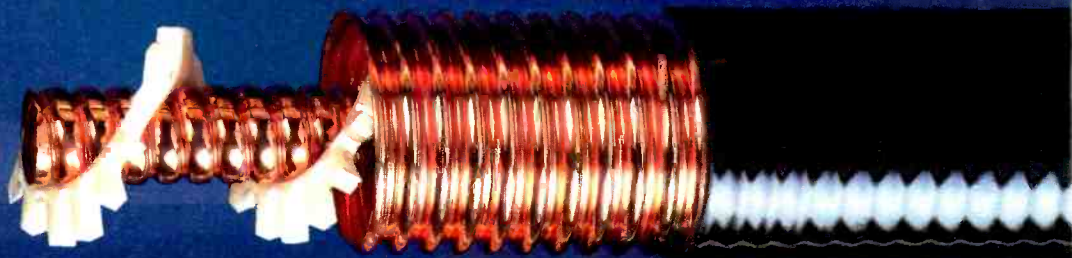
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## HD SET-TOP BOX

**PIONEER VOYAGER 3501HD**

310-952-2799;  
www.pioneerelectronics.com

Enables cable customers to view HD programs in all 16 ATSC formats supported by the cable industry, including 720p and 1080i, in both 4:3 and 16:9 aspect ratios; features full graphics over HD capability with video scaling; outputs to devices including plasma, HDTV-ready TVs, and standard TVs. ■

## AUTOMATION SYSTEM

**ENCODA A5000 D-SERIES**

303-237-4000; www.encodasystems.com

Includes DAL channel manager, DAL Content Server, DALingest Client and DALstations; provides the functionality necessary for playout, automatic caching and system-wide alarm management. ■

## HD ZOOM LENS

**FUJINON XA101X8.9BESM**

973-633-5600; www.fujinonbroadcast.com



Sports lens has 101x magnification; includes a built-in OS-Tech optical stabilization system and a built-in moisture removal system; features multiple moving zoom groups that minimize coma and field curvature; back focus technology enables remote control of macro and focus fade on wide shots. ■

## LENSES

**THALES ANGENIEUX OPTIMO 24-290 AND OPTIMO 12X9.7HD**

973-812-4326; www.angenieux.com

Optimo 24-290 has a focal range of 24-290mm and an aperture of T2.8, which provides for a large depth of field; produces contrast and color reproduction; Optimo 12x9.7HD incorporates an advanced optical design and proprietary high resolution glass; has an aperture speed of F1/4. ■

## DATA MANAGEMENT SYSTEM

**AVALON AVALONIDM**

773-756-3992; www.ava.com

Data management system provides broadcasters with new levels of access and control over data files; offers a file system interface in addition to the product's open API; interface allows users to store data via standard NFS or CIFS mounted file systems. ■

## EDITING SOFTWARE

**APPLE FINAL CUT PRO 4**

800-692-2775; www.apple.com/software/pro/broadcast/



Supports DVCPRO50; transfers 4:2:2 images via FireWire; hundreds of new features; support for asymmetric trimming; customization features including fully customizable keyboards and workspace layouts; multi-track audio mixing, multi-channel output and real-time audio effects; includes LiveType CG and Soundtrack; provides 10-bit uncompressed video, composite elements and render effects with incredible clarity and precision using HDR imaging to render video using an amazing 32-bits per channel. ■

## MPEG-2 REMULTIPLEXER

**THALES AMBER**

413-998-1100; www.thales-bm.com

Remultiplexer features input/output bit rates up to 180Mb/s with accuracy to one bit per second and built-in ASI and SMPTE-310M outputs; remultiplexes up to eight ASI and seven IP/Ethernet transport streams, and provides for PSI/PSIP table management; other capabilities include broadcast-to-cable translation, opportunistic data insertion, and bandwidth optimization and overflow prevention. ■

## FRAME-RATE CONVERTER

**DOLBY MODEL 585 TIME SCALING PROCESSOR**

415-558-0200; www.dolby.com

Features pitch correction and time scaling of multichannel audio in real-time; suitable for all types of content, it accepts multiple channels of PCM or up to eight channels of decoded Dolby E or Dolby Digital audio and metadata; audio tracks can be pitch-shifted  $\pm 15$  percent, or in time-scale mode, adjusted  $\pm 15$  percent while maintaining proper pitch. ■

## CAMERA CRANE

**SACHTLER CAMCRANE EFP**

516-867-4900; www.sachtler.com

For cameras up to 39.7 pounds; four towers and four outriggers stabilize the CamCrane EFP; tower and outrigger cables can be adjusted; the main pipe is telescopic; can be setup at a variety of lengths; adjustable in both the horizontal plane as the top and bottom views; scaling on the spindle enables the cameras to be moved or repositioned at the same angle. ■

## LOCATION SOUND RECORDER

**HNB COMMUNICATIONS USA PORTADRIIVE**

805-579-6490; www.hnbusa.com

Combines 8-track recording on a removable hard drive, simultaneous recording of mono or 2-channel rushes to an external DVD-RAM/DVD-R/DVD-RW drive, 24-bit/96kHz performance, comprehensive timecode facilities and session-based file transfer with Mac and PC workstations. ■

## DIGITAL ASSET MANAGEMENT SYSTEM

**ARTESIA TECHNOLOGIES TEAMS 5.0**

301-548-4000; www.artesia.com

Search for and retrieve unique assets regardless of media type, including audio and video recordings, images and graphics, and text-based documents; edit, transform, transcode and distribute material directly the desktop; new metadata management capabilities provides users with a personalized interface to guide them through the automated steps for uploading content, entering metadata and categorizing an asset in order to ensure greater consistency in future usage. ■

## AUTOMATION

**TELESTREAM MAPREVIEW**

530-470-1300; www.telestream.net



Automatically records multiple video feeds and captures metadata during ingest; media are encoded and stored in Windows Media Video 9; extends familiar Windows Explorer navigation toolkit; can access, organize, search, review and share media across the facility from a desktop; can simultaneously review live newscasts along side competitors. ■

## SERVER

**EVS MPEG-2 SERVER SYSTEMS**

973-575-7811; www.evs.tv

Product line is now both ATSC- and DVB-compliant and includes complete DTV business packages for multichannel time-zone delay; multichannel playout is handled by existing automation or with playlist management integrated within the server system; core technology relies on direct ASI inputs and outputs, and integrated multiplexing, maintaining content in the MPEG-compressed domain all the way through. ■



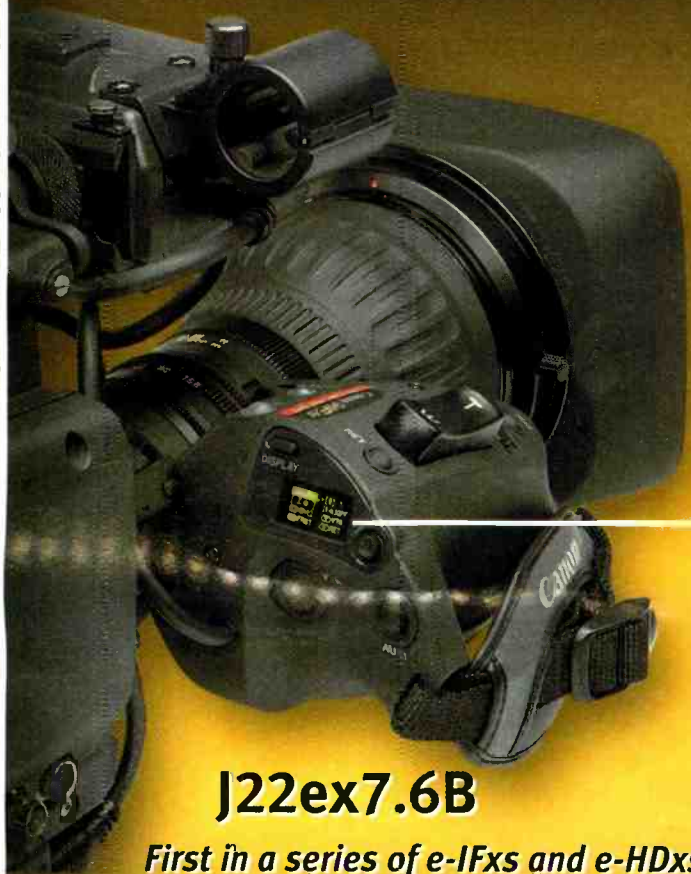
# Canon's new 'e' lens brings 'e'nhancement to a new level.

From its enhanced features to its environmental design, Canon's new J22ex7.6B IRSD/IASD lens is engineered to impress. The widest angle portable telephoto lens ever produced, the J22ex7.6B is the first in a series of Canon e-IFxs and e-HDxs broadcast lenses. These lenses feature enhanced digital technology, which improves on the performance of the highly useful Digital Drive tools and are manufactured with non-polluting components including lead-free glass, minimizing environmental impact.

# e

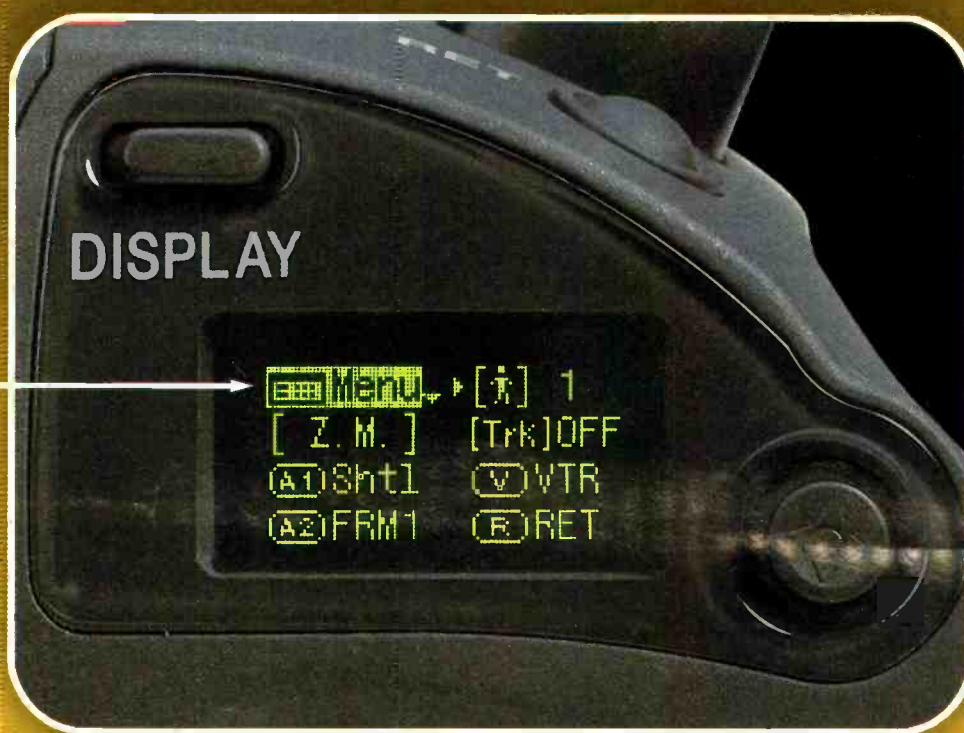
Enhanced Features

Environmental Design



**J22ex7.6B**

*First in a series of e-IFxs and e-HDxs lenses*



## eIFxs

## FEATURES AT A GLANCE

Equipped with an informational LCD display and digital feature navigator, e-IFxs series users can customize the enhanced digital functions with ease and precision. New features of e-IFxs lenses include:

- Digital Drive's new Focus Preset (IASD version) can be combined with Shuttle Shot, Speed Preset and 2 Framing Presets, and Zoom Track for powerful user settings.
- New Aux 1 and Aux 2 switches provide quick access to user-assignable functions.
- Users can set precise zoom and focus curves according to their needs.
- A Precise Movement Sensitivity Mode can be memorized for zoom seesaw, zoom demand and preset controls.
- The drive unit can memorize 9 camera operator patterns of user-customized settings, as well as a default position, and transmit the data from unit to unit.
- Maximum Zoom Speed now 0.5 seconds.
- Follow reference signal display for virtual reality, robotic control and other uses.

Find out more at  
[canonbroadcast.com](http://canonbroadcast.com)

1-800-321-HDTV (Canada: 905-795-2012)

Maximize Your Camera's Performance.

# Canon KNOW HOW™

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**RECEIVER****LECTROSONICS UCR411**505-892-4501; [www.lectrosonics.com](http://www.lectrosonics.com)

Compact design; all settings are made from the front panel with an LCD interface, making the unit ideal for use with multi-couplers, on sound carts and in portable mixing "bag systems;" an RF spectrum analyzer is built into the receiver; tunes across its 25.6MHz tuning range and records RF activity with markers on the LCD screen. ■

**THREE-CCD COLOR CAMERA****HITACHI HV-D17**650-589-8300; [www.hitachi.com](http://www.hitachi.com)

Works with light levels ranging from 0.0003 to 100,000 lux; utilizes a combination of integration mode with field memory, electronic and digital gain, pixel binning, auto iris, and auto electronic shutter; three 410,000-pixel CCDs achieve a resolution of 850 TV lines; signal-to-noise ratio of 65dB with digital noise reduction. ■

**CONTROL PANEL****QUARTZ ELECTRONICS QMC-FS**888-638-8745; [www.quartzus.com](http://www.quartzus.com)

Offers quick and easy access to all of the facilities of the QMC; a full-function master control panel, assignable to any one channel or an entire bank of channels to be controlled simultaneously; provides an extra row of utility buttons, a lever arm, rotary shaft encoders, and dynamic button and function assignments. ■

**ON-AIR SERVER****SEACHANGE BROADCAST MEDIACLUSTER 24000**

978-897-0100;

[www.seachangeinternational.com](http://www.seachangeinternational.com)

Contains up to 35TB; provides fault resilience, multichannel I/Os and standards-based IP network performance; uses 24 drives per server chassis in clusters comprising of three to seven nodes; stores and plays media encoded at 8- to 30Mb/s. ■

**MODULAR CONSOLE SYSTEM****WINSTED MATRIX**800-447-2257; [www.winsted.com](http://www.winsted.com)

Incorporates an overhead dimmable Xenon lighting system, an anti-glare monitor bezel with acrylic optical shield and a monitor positioning system; has a tube steel frame; side panels come in a variety of materials and colors. ■

**Product Source****WIRELESS CAMERA SYSTEM****MRC REPORTER**800-490-5700; [www.mrcbroadcast.com](http://www.mrcbroadcast.com)

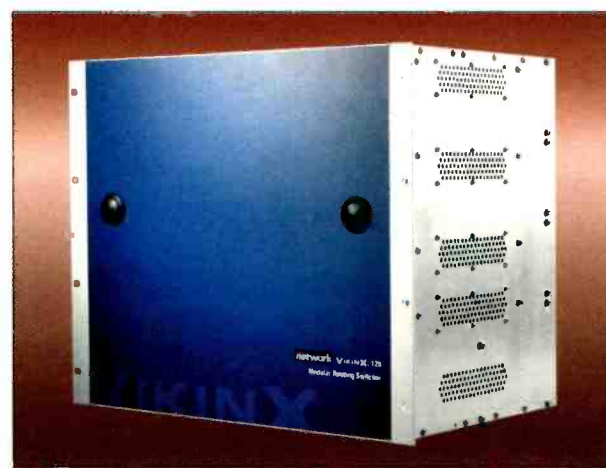
Provides wireless link between camera and central receiver over distances not exceeding 1000 meters; two audio channels; MPEG-2 encoding (4:2:2/4:2:0) with COFDM modulation, 18W power consumption; 1.99-2.7GHz operation. ■

**DIGITAL SPG AND TSG****TRILOGY MENTOR PLUS**+44 01264 384000; [www.trilogy-broadcast.com](http://www.trilogy-broadcast.com)

Digital SPG and TSG includes embedded audio outputs on both digital black and test signal outputs; offers the option of wide-screen test signals; combines the benefits of a broadcast Master SPG, a studio reference TSG, and three multi-field black and burst timing units and embedded audio. ■

**SATELLITE TERMINAL****SWE-DISH IPT SUITCASE**+46 923 12250; [www.swe-dish.com](http://www.swe-dish.com)

Combines the benefits of simple, one-person operation with technical performance to allow live, 2Mbps broadband transmission complete with inbuilt encoding from virtually anywhere in the world; features four different versions for various applications. ■

**CONTROL SYSTEM****NETWORK ELECTRONICS VIKINX.128**631-928-4422; [www.network-electronics.com](http://www.network-electronics.com)

Cost-effective range of control panels featuring full TCP/IP connectivity between routers and control panels allowing use of standard Ethernet LAN; existing LANs can be used as hardware platform for routing system; long-distance remote control possible via TCP/IP Internet connections. ■

**CMOS VIDEO CAMERA****JVC PROFESSIONAL HD-CMOS**973-317-5000; [www.jvc.com/pro](http://www.jvc.com/pro)

Uses the next generation of Rockwell CMOS chips to deliver 1080i high-definition performance; features a compact size and remote control capability; ideal for unmanned-camera applications. ■

**REMOTE MONITORING SYSTEM****RFS ANTENNA SYSTEM MONITOR**203-630-3311; [www.rfsworld.com](http://www.rfsworld.com)

Comprises a user-friendly touch screen connected to a programmable logic controller interfaced with a transducer and analog/digital converter; provides an active mimic panel and interactive graphical displays depicting parameters such as forward/reflected power, voltage standing wave ratio and temperature. ■

**SYSTEM BATTERY****ANTON/BAUER HYTRON 120**203-929-1100; [www.antonbauer.com](http://www.antonbauer.com)

Capable of powering any camera or camera/light combination; offers 20 percent improvement in capacity to 120 watt hours, adding almost one hour of runtime to the typical ENG camera runtime. ■

**AUDIO VECTORSCOPE****RTW BROADCASTMONITOR**+49 221 70 91333; [www.rtw.de](http://www.rtw.de)

Two- and four-channel design in a half-sized 19-inch submodule; features similar to those of the PortaMonitor but with transformer-balanced analog inputs and buffered AES/EBU signals looped through the unit; push-button functions can be remote-controlled. ■

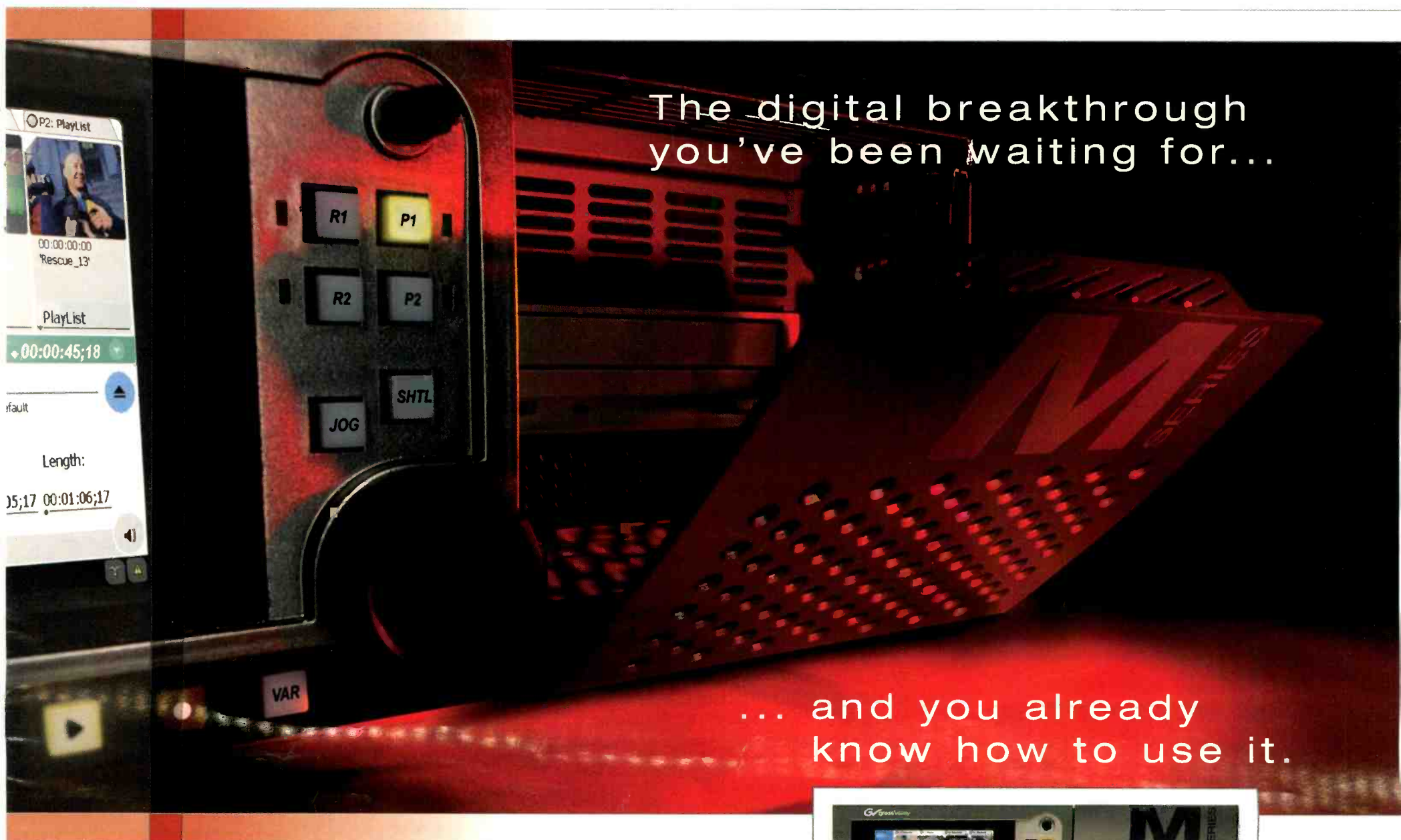
**BLUE SCREEN MATTE EXTRACTION PLUG-IN****ULTIMATE ADVANTEDGE V1.5**818-993-8007; [www.ultimate.com](http://www.ultimate.com)

Enhancements include faster setup and render times, multi-directional matte shrink and blur controls, and user-defined system preferences; creates blue screen visual effects within Adobe, Apple, Avid, Discreet and other leading graphics applications. ■

**DOPPLER RADAR DATA****ACCUWEATHER NEXRAD LEVEL II**[www.accuweather.com](http://www.accuweather.com)

Now available as part of the company's Galileo weather graphics system; includes enhanced features such as real-time information, more comprehensive radar data than normal NEXRAD and 3-D viewing capabilities. ■





**Our M-Series™ iVDR intelligent video digital recorder has a familiar look about it.**

That's because its touch-screen interface looks just like a VTR—so you can run it just like a tape-based system.

But you don't have to worry about replacing high-cost tape heads. Or transports jamming. Or running tapes here, there, and everywhere.

That's because an M-Series iVDR is a digital system. No heads to replace. No capstans to clean. No rollers that can pinch.

**Just plug it in, turn it on, and go.**

The M-Series iVDR features two record and two playback channels, more than 60 hours of online DV storage, and removable media. And it supports any standard-sized media drive using industry-standard I/O—from digital tape to optical disk.

**It's like having multiple VTRs in one box.**

Best of all, the M-Series iVDR lets you do things you never could before. Like trim and create video clips and subclips. Or build playlists. Or exchange clips with news, graphics, and other applications using standard formats such as AVI and QuickTime.



Major software developers are already supporting the M-Series iVDR. They include, Crispin, Dixon Sports Computing, DNF Controls, Encoda Systems, Floral Systems, Harris Automation Solutions, OmniBus Systems, Pathfire, and Sundance Digital.

With its network-friendly design, the M-Series iVDR lets you send digital clips wherever you want with a push of a button. Its Firewire port can ingest video directly from a DV camera. And with the broadest compression format support available, the M-Series iVDR is architected to accommodate future camcorder and compression-format technologies.

In addition to direct control, the M-Series iVDR offers remote control via cable connection, Ethernet network, or specialized software.

To learn more, please visit [www.thomsongrassvalley.com/M/](http://www.thomsongrassvalley.com/M/). Or contact your local Grass Valley™ sales representative.

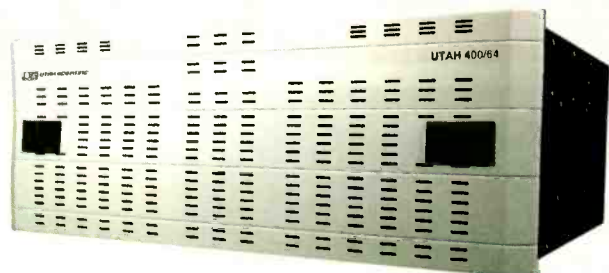


**STREAM SWITCH****LOGIC INNOVATIONS SMART TRANSPORT STREAM SWITCH (TSS)**858-455-7200; [www.logicinnovations.com](http://www.logicinnovations.com)

Provides MPEG-2 transport stream switching with pre-processing of table information; provides automatic PID detection, PSIP insertion, stream grooming, re-branding of streams, re-mapping of PIDs and blocking of unwanted program elements; designed to interface with popular automation systems for precise control of transport switch timing. ■

**MPEG-2 MEDIA SERVER****VELA MEDIAADVANTAGE**727-507-5352; [www.vela.com](http://www.vela.com)

Integrated media management solution that provides access to a comprehensive set of video management features, including: time code aware recording, Longitudinal Time Code (LTC) input/output, remote access and simultaneous encoding/decoding confidence monitoring; employs the Argus MX encoder and the CineView Pro Xle decoder. ■

**DIGITAL ROUTING SWITCHER****UTAH SCIENTIFIC 400/64**801-575-8801; [www.utahscientific.com](http://www.utahscientific.com)

Uses a three-board architecture consisting of an input board, a crosspoint board and an output board; contains 36 I/O slots; features signal presence detection, low-power consumption, redundant power supplies and control cards, and an internal monitor matrix. ■

**SIGNAL GENERATORS****SHIBASOKU TG77AX**303-278-0303; [www.ShibaSoku.com](http://www.ShibaSoku.com)

Multiformat signal generators for HDTV and SDTV; compact 1U form factor enables users to conveniently and economically rack mount one or more units, each providing support to as many as four independent plug-in modules for an all-in-one test and sync solution tailored to each environments' unique requirements. ■

**MULTI-STANDARD ANALYZER****SYNTHESYS RESEARCH MVA3000**650-364-1853; [www.synthesysresearch.com](http://www.synthesysresearch.com)

Solution for testing serial digital video signals as defined by SMPTE 259M and SMPTE 292M; makes testing easier and faster without sacrificing on performance or quality; provides two multi-format serial digital inputs, which may be switched between any combination of HD, SD or ASI signals. ■

**AUDIO ANALYZER****TERRASONDE DIGITAL AUDIO TOOLBOX**888-433-2821; [www.terrasonde.com](http://www.terrasonde.com)

Capable of generating a low-noise digital signal at 24 bit/96k resolution; this DSP-powered toolbox has four main sets of I/O connectors; supported digital formats include AES/EBU, s/pdif, toslink and ADAT at bit depths of 24 bits and sample rates to 96kHz; designed to interface with other digital audio test equipment; includes digital audio cable tester. ■

**CONTENT BROWSER****PIXEL POWER PIXELBROWSER**954-943-2026; [www.pixelpower.com](http://www.pixelpower.com)

Web-based browser is an open standards-based software solution to the problem of browsing and searching still picture, video clip and character generator page assets in a broadcast environment; using only a common Web browser, staff can search the library of stills, clips and pages, and drag and drop images to create a playlist. ■

**CONTROL SYSTEM****VISTEK VIEWNET**973-313-6416; [www.vistek.tv](http://www.vistek.tv)

The core of the system is a Linux-based rack server, which supports communications from virtually any Web browser; the server communicates in turn with the Vistek DART network, linking individual rack frames together. ■

**WINDOWS MEDIA ENCODING AND STREAMING PLATFORM****OPTIBASE MGW2400**650-230-2400; [www.optibase.com](http://www.optibase.com)

Powered by an Equator media processor and embedded Windows 2000 server; designed to enable high-quality video streaming at bit rates starting as low as 100kb/s and up to 2Mb/s per stream. ■

**SOFTWARE DEVELOPMENT BOARD****ASPEx SOFTWARE DEVELOPMENT BOARD**+44 1494 558 121;  
[www.aspextechnology.com](http://www.aspextechnology.com)

Consists of a PCI-based development system, which provides customers with a software and system development platform for its Linedancer software-programmable processor; features synchronous SRAM and synchronous DRAM. ■

**BROADCAST PAINT PRODUCT****VIDEO DESIGN SOFTWARE TWISTER PAINT STATION**631-249-4399;  
[www.videodesignsoftware.com](http://www.videodesignsoftware.com)

Fully compatible with Windows 2000, NT and XP operating systems; available in either a rack-mount or tower configuration; supports 3-D past image and mask layers, Photoshop plugins, video grab to canvas and real-time paint show to video; uses Chyron Lyric text plug-in for text generation. ■

**HD/SD CAMERA****IKEGAMI HDK-790E/79E**201-368-9171; [www.ikegami.com](http://www.ikegami.com)

Provides for both HD and SD capability; handles requirements of HDTV (1080i/720p) and SDTV (480i/480p); CCD readout switchable between interlace and progressive scan modes; signal can be converted in the CCU to different formats; high sampling frequency of 28.64MHz provides maximum resolution of 900TV lines in the NTSC format. ■

**LIVE BROADCAST ENCODER****IVAST ENCODER**408-496-0671; [www.ivast.com](http://www.ivast.com)

Provides real-time MPEG-4 audio/video encoding and simultaneous archiving for satellite and media backhaul, electronic news gathering and live event broadcasts. ■

**COMPACT ENCODERS****LINK RESEARCH L1000**+44 1923 200 900; [www.linkres.co.uk](http://www.linkres.co.uk)

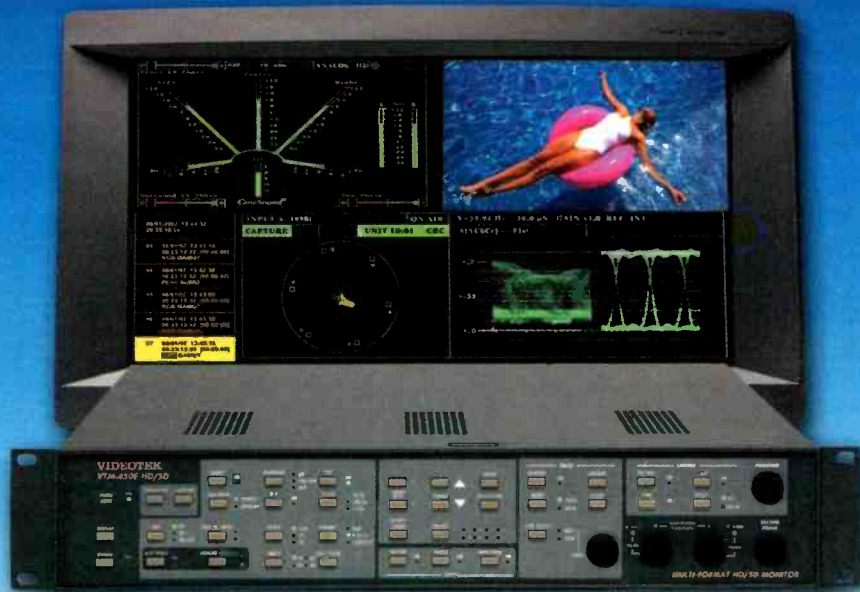
Low bit rate is now offered, extending the standard minimum bit rate of 2.5Mb/s down to 500kb/s; can be supplied in a small chassis that is half the size of a standard 19-inch equipment rack; ideal for OB trucks. ■

**MPEG-4 VIDEO APPLIANCE****VBRICK VBXCAS**203-265-0044; [www.VBrick.com](http://www.VBrick.com)

Allows organizations of any size to simple "plug in" and broadcast video to and from anyone, anywhere, on any network; can be used for videoconferencing, distance learning, training simulations and trunking video to stream over local channels; leverages MPEG-4 compression technology to help these agencies improve and enhance their use of streaming video. ■



# Continuing to Lead the Way Through Innovation...



VTM-450E HD/SD  
US Patent 6,069,607  
Patent Pending



VTM-150  
US Patent 6,069,607  
Patent Pending



## Emmy Winning Technology

Videotek introduces two new precision VTM on-screen test instruments to provide the exact measurement device for your specific application. With more than ten models to select from, backed by our exclusive five year warranty and FREE future VTM enhancements, Videotek instruments are the most flexible and cost-effective choice!

### VTM-450E HD/SD

#### High Definition, SDI & Analog Multi-Format On Screen Monitor

- Waveform/ Vector/ Picture/ Audio/ Alarms on screen.
- Auto detection of input formats 720p, 1080i, 1080p at 1.485 Gb/s, 525/60 and 625/50 at 270 Mb/s
- Eye Pattern, Gamut Display, Jitter Measurements
- Pixel locator/ Data Word Analyzer
- Ethernet connection with SNMP agent
- Closed Captioning detection and display
- Unique Analog/ Digital relative timing display
- Two RS-12 Series router control ports for input expansion
- XGA output, high resolution, for 16:9 or 4:3 displays
- Single user SpyderWeb™ IP software included
- Two composite analog inputs optional
- Audio optional

### VTM-150

#### Digital and Analog Multi-Format On Screen Monitor

- Waveform/ Vector/ Analog Audio level and phase meters over Picture
- Video and Audio Alarms on screen
- NTSC/ PAL, 525/625 and CAV with four analog audio channels
- SVGA output, 800 x 600 resolution, for display on any standard computer monitor

Discover what is new in the VTM instrument line that has shifted the industry's test and measurement paradigm.

Call Videotek today!

**VIDEOTEK®**  
A Zero Defects Company

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Direct: 610-327-2292

SpyderWeb™ is a trademark of Videotek Inc.



People Who Use Videotek Think Clearer.™



## MULTI-VIEWERS

**ZANDAR DX DIGITAL SERIES**321-939-0457; [www.zandar.com](http://www.zandar.com)

Available in 4-, 8-, 12- or 16-channel configurations; features SDI or composite inputs with auto-detect of input format and a selection of outputs – video, SDI or VGA; options include In-Picture audio monitoring and In-Picture display of UMDs and tally status. ■

## SERVER SYSTEM PRODUCT

**OMNEON PROGRAM DELAYTOOL**866-861-5690; [www.omneon.com](http://www.omneon.com)

Adds real-time program delay capability to the Omneon Media Server System; for each program input, up to six simultaneous delayed outputs can be provided; if multiple instances of DelayTool are run, additional programs can be delayed; offers an easy-to-use graphical user interface and runs on a standard Windows 2000 platform. ■

## STORAGE SOLUTION

**HEWLETT PACKARD/ADIC MEDIA STORAGE**800-752-0900; [www.hp.com/communications](http://www.hp.com/communications)

Features HP servers and HP storage with ADIC's StorNext Management Suite; manages content throughout its entire life cycle; control of media, drive and library functions improves data movement by choosing the optimal resource across shared libraries/drives. ■

## DEMODULATORS/DECODERS

**VIDEOTEK DDM-520 (SHOWN BELOW) AND DDM-540**800-800-5719; [www.videtek.com](http://www.videtek.com)

Have a variety of I/O capabilities; can display signals at 1080i, 720p, 480p and 480i; decodes and displays EIA 608 and 708 closed captions on-screen; supports three MPEG-2 streamed formats. ■

## UPCONVERSION SYSTEM

**SNELL & WILCOX UPCASTER**212-481-1830; [www.snellwilcox.com](http://www.snellwilcox.com)

One-box HD upconverter for use in transmission and production; specifically designed to enable U.S. broadcasters to achieve a high-quality DTV picture on-air at an economic price point; suited to live production due to its low latency; easily configurable and designed primarily for fixed-mode operation; can handle all common HD formats. ■

## FACILITY AUTOMATION

**CAM SYSTEMS TVIA**408-446-7000; [www.camsystems.com](http://www.camsystems.com)

Delivers traffic and billing solution, handles consolidation, hubbing and centralcasting and multichannel broadcast; advanced database schema, sophisticated program design, especially effective in cross-marketing and multi-ownership environments. ■

## ENTRY-LEVEL CONTROLLER

**LSI LOGIC STORAGE SYSTEMS 2882**408-433-8000; [www.lsilogicstorage.com](http://www.lsilogicstorage.com)

Designed specifically for open systems environments; 2Gb/s host-side connectivity supports direct-attached storage or storage area network configurations; "always on" availability keeps data accessible to decrease the risk of downtime-related revenue loss. ■

## CD IOT

**THALES ELECTRON DEVICES TH 790 CD**+33 1 30 70 35 00; [www.thales-electrondevices.com](http://www.thales-electrondevices.com)

New IOT features a 55 percent efficiency at 30kW average 8-VSB power, which represents an increase in efficiency of 12 percent over standard IOTs; offers an immediate reduction of the operating power consumes; high gain is constant over the entire UHF band. ■

## REAL-TIME WEBCAST CAPTIONING TOOL

**COMPUTER PROMPTING & CAPTIONING CPC-800**301-738-8487; [www.cpcweb.com](http://www.cpcweb.com)

Capable of inserting caption text directly in a live Web video/audio stream; allows caption/spoken dialogue synchronization within one to three seconds, the same as that of standard real-time TV broadcasts. ■

## HD AUDIO MONITOR

**WOHLER TECHNOLOGIES AMP-S8**650-589-5676; [www.wohler.com](http://www.wohler.com)

Features eight 26- or 53-segment high-resolution tri-color LED level meters showing simultaneous VU and PPM; output limiter circuits are incorporated to protect the speakers; has an extra AES input. ■

## 3-D TEXT, EFFECTS AND MULTI-LAYER COMPOSITING

**INSCRIBER TITLEMOTION PRO FOR DPSVELOCITY**519-570-9111; [www.inscriber.com](http://www.inscriber.com)

Option for Inscriber's TitleMotion graphics and titling plug-in; provides access to animated textures over time, animated kerning over time and the ability to apply 3-D effects to text and graphics over time; ships with more than 175 3-D text styles and includes more than 100 new titling templates. ■

## 1-M/E DIGITAL PRODUCTION SWITCHER

**THOMSON GRASS VALLEY KAYAK**

530-478-3000;

[www.thomsongrassvalley.com](http://www.thomsongrassvalley.com)

Designed for live production and editing applications; includes four keys and complete machine control; its networking capability enables several switchers to be combined and controlled via a single panel; offers an intuitive GUI with an integrated touch-screen display; supports both SDI 525- and 625-line formats. ■

## OFF-AIR RECORDER

**MASSTECH MASSLOGGER**321-255-3653; [www.masstechgroup.com](http://www.masstechgroup.com)

This device is a VCR replacement for off-air logging and confidence recording applications using industry-standard MPEG-4 encoding and playback; features single- or multi-channel networked solutions with local and network storage. ■

## ASI AMPLIFIER

**LOGIC INNOVATIONS ASI-DA**858-455-7200; [www.logicinnovations.com](http://www.logicinnovations.com)

PCI card that provides ASI transport stream repeat/distribution while conserving equipment rack space and power; eliminates the need for mounting a traditional, self-contained DA in an equipment rack. ■

## BROWSING SOLUTION

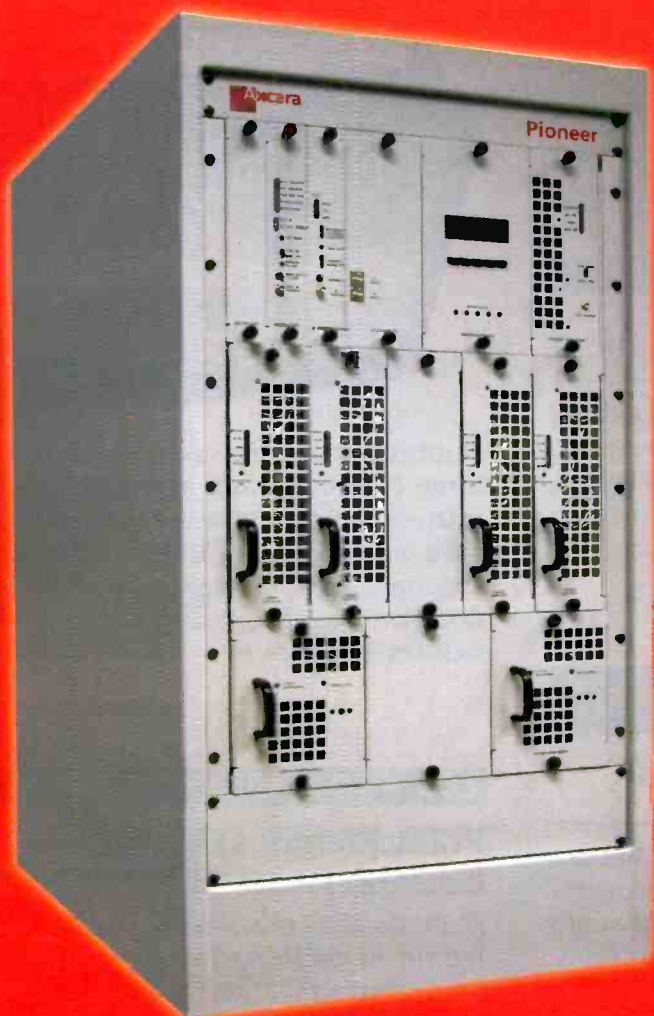
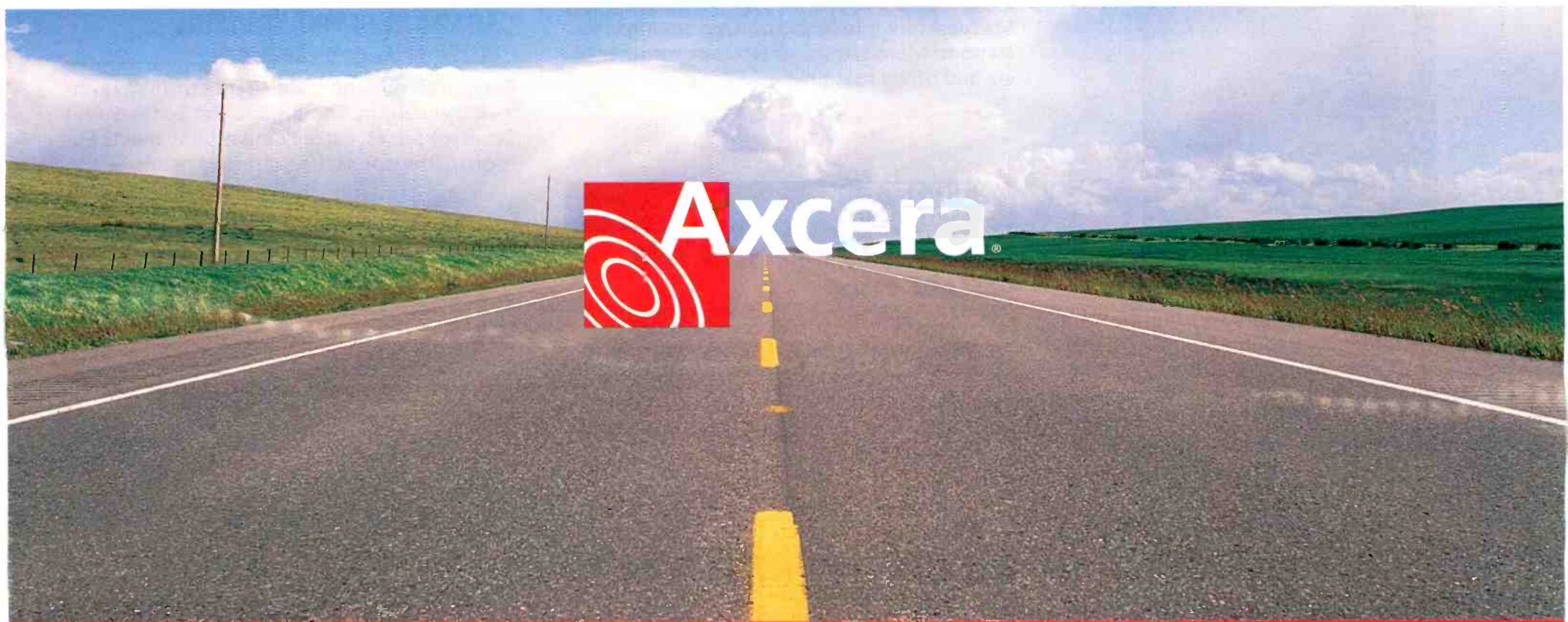
**IBIS VISTA**+44 1483 280208; [www.ibistv.com](http://www.ibistv.com)

Fully scalable desktop browsing solution links into IBIS's LandScape, P2 and ServerSuite applications providing the ability to view media clips in any of the applications from a standard PC desktop. ■





## Eliminating obstacles for today's broadcaster



## Introducing the Pioneer

When we asked broadcasters what they want in a transmitter, one theme continually resurfaced - broadband. A broadband transmitter allows group owners to minimize spare parts stock and adds simplicity for stations planning to move DTV channels to current analog frequencies, or community broadcasters relocating to core channels. Introducing the Pioneer and Pioneer DT, meeting the needs of today's broadcaster like no other solution on the market. The modular LDMOS amplifiers cover the entire UHF band with no retuning, allowing simple channel changes and minimizing spare parts stock. And all Pioneer and Pioneer DT transmitters can be upgraded to high power with nearly 100% reuse. For over 20 years, the best-engineered transmitters have come from Axcera - *The RF Experts.*

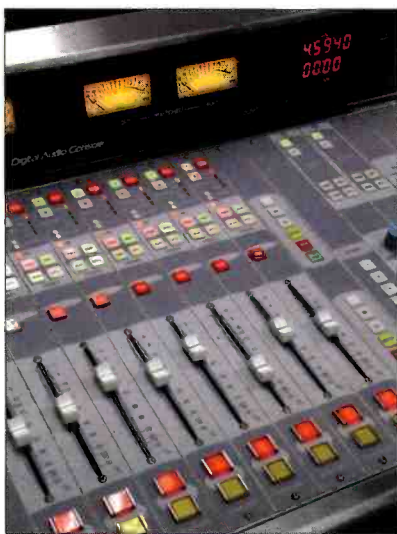
Accessing the new era of digital communications

[www.axcera.com](http://www.axcera.com) \ T: 724.873.8100 \ F: 724.873.8105 \ [info@axcera.com](mailto:info@axcera.com)



**CMOS IMAGE SENSOR****ROCKWELL SCIENTIFIC PROCAMHD**  
805-373-4545; [www.rockwellscientific.com](http://www.rockwellscientific.com)

The first commercially available HD image sensor to use CMOS technology instead of CCD technology; power consumption is only about one-fifth that of a comparable CCD sensor; active image-sensing area of 1936 x 1086 pixels exceeds highest HDTV standard. ■

**DIGITAL CONSOLE****WHEATSTONE D-4000**  
252-638-7000; [www.wheatstone.com](http://www.wheatstone.com)

Four-bus; has 28 or 32 mainframe inputs, A&D I/Os, VU metering, dual source inputs, optional line selectors phone modules and open bus architecture; features full logic, opto-isolated machine control, built-in TB, cue, headphone, clock and timer; switchable daughter cards allow varying sources and signal rate within the same mainframe. ■

**WIRELESS INTERCOM****SYSTEMS WIRELESS HME PRO850**  
800-542-3332; [www.swl.com](http://www.swl.com)

Features operation between 470MHz and 740MHz; automatically selects frequencies or can be programmed by a front panel LCD on the base station or an attached PC. ■

**SATELLITE SERVICE****SES AMERICOM SIGNALSAT**  
609-987-4143; [www.ses-amicom.com](http://www.ses-amicom.com)

This new satellite-based alternative service enables broadcast TV stations to maximize reach with their DMA; the affordable point-to-multipoint C- or Ku-band satellite delivery service is a cost-effective alternative to microwave links and fiber networks. ■

**UNIVERSAL SYNCHRONIZER****PIXEL INSTRUMENTS VS5200**  
408-871-1975; [www.pixelinstruments.tv](http://www.pixelinstruments.tv)

Ten-bit frame synchronizer; built-in TBC with auto mode select; transcoding from any selected input to all outputs simultaneously; digital proc amp; wide range output timing; patented signal processing. ■

**NLE ACCELERATORS****AVID DNA FAMILY**  
978-640-6789; [www.avid.com](http://www.avid.com)

Trio of hardware accelerators, dubbed Nitris, Adrenaline and Mojo, pumps up the power of nonlinear-editing and media-processing systems; Nitris offers processing power equivalent to 30 Pentium-4 processors and supports uncompressed HD formats and up to eight audio channels; Adrenaline can transform PC and Mac desktops into high-powered editing workstations; Mojo targets notebook-computer users and offers real-time effects. ■

**AUDIO TEST AND MEASUREMENT SYSTEM****AUDIO PRECISION SYSTEM TWO CASCADE PLUS**  
503-627-0832; [www.audioprecision.com](http://www.audioprecision.com)

This PC-controlled system brings improved distortion and noise specifications required to test the latest advances in converter technology; dual-domain architecture accommodates both analog and digital signals. ■

**TRANSMITTER COMBINER****RFS 450MHZ**  
203-630-3311; [www.rfsworld.com](http://www.rfsworld.com)

Designed for use in the 403 to 512MHz frequency band; utilizes low-loss, low intermodulation dual-stage isolators with integrated coaxial cavities; four-channel combiner can be converted into an eight-channel unit. ■

**COMMAND CENTER****WINSTED PRESTIGE**  
800-447-2257; [www.winsted.com](http://www.winsted.com)

Modular approach to command center design; provides full-service command center design capabilities, including complete electronics layout, Auto CAD drawings and full-color control room renderings. ■

**REAL-TIME, 3-D PRODUCTION SYSTEM****KAYDARA KAYDARA ONLINE 4.0**  
888-842-6842; [www.kaydara.com](http://www.kaydara.com)

Integrates live video and real-time animation; uses a new PC hardware platform; provides broadcast-quality SD and HD video and audio I/O; features real-time triggers, voice recognition, and shadows and reflection. ■

**VIDEO DEMULTIPLEXER****PATH 1 CHAMELEON VIDX**  
877-ONE-PATH; [www.path1.com](http://www.path1.com)

Multi-port product line offers mixing and routing of SD and HD video streams over IP. ■

**SATELLITE TERMINAL****SWE-DISH FLY-AWAY 90**  
+46 923 12250; [www.swe-dish.com](http://www.swe-dish.com)

Offers IP transmission up to 5Mb/s, with potential to upgrade to 10Mb/s for IP applications such as live broadcast, Internet access, VoIP and file transfer; optional equipment enables up to 50Mb/s DVB transmissions. ■

**CONNECTORS****CANARE TRI-FPRO TRIAXIAL**  
818-365-2446; [www.canare.com](http://www.canare.com)

Rugged construction; impedance of 75W; push-lock mechanism; compatible for Series 5 and Series 10 cables; cable compatibility meets European interconnecting strategy needs. ■

**TOWER DESIGN****SPECTRASITE BROADCAST GROUP**  
972-550-9500; [www.spectrasite.com](http://www.spectrasite.com)

Offers design, engineering and fabrication services to meet any site challenge for broadcast towers up to 2000 feet. ■

**FLUORESCENT LIGHTING FIXTURE****ARRI STUDIO COOL**  
845-353-1400; [www.arri.com](http://www.arri.com)

Fluorescent fixture with choice of reflectors, three control options and traditional cast and extruded aluminum housing; can be used on the road or in the studio; slide-in lamp support and locking lamp holders allow for six 4-tube Studio Cools on one circuit; two, four and eight lamp fixtures available. ■

**ZCG AND GRAPHICS SYSTEM****PIXEL POWER CLARITY2**  
954-943-2026; [www.pixelpower.com](http://www.pixelpower.com)

Multiple pixel processors operate in parallel; a hybrid of dedicated graphics hardware and open platform PC technology. ■





### MM400A miniature transmitter

Watertight, only 3.6 ozs. and powered by a single AA battery. With a solid machined aluminum housing and a non-corrosive finish, the MM400A is ideal for hostile environments and special costing needs.

The 100mW output with an RF circulator/isolator in the output stage provides excellent operating range and multi-channel performance. The 4.5 hour battery life (lithium AA) is comparable to standard transmitter models operating on 9V alkaline batteries. The input amplifier uses an ultra low noise op-amp for quiet operation. Its gain controlled with a DSP controlled dual-envelope limiter which cleanly limits input signal peaks over 30dB above full modulation. The unit can be programmed easily in the field for use with 400 Series digital hybrid receivers, or in several other modes for use with Lectro and other analog receivers.



### UCR411 compact receiver

The UCR411 receiver provides professional performance and a versatile feature set in a compact design for field and location production. Tracking front-end filters guard against interference from DTV and analog television broadcast signals and other high power RF sources. All settings are made from the front panel with a powerful LCD interface, making the unit ideal for use in Quad Paks, on sound carts, in portable bags and in rack mount multi-couplers.

To alleviate interference problems in an increasingly congested RF spectrum, a spectrum analyzer is built into the receiver. The receiver tunes across its 25.6 MHz tuning range and records RF activity with markers on the LCD screen. Finding clear operating frequencies is a quick, simple process. The UCR411 is compatible with all 400 Series Lectrosonics wireless transmitters and can be powered with internal 9V batteries or external DC.

### Digital Hybrid Wireless™

An industry first, this proprietary combination of digital audio and analog RF provides the superb audio quality of a pure digital system and the outstanding operating range of the finest FM wireless systems. The digital audio chain eliminates a compandor and its artifacts, and provides audio frequency response flat to 20 kHz. The RF link takes advantage of the spectral efficiency of an aggressively optimized FM radio system offering 256 selectable frequencies across a 25.6 MHz band.



### UM400 belt-pack transmitter

The UM400 provides the latest digital and analog features in a classic Lectrosonics belt-pack transmitter. The 5-pin input jack provides taps for any mic or line level signal.

The UM400 input handles low impedance dynamic mics, electret lavalier mics with positive or negative bias, and line level signals from any source. Input gain is adjustable over a 43 dB range to perfectly match the audio input level for optimum modulation, minimum distortion and maximum signal to noise ratio. Input levels are accurately indicated by two LEDs on the control panel.



### UH400 plug-on transmitter

The UH400 adapts microphones with an XLR connector to wireless operation. In addition to common uses with hand-held microphones, the multi-voltage phantom power feature allows the transmitter to be used with high current condenser microphones, expanding its usefulness in high-end applications. The transmitter provides 256 frequencies in standard Lectro frequency blocks, selected with two rotary switches on the side of the housing.

# LECTRO™

**LECTROSONICS, INC.**

581 Laser Road, Rio Rancho, NM 87124 US  
www.lectrosonics.com - sales@lectrosonics.com  
tel (800) 821-1121 or (505) 892-4501  
fax (505) 892-6243

Distributed in Canada by:

**MILLER** Professional Products Canada  
Vancouver tel: (604) 685-4654  
Toronto tel: (416) 361-9390  
www.millercanada.com  
sales@millercanada.com

# Digital wireless with a fresh twist.



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[www.lectrosonics.com/R/be0603](http://www.lectrosonics.com/R/be0603)



## DIGITAL CG

## CHYRON SOLO

631 845 2000; [www.chyron.com](http://www.chyron.com)

Editing system consists of a Chyron-specified laptop PC, a PCMCIA PCI CG/squeezeback card contained in a separate three-pound box, and a complete CG/"squeeze & tease" software package. ■

## HD STUDIO CAMERA

## SONY ELECTRONICS HDC-910

201-930-1000; [www.sony.com/professional](http://www.sony.com/professional)

Uses switchable 50/60 HD camera head and optional downconverter plug-in boards in the camera CCU to simultaneously deliver the alternative 1280x720@59.94p HDTV output; vertical smear is held to -125dB. ■

## DISK STORAGE SYSTEM

## STORAGETEK V2X2 SHARED VIRTUAL ARRAY

303-673-5020; [www.storagetek.com](http://www.storagetek.com)

Enhanced version of the V2X SVA; includes increased capacity using Seagate 73GB drives; provides automated storage management functions; features Power Point-to-Point Remote Copy which decreases synchronization time between disk subsystems. ■

## DIGITAL MIXING CONSOLE

## SALZBRENNER STAGETEC MEDIAGROUP CANTUS

+49 30 639902-0; [www.stagetec.com](http://www.stagetec.com)

Features a distributed system consisting of a main console, optional slave consoles, a separate audio processor and the Nexus routing system; system components are interconnected by duplex fiber-optic cables. ■

## MPEG VIEWER

## OMNEON MTV 1000 VIEWERTOOL

866-861-5690; [www.omneon.com](http://www.omneon.com)

Enables users to view video elementary streams within MPEG transport streams stored on the Omneon media server; can identify and select individual program streams within the transport stream. ■

## COMPOSITING SYSTEM

## DISCREET COMBUSTION 2.1

514-393-1616; [www.discreet.com](http://www.discreet.com)

Resolution-independent environment; designed to handle complex compositing in 3-D space; interface allows operator to combine unlimited layers and effects into a single seamless composite. ■

## PROFESSIONAL HDTV DECODER

## DIGITAL VISION BITLINK

818-769-8111; [www.digitalvision.se](http://www.digitalvision.se)

Modular MPEG-2 HDTV/SDTV decoder with an extensive choice of I/O modules including ASI input, satellite demodulator, VGA HD monitoring and video reference. Up and down conversion. Support for advanced Closed Caption. Controlled via front panel or web interface. ■

## VIDEO SERVER

## 360 SYSTEMS IMAGESERVER 2000

818-991-0360; [www.360systems.com](http://www.360systems.com)

New model provides two independent video output streams and simultaneous program ingest; each video channel has two stereo AES/EBU channels, with analog audio I/O included; stores up to 140 hours of video at 12Mb/s, and includes many of the standard features found on the larger 7000 server. ■

## NEWS EDITING SYSTEM

## AVID NEWS CUTTER ADRENALINE FX

978-640-6789; [www.avid.com](http://www.avid.com)

Processes uncompressed SD video over a single FireWire cable; ability to expand to 10-bit video and 24-bit audio capabilities; features built-in HD upgradability and support for Avid Adrenaline DNA. ■

## DSNG ENCODER

## SCOPUS CODICO E-1710

609-987-8092; [www.scopus.net](http://www.scopus.net)

Combines encoding and modulation in a one rack-mounted unit; compact platform for DSNG applications; provides embedded L-band monitoring; offers both satellite and QPSK/8PSK/16QAM/COFDM modulation. ■

## GENERATORS AND LOGO INSERTERS

## LEITCH LOGOMOTION II

757-548-2300; [www.leitch.com](http://www.leitch.com)

Available in analog, SD and HD formats; can insert up to four logos at once; features four-channel AES capability, support of multiple graphics formats and Ethernet network connectivity for logo interchange. ■

## DIGITAL ROUTER

## LEITCH INTEGRATOR GOLD

757-548-2300; [www.leitch.com](http://www.leitch.com)

Comes in SD and wideband digital multi-rate formats; handles signals from 30Mb/s to HDTV at 1.485Gb/s; re-clocks most standard data rates; expandable from 8x8 to 128x128 in a single 8RU chassis. ■

## NEWROOM EDITING

## QUANTEL GENERATIONQ NEWS

203-972-3199; [www.quantel.com](http://www.quantel.com)

Tailored for small and mid-market stations; 2-2-1 configuration includes an eight-port server with ingest automation, two browse applications, two desktop editing applications and a craft edit system. ■

## 100X HD LENS

## CANON DIGISUPER 100XS

516-328-5000; [www.canonbroadcast.com](http://www.canonbroadcast.com)

100X HDTV/SDTV-capable zoom lens; incorporates Shift-IS image stabilizer; a speed of F/1.7; M.O.D. from lens front is 3.0 meters; focal length, 9.3~930mm (18.6~1860mm using the 2X extender). ■

## GRAPHICS PROCESSOR

## PANASONIC AV-CGP500

201-392-4127; [www.panasonic.com](http://www.panasonic.com)

Multi-application, multifORMAT real-time graphics processor; offers real-time rendering of broadcast quality graphics, including widely-implemented HD formats (1080i, 720p/60 and 1080/24p), as well as SD video (480i); PC-based system with a two RU size external graphics unit; designed for on-air sports/live graphics and virtual set applications; anti-aliasing generates images using 16 sub-pixels, with no performance degradation; defocus image generation, bump mapping, cube environment mapping and soft shadow all contribute to the realization of rich CG rendering in real time. ■

## AUTOMATION SYSTEM

## ENCODA SYSTEMS BROADCAST MASTER

303-237-4000; [www.encodasystems.com](http://www.encodasystems.com)

Integrates program rights management, scheduling and payment functionality; provides integrated library and workflow management. ■



# UTAH-400

## It Just Keeps Getting Better



The UTAH-400 High-Density Digital Routing Switcher, already the world's most advanced switcher, now offers even more:

- **Analog I/O Ports** - Your digital Audio or Video router can now be fitted with analog I/O in blocks as small as 8 ports. No more worries about integrating your existing analog source and destination equipment into your new digital plant!
- **A New 64x64 Frame** - Now all of the UTAH-400's advanced features are available in a compact (4RU) frame for smaller applications.

No matter what size, all UTAH-400 systems offer the same set of world class features at the industry's lowest prices:

- **SD/HD Compatibility**
- **Reduced Power Consumption**
- **Full-time Monitoring of Input/Output Signals**
- **Advanced Digital Audio Routing Capabilities**



Utah Scientific has a full range of solutions to the most demanding requirements for routing and presentation systems. Let us help you find the most cost-effective and future-proof digital signal management system for your facility. Visit us at [www.utahscientific.com](http://www.utahscientific.com) or call (801) 575-8801 today for more information.

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**IP-MPEG ANALYSIS SYSTEM****PIXELMETRIX DVSTATION-IP**954-472-5445; [www.pixelmetrix.com](http://www.pixelmetrix.com)

Provides MPEG-2 transport stream analysis and monitoring over an IP connection; supports 10-, 100- and 1000Mb/s Ethernet, and both the ad hoc MPEG over UDP and RTP encapsulations. ■

**DIGITAL MEDIA ENGINE****ADAM SYSTEMS ADAM 1000**408-526-0500x226; [www.adamsystems.com](http://www.adamsystems.com)

Solutions for content creation and delivery by the entertainment industry; scalable to thousands of terabytes with full security; enables fast conversion of film and video formats, processing of special effects and DVD creation. ■

**SIGNAL MONITOR****TRIOLOGY BROADCAST SENTINEL**+44 01264 384000; [www.trilogy-broadcast.com](http://www.trilogy-broadcast.com)

Improved networked connectivity and alarm masking; includes VTR/server data, subtitles and AFDs; In-Vision display of monitored data and additional PC status monitoring. ■

**ASSET MANAGEMENT****DALET DALETPLUS MEDIA LIBRARY**212-825-3322; [www.dalet.com](http://www.dalet.com)

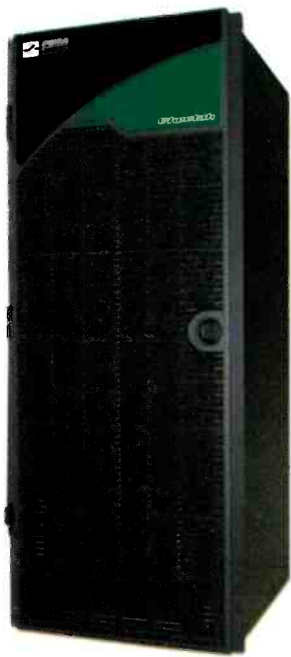
Complete turnkey system running on standard IT hardware; catalog, store and distribute media assets in multiple formats: HD, DV, DVCPRO, MPEG-2, Windows Media, QuickTime, MPEG-4 and other formats. ■

**AUDIO ROUTER****THOMSON GRASS VALLEY APEX**530-478-3000; [www.thomsongrassvalley.com](http://www.thomsongrassvalley.com)

Audio router features high-density construction and 11RU 256x256 chassis housing; TDM switching architecture; able to interconnect multiple frames to create matrices up to 1280x1280. ■

**HD TRANSMISSION SERVER****LEITCH VR MTS TRANSMISSION SERVER**757-548-2300; [www.leitch.com](http://www.leitch.com)

HD content can be ingested and played out via ASI SPTS or MPTS; capable of storing both HD and SD material on same server. ■

**ROUTING SWITCHER****PESA SWITCHING SYSTEMS CHEETAH 448X FLEXI-FRAME**256-726-9200; [www.pesa.com](http://www.pesa.com)

Incorporates a 27RU frame designed to support SD and HD, as well as other non-standard digital signals simultaneously; internal backplanes are programmable for either input or output connection. ■

**NETWORKED STORAGE****PINNACLE PALLADIUM STORE**650-526-1600; [www.pinnaclesys.com](http://www.pinnaclesys.com)

Networked storage systems use scalable, mission-critical server and shared storage technology; provide seamless integrated ingest, editing and playout processes; eliminate the need for multiple copies of media. ■

**ANALOG UHF TRANSMITTER****HARRIS ATLAS**513-459-3400; [www.broadcast.harris.com](http://www.broadcast.harris.com)

Built on a new common UHF transmitter platform; advanced DTV-660 analog/digital exciter; on-air servicing of PA modules and power supplies; redundant control system and robust serial bus architecture. ■

**PROMPTING SOFTWARE****BDL-AUTOSCRIPT WINPLUS+**516-799-3869; [www.bdlautoscript.com](http://www.bdlautoscript.com)

Provides stand-alone prompting; features instant prompt editing and a fully active run order that can be manipulated at any time during scrolling; operates with all languages and fonts available in TrueType and Adobe. ■

**MULTIFORMAT AUDIO GENERATOR/MONITOR****VIDEOTEK ASM-100**800-800-5719; [www.videotek.com](http://www.videotek.com)

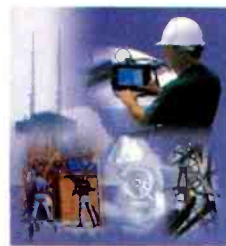
Monitors most audio formats; displays up to eight channels of analog or AES/EBU audio; options allow de-embedding the SD and HD-SDI inputs; Dolby Digital and Dolby E decoding. ■

**MEDIA ASSET MANAGEMENT SYSTEM****SEACHANGE BROADCAST MEDIALIBRARY**978-897-0100; [www.seachangeinternational.com](http://www.seachangeinternational.com)

Provides high-speed, universal access to over 24TB of media; allows clients using disparate media tools and file formats to collaborate more efficiently to produce, repurpose and distribute HD and SD media assets. ■

**BROADCAST ARCHITECTURE****OMNIBUS G3**+44 8705 004300; [www.omnibus.tv](http://www.omnibus.tv)

Based on standard open IT protocols; utilizes a micro-modular design; provides tight integration between new HeadLine series of modules, including Edit 1000, 2000 and 3000 desktop editors. ■

**RF SERVICES****ANDREW BROADCAST SYSTEMS SITE SERVICES**708-349-3300; [www.andrew.com](http://www.andrew.com)

Provide users with site survey and inspection services, transmission-line system design and layout, field technical-advisory service, system-optimization testing service, and system-optimization tuner service. ■

**DIGITAL AUDIO CONSOLE****CALREC ALPHA 100**+44 142 284 2159; [www.calrec.com](http://www.calrec.com)

Console features up to 96 stereo/48 mono channels; two-layer design allows for channel path per fader or dual path arrangement; provides eight stereo or mono groups, four main outputs and a mix-minus output per channel. ■

**AUDIO SIGNAL PROCESSING HARDWARE****SYMETRIX AIRTOOLS STUDIO MATRIX**425-778-7728; [www.symetrixaudio.com](http://www.symetrixaudio.com)

System configuration allows hundreds of input and output signals to be ingested and routed via mixers, selectors and/or crosspoint matrix/mixers up to 32x32 (stereo); contains two SHARC processors for specialized handling of audio signals. ■





## Cool. Studio Cool.

Introducing Arri Studio Cool, the most complete, flexible, and easy to service fluorescent lighting solution ever developed.

The optically superior Arri Studio Cool is available in 2-tube, 4-tube, and 8-tube models. Each lamphead accommodates 55-watt tubes for higher light output. What's more, only Arri offers interchangeable reflectors that allow designers to select either the high output 90 degree reflector or the wide, soft 120 degree beam angle reflector.



Studio Cool's rugged aluminum extrusion and cast housing features a detachable electronics module for total ease of service and maintenance. And when it comes to control, three different choices of Arri Studio Cool provide dimming via DMX control, two-step switching, or phase control dimming.



Finally, a complete line of Studio Cool accessories is available to help you create the system solution that's right for you. Accessories include barndoors, intensifiers, egg crates, louvers, and filter frames.



Optically superior, flexible, rugged and reliable, Studio Cool offers everything you've come to expect from Arri. And that's the coolest part of all.

For more information about Arri Studio Cool, please call 845.353.1400 or email us at [studio-be@arri.com](mailto:studio-be@arri.com).



**AUDIO ROUTER****EUPHONIX TDM ROUTER**650-855-0400; [www.euphonix.com](http://www.euphonix.com)

Provides easy access and control over production monitors, I/O feeds, tape machines, console mix, and aux and group busses; up to 728X728 capability with multi I/O and 75V coax interconnectivity. ■

**DISPLAY TECHNOLOGY****CLARITY VISUAL SYSTEMS AP/LCD**503-570-0700; [www.clarityvisual.com](http://www.clarityvisual.com)

Features UXGA (1600x1200) resolution; offers redundant lamp engines for fail-safe reliability in control room environments; includes a new light engine design that produces brighter displays with better color saturation. ■

**DIGITAL ASSET MANAGEMENT****ARKEMEDIA ARKEKTEK**+44 1256 869200; [www.arkemedia.com](http://www.arkemedia.com)

Pre-configured end-to-end system handles ingest and storage to management and distribution; ships with Ingest Manager, Resource Manager, full system management tools, HSM, RAID and 2.5TB of tape drive storage. ■

**HD/SD TEST EQUIPMENT****OMNITEK OMNIVIEW**+44 1256 881 110; [www.omnitek.tv](http://www.omnitek.tv)

Provides standard waveform monitor functions operating in the RGB or YUV domain; optional built-in test generator for comparison of output image data with internally generated reference images. ■

**BROADCAST AUTOMATION****ON AIR SYSTEMS ON-AIR SOLUTIONS**+44 20 7663 3663; [www.on-air-systems.com](http://www.on-air-systems.com)

Fourteen modular software applications can be used separately or as a turnkey system from acquisition to transmission on a PC; ON-AIR Studio allows the operator to control all the MCR elements. ■

**VIDEO-BASED WORKFLOW SYSTEM****SGI CXFS**949-224-4566; [www.sgi.com](http://www.sgi.com)

Uses IT technology for broadcast, post-production and broadband applications; enables the secure sharing of video as data files across high-speed networks. ■

**TOWER REINFORCEMENT****ERI PRE-ENGINEERED BOLT-ON AND WELD-ON LEG PARTS**81-925-6000; [www.eriinc.com](http://www.eriinc.com)

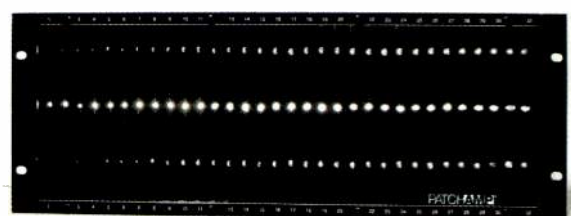
System of custom-designed bolt-on and weld-on leg reinforcement parts, inner member parts and adjustable length hog rod members. ■

**PLAYOUT AUTOMATION****OMNIBUS TX>PLAY**+44 8705 004300; [www.omnibus.tv](http://www.omnibus.tv)

Entry-level, multichannel content delivery solution enables the user to determine the exact functionality at each stage of ingest, content management and delivery. ■

**HD ON-SCREEN MONITOR****VIDEOTEK VTM-450E**800-800-5719; [www.videotek.com](http://www.videotek.com)

Includes HD-SDI, SD-SDI, analog, and analog composite measurements; features an eye pattern, jitter measurement, gamut display, pixel locator and data word analyzer; introduces A/D relative timing display. ■

**DA FRAME****PATCHAMP PA-3200HD**201-457-1504; [www.patchamp.com](http://www.patchamp.com)

Super-density DA frame; accommodates 32- 1x9 or 64- 1x4 DAs; 3GHz multiformat system can be used with any coaxial signal including high-definition and AES audio. ■

**MEDIA SERVER****SGI MEDIA SERVER**800-800-7441; [www.sgi.com](http://www.sgi.com)

Supports up to eight standard-definition MPEG-2 video channels, with up to eight audio channels per video channel; compression rates up to 50Mb/s; supports most broadcast digital formats. ■

**COMPOSITE SWITCHER****BRICK HOUSE VIDEO VTB-2A**+44 23 8067 6026; [www.brickhousevideo.com](http://www.brickhousevideo.com)

Two additional switched auxiliary outputs allow it to offer 4x4 routing facilities; features take (cross-cut), auto/manual mix and wipe and auto fade to black; auto functions are variable in the range of 0-5 seconds. ■

**BROADCAST NEWS AUTOMATION****AUTOCUE QSERIES**704-377-1496; [www.autocue.co.uk](http://www.autocue.co.uk)

Integrated news and transmission automation; fault-tolerant clustering design; indexes incoming wire stories in real time; supports multilingual archiving and script editing; remote access capable. ■

**BROADCAST AUTOMATION****SUNDANCE TITAN**972-444-8442; [www.sundancedigital.com](http://www.sundancedigital.com)

Separates the on-air interface from the actual playlist controller; List Processor runs frame-accurate playlists; up to ten list processors can run concurrently on a single server; Air Control Station allows multichannel operation. ■

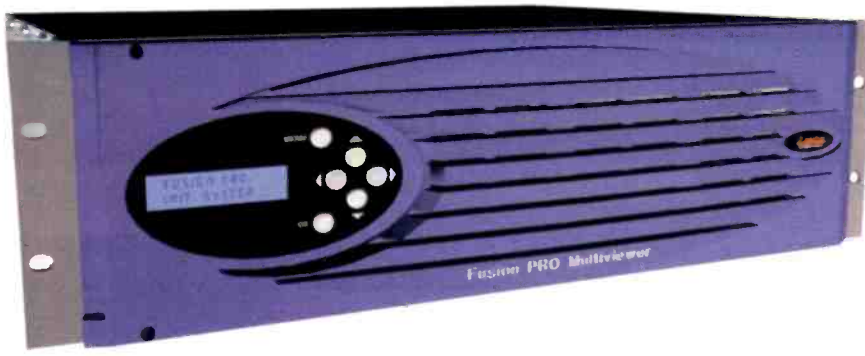
**IP-BASED INTERCOM****TRILOGY BROADCAST MERCURY INTERCOM**+44 01264 384000; [www.trilogy-broadcast.com](http://www.trilogy-broadcast.com)

Provides full intercom capability in facilities with Ethernet capability without the need for additional wiring; allows PCs to be used as virtual panels. ■

**CONSOLE MODULE****KLOTZ DIGITAL ENHANCED DSP MASTER MODULE**678-966-9900; [www.klotzdigital.com](http://www.klotzdigital.com)

For VADIS D.C.II mixing consoles; rotary encoders allow direct and fast access to DSP parameters; access to all channel parameters from a single button. ■





The **FusionPro 3RU** is a multi-window display processor designed to accurately render multiple video and computer graphics sources to high-resolution displays. The FusionPro 3RU currently supports resolutions up to SXGA (1280 x 1024) and UXGA (1600 x 1200) with pristine image quality achieved through a combination of 10 bit RGB outputs, an advanced video processing engine and dynamic phase adjustment for accurate pixel mapping.

The Series is founded on a modular architecture consisting of a range of plug in processing cards and associated i/o, enabling users to combine input formats - analog video, SDI, HD-SDI, DVI and computer - in one

system. The 3RU base system supports up to 13 dual-channel processing cards for 26 inputs, and is designed for mission critical applications with optional dual redundant power supplies and easily accessible front-loading cards.



The **FusionPro 1RU** delivers excellent image quality and can reproduce fine details even for small video windows. Each input is equipped with an advanced de-interlacing and scaling engine to ensure high quality display.

The FusionPro 1RU enable users to combine input formats - analog video, SDI, HD-SDI, DVI and computer - in one system. The 1RU base system accepts 4 processing cards, supporting up to 8 scalable windows.

The **DX Digital Series MultiViewers** are versatile, cost-effective solutions for a wide range of broadcast applications, including; broadcast presence monitoring, master control rooms, video server confidence channel, and multi-channel monitoring in OB Vans.

The MultiViewers' 1RU compact design delivers modular configurations for 4, 8, 12 or 16 SDI or composite inputs, with auto detect of NTSC, PAL or SDI formats. Composite, component, SDI and line doubled VGA outputs provide customers with a wide range of flexible display options. Both the front panel controls and remote control via RS-232/422 provide the user with the ability to view real-time multiple images in various pre-configured displays. Optional software allows user configuration of displays, and multi-system control, while options also exist for in-picture audio monitoring of analog, AES/EBU and SDI embedded audio.



The **MX Analog Series MultiViewers** are versatile, cost-effective and easy to operate four to sixteen input analog video screen splitters. The MultiViewers provide a cost effective solution for high quality real-time multi-video display and monitoring and are ideal for "presence" or "confidence" monitoring in multi-video display applications. Single touch operation provides the ability to view real-time multiple images in various pre-configured displays. Each image can also be seen full screen. Control is via the front panel buttons or remotely via the RS-232/422 serial interfaces. The front panel LCD display show menus for user configurations of channel ID, borders, clock & date and the GPIO lines.



The **OmniVideo Series** comprises the MVG2, MVG6 and MVG16 PCI cards solutions. These cards can display 2, 6 or 16 real-time video sources simultaneously with the following feature set; composite video inputs, a high quality video output, flicker-free text & graphics and user configuration of displays via integrated software, allowing picture resize, position, crop and picture-in-picture effects

**Zandar**  
TECHNOLOGIES

**THINK MULTIVIEWER,  
THINK ZANDAR**

Zandar offer a wide range of proven MultiViewer solutions, with numerous input formats, output display resolutions, and control options.

Think Zandar for:

- Command & Control
- Master Control Rooms
- Broadcast multi-video & audio monitoring
- AV Presentations
- Video-conferencing
- Mosaic & Interactive Channels
- Security & Surveillance



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Fax: +353 1 280 8956  
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E-mail: advancedms@msn.com

[www.zandar.com](http://www.zandar.com)



**TALLY AND UMD CONFIGURATION PROGRAM**

**TELEVISION SYSTEMS TALLYMAN**  
+44 1628 687 200;  
[www.televisionssystemsltd.uk](http://www.televisionssystemsltd.uk)

Allows users to reconfigure tally systems easily and to interface to hardware including switchers, routers and multiviewers; allows an operator from single position to control the entire system. ■

**AUDIO/VIDEO MONITOR/DISPLAY**

**WOHLER TECHNOLOGIES, PANORAMADTV VAMP2-SDA**  
650-589-5676; [www.wohler.com](http://www.wohler.com)

Offers two selectable SDI digital and two composite analog video sources in a 2RU unit; a composite video monitor output from the selected SDI is included for use with larger, external video monitors. ■

**VIDEOCASSETTES**

**MAXELL PROFESSIONAL DV (DV-PRO)**  
800-533-2836; [www.maxell.com](http://www.maxell.com)

Developed for use in Mini DV and DV systems within the professional video and broadcast markets; integrates Maxell's Multipuretron vapor-deposited film; DV-PRO enhances picture quality and durability in demanding ENG/EPF applications. ■

**GRAPHICS SYSTEM**

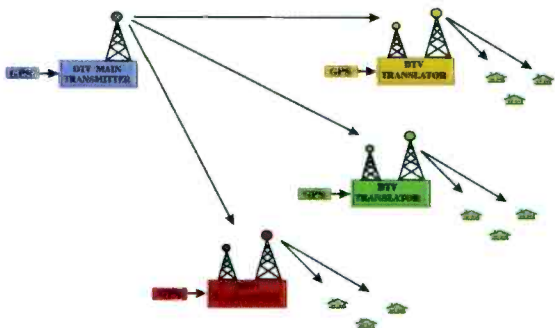
**ORAD HI-TEC SYSTEMS CYBERGRAPHICS**  
972-9-7676862; [www.orad.tv](http://www.orad.tv)

Interfaces to industry standard newsrooms such as iNews and ENPS via MOS and TCP/IP protocols; user-friendly API for creating dedicated control applications, tools for centralization, management and editing of content. ■

**TRANSMISSION TECHNOLOGY**

**KTECH DISTRIBUTED TRANSMISSION TECHNOLOGY**  
818-773-0333; [www.ktechtelecom.com](http://www.ktechtelecom.com)

Distributed DTV Transmitter and Translator for On-Channel Booster



- GPS signal is used to synchronize all DTV translators with the main transmitter
- Receivers will view the combined signal as ghost and will equalize it out
- Implement On-Channel Booster

Distributed transmission technology employs GPS signals to synchronize all DTV transmitters and translators in a single channel; translators for on-channel boosters come in 1W, 5W, 10W, 50W and 100W versions. ■

**AUDIO ROUTING MATRIX**

**NTP SYS NTP625**  
+45 44 53 11 88; [www.ntpsys.com](http://www.ntpsys.com)

Flexible audio matrix can be installed either as a master control room matrix system or associated to user surfaces and/or control panels for use in studios; has unlimited size. ■

**SWITCHER**

**SNELL & WILCOX HD3060**  
408-260-1000; [www.snellwilcox.com](http://www.snellwilcox.com)



Features 12 keys, three available on MEs one and two, and six available on ME3; has four HD frame stores with still-store backup; has four timed aux., plus 12 non-timed aux. ■

**MOBILE NEWS EDITING SYSTEM**

**PANASONIC AJ-DE10 NOTEBOOK**  
201-392-4127; [www.panasonic.com](http://www.panasonic.com)

Rugged notebook computer-based news editing system; extends DVCPRO and DV newsroom editing into the field; 1394 interface; supports 25Mbps DVCPRO and other DV-based video. ■

**VIDEO TO MPEG-2 ENCODER**

**COMPUTER MODULES TS MASTER**  
858-613-1818; [www.computermodules.com](http://www.computermodules.com)

Real-time video to DVB-ASI encoder; 1RU enclosure; provides Y/C and composite inputs and encodes to full D1 resolution at 10Mb/s; remote management and scalable resolution from half D1 to full D1. ■

**TOWER CONSTRUCTION**

**RICHLAND TOWERS**  
800-827-4349; [www.richlandtowers.com](http://www.richlandtowers.com)

Provides turnkey tower construction services including project planning and construction coordination, tower facility operation and management, and transmitter site development. ■

**HD STOCK FOOTAGE**

**FILMDISC.COM FILMDISK STOCK FOOTAGE**  
866-322-7331; [www.filmdisc.com](http://www.filmdisc.com)

Royalty-free HD stock footage; 50-disk library with 20 shots/disk ranging from seven to 15 seconds each. ■

**PRODUCTION AUTOMATION SYSTEM**

**PARKERVISION CR1000**  
904-737-1367; [www.pvtv.com](http://www.pvtv.com)

Can perform back-to-back transitions with up to two upstream key layers; has CG list display from news automation system scripts and run-downs that illustrate the "slug name"; includes script synchronization. ■

**NEWSROOM SOLUTION**

**OMNIBUS SYSTEMS HEADLINE**  
+44 8705 004300; [www.omnibus.tv](http://www.omnibus.tv)

Features ingest, machine control, router control, desktop media viewing, craft editor support, integration with the newsroom computer system, playout, manual server content management and manual archiving. ■

**MONITORING SYSTEM**

**MIRANDA TECHNOLOGIES DENSITÉ**  
514-333-1772; [www.miranda.com](http://www.miranda.com)

Provides video and audio signal measurement and alarm profiling, as well as visual confidence monitoring with low latency, low bit rate video, and audio streaming over standard IP networks. ■

**RECEIVE AND PLAYBACK APPLIANCE**

**TELESTREAM CLIPVIEW**  
530-470-1300; [www.telestream.net](http://www.telestream.net)



Automatically receives MPEG video sent over standard IP networks from other Telestream appliances or FlipFactory applications; media is received and stored until users are ready to view them on large-screen video monitors. ■

**DIGITAL VIRTUAL LIBRARY**

**ASACA FIREFLY DM SERIES**  
303-278-1111; [www.asaca.com](http://www.asaca.com)

Delivers up to 48TB of data per library at an unprecedented 400MB/s; each library can sustain up to a maximum of 400MB/s of I/O; self-monitoring analysis and reporting technology (SMART) tool helps avoid data loss. ■

**CONTENT PROTECTION**

**IRDETO ACCESS CYPHERCAST FOR IPTV**  
858-668-4800; [www.irdetoaccess.com](http://www.irdetoaccess.com)

Designed for operators requiring secure deployment of premium video over DSL and FTTH; features real-time encryption; session-based encryption includes limited-life keys and encryption of individual VOD sessions. ■



## HALO



The Halo standalone routing system enables flexible, low cost ASI/SDI and HD/SD switching in 16x16 or 32x32 configurations. Designed to address a wide range of digital routing requirements, with special focus on redundancy switching in digital cable and satellite applications, Halo is based on the latest switching technology. ■

## PROCION 2



Offering unprecedented freedom in designing GUI's, Procion 2 enables customized control interfaces to be easily created and integrates fully with existing Pro-Bel router control systems including Aurora. Operating from a single configuration database, Procion 2 also integrates with COSMOS, Pro-Bel's system configuration and monitoring solution – enabling router control and monitoring mimic soft-panels to be quickly built. ■

## THE SIRIUS FAMILY



The award-winning Sirius family is available in SDI/HD/analog video and AES audio formats, scalable from 8x8 to 256x256. Utilizing innovative technology and providing unprecedented flexibility and scalability, Sirius incorporates built-in analog and digital signal conversion for both video and audio signals, as well as Ethernet and SNMP management and control. ■

## THE ICON



Pro-Bel's extensive signal processing range offers simple, low-cost distribution amplifiers up to multi-channel DSK/mixer units. The ICON family represents

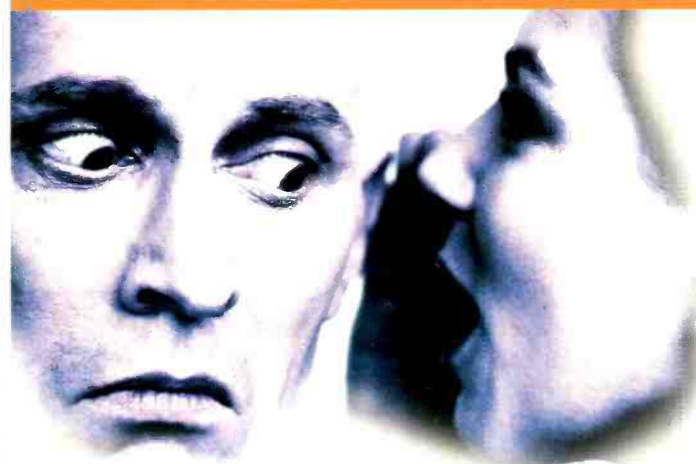
total frame flexibility and supports powerful and sophisticated signal processing functions such as digital video and AES/EBU conversion, mux/demux, key/mix, etc. ■

## MERIDIAN, SEXTANT AND COMPASS



Meridian, Sextant and Compass automation systems use dedicated, hardware controllers providing a broad range of device control and ultra-reliable play-out of automation schedules. The MAPP media management system can be used independently for server-only automation playout, or for global WAN media management. These highly integrated solutions efficiently handle basic single-channel to sophisticated multi-channel transmission. ■

The competition just discovered the price of the new Pro-Bel Halo router!



You know Pro-Bel routers are of the highest quality but if you think they're expensive you obviously haven't heard the price of the new Halo router!

- High performance SDI and ASI compatible
- Available in 16 x 16 or 32 x 32 configurations
- Removable dual redundant power
- Editable database (with control for up to 8 breakaway levels) plus fully compatible with all Pro-Bel control systems



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A Chyron Company



**MINIATURE DIRECT DV RECORDER****LAIRD TELEMEDIA CAPDIV**845-339-9555; [www.lairdtelemedia.com](http://www.lairdtelemedia.com)

Designed for recording edit-ready clips directly to its integrated hard drive from any DV camcorder while shooting; eliminates the lengthy capture process; clips are accessible by the user's NLE system for post production. ■

**BROADCAST GRAPHICS AUTOMATION****VERTIGOXMEDIA PRODUCER XMEDIA**514-397-0955; [www.vertigoxmedia.com](http://www.vertigoxmedia.com)

Has full MOS-compliance; features "smart" templates defining output format and production logic; includes multiple live data feeds that can share between applications; no custom programming required. ■

**ADC FIBER OPTIC CONNECTORS****CLARK WIRE & CABLE FASTERM SC AND ST CONNECTORS**847-949-9944; [www.clarkwc.com](http://www.clarkwc.com)

Compatible with either 3mm or 900µm fiber optic cable; 62.5/125 or 50/125µm fiber size; extremely low loss (<.2dB typical) and low reflectance (<-20 dB typical); designed to install in less than three minutes with standard fiber optic tools. ■

**MPEG AND DOLBY DIGITAL ENCODING PLATFORM****OPTIBASE MPEG MOVIE MAKER 200S PUBLISHER**650-230-2400; [www.optibase.com](http://www.optibase.com)

Comes bundled with MPEG Composer 200 version 3.7, allowing customization and control of encoding parameters; features include DVB and ATSC compliance, as well as support for Dolby Digital 5.1 input with synchronized muxing. ■

**ANALOG VIDEO CARD****BLACKMAGIC DESIGN DECKLINKSP**+61 (3) 9682 4770; [www.decklink.com](http://www.decklink.com)

Features analog component YUV video input and output, analog stereo-balanced XLR audio input and output, and separate SDI video monitoring output; separates SPDIF digital audio outputs for monitoring or high-end mastering. ■

**COLOR CONTROL SUITE****PANDORA POGLE EVOLUTION**+44 1474 561000; [pogle.pandora-int.com](http://pogle.pandora-int.com)

Includes an integrated Wacom drawing tablet, dedicated knobs and soft keys; hardware and software is linked by a high-speed network; individual modules contain their own RISC processor. ■

**FULLY AUTOMATED MOBILE TRANSMISSION SYSTEM****BT BROADCAST SERVICES BT SATNET**202-721-8599; [www.broadcast.bt.com](http://www.broadcast.bt.com)

Provides uplink and satellite capacity controlled and operated from a central hub; can be easily fitted to the roof of most vehicles; PC interface is designed to be easy to use; incorporates fixed transmit setting. ■

**DIGITAL WIRELESS CAMERA SYSTEM****LINK RESEARCH LINKXP2**+44 1923 200 900; [www.linkres.co.uk](http://www.linkres.co.uk)

Designed for live broadcast; offers reverse camera control; supplied as a complete camera back with a Sony BVV-5 interface, making it compatible with all broadcast cameras. ■

**DIGITAL GRADING AND COLOR CORRECTION SYSTEM****DISCREET LUSTRE**514-393-1616; [www.discreet.com](http://www.discreet.com)

Offers a resolution-independent environment capable of processing images of any resolution as well as a color grading environment with real-time primary color correction and playback of up to 2K 10-bit RGB data. ■

**CONSTANT-EFFICIENCY RF AMPLIFIER****L-3 COMMUNICATIONS ELECTRON DEVICES L-3 CEA 130**570-326-3561; [www.L-3com.com](http://www.L-3com.com)

Operates from 470MHz to 810MHz; combines a multi-stage depressed collector with an inductive output amplifier; DC input power nearly proportional to RF output over a wide power range. ■

**HIGH-RESOLUTION VIDEO DISPLAY PROCESSOR****ZANDAR TECHNOLOGIES FUSIONPRO**321-939-0457; [www.zandar.com](http://www.zandar.com)

Offers multi-window display technology; carries a range of plug-in processing cards and associated I/O, enabling users to combine input formats — analog video, SDI, computer, DVI and HD — in one system. ■

**LOGO INSERTER****EVERTZ HD9625LG**905-335-3573; [www.evertz.com](http://www.evertz.com)

Inserts logos in flash memory so the user can quickly access them through the device's front-panel quick-select keys or through GPI inputs; logos can be static or moving, and can be as small as one percent of the display area; their position and fade rate are user controllable. ■

**AES DIGITAL AUDIO SIGNAL****SIGMA OCTASTREAM FAMILY**801-575-8801; [www.sigmaelectronics.com](http://www.sigmaelectronics.com)

Consists of the DA5320 mixer and subframe router, the DA5315 variable delay compensator, the DA5325 sample rate converter and the SG5605 audio reference generator; designed for the S5000 signal management frame. ■

**9.4-METER DUAL-REFLECTOR EARTH STATION ANTENNAS****ANDREW EARTH STATION ANTENNAS**708-349-3300; [www.andrew.com](http://www.andrew.com)

Available for Ku or K-Band two- or four-port configurations with linear or circular polarization; features aluminum and steel construction; wind survival up to 125 mph. ■

**ATSC TRANSPORT STREAM MONITOR AND ANALYZER****TRIVENI DIGITAL STREAMSCOPE MT-25**609-716-3500; [www.TriveniDigital.com](http://www.TriveniDigital.com)

Monitors, measures and analyzes DTV streams and signals to ensure they are error-free and comply with the ATSC standards; includes an at-a-glance transport stream summary display and support for closed captioning. ■

**TACTICAL OPTICAL CABLE****MULTIDYNE HYDRA-800**800-488-8378; [www.multidyne.com](http://www.multidyne.com)

Transports up to 32 video and 128 audio in 1RU; maximum of 768 channels on one tactical cable; modular design; 10-bit video with S/N ratio greater than 67dB; video bandwidth of 6.5MHz. ■



## PROGRAMMABLE PROCESSOR

### ASPEX LINEDANCER

+44 1494 558 121;  
www.aspextechnology.com

New services or features can be introduced after the final product has been deployed; if specifications change during the development cycle, the processing bandwidth can be increased accordingly. ■

## 3U DIGITAL/ANALOG TV MODULES

### BROADCAST TECHNOLOGY 3000 SERIES

+44 1264 332 633; www.btl.uk.com

Includes the DTCA 3000 DVB-CI CA module, capable of descrambling multiple services; and the DTDA 3000 DVB-ASI distribution amplifier with three switched DVB-ASI inputs and six DVB/ASI-compliant outputs. ■

## LCD WAVEFORM MONITOR

### ASTRO WM-3004 WAVEFORM MONITOR

818-848-7722; astro-systems.com

Portable HDTV waveform monitor; high brightness and contrast; supports 23 formats of HD and SD video; one audio output selectable from 16 channels of imbedded audio. ■

## HEADPHONES

### AKG K 171 STUDIO (SHOWN BELOW) AND K 271 STUDIO

615-620-3800; www.akgusa.com



Feature AKG's Varimotion XXL transducers used in the K 141 and K 240 models; the K 171 Studio combines the benefits of a closed-back design with the light weight and comfort of supra-aural headphones; the K 271 Studio combines the benefits of AKG's circumaural "around-the-ear" design with a closed-back design for maximum isolation from ambient noise. ■

## VIDEO SERVICES ROUTER

### SKYSTREAM NETWORKS MEDIAPLEX-20

408-616-3300; www.skystream.com

Has 20-slot chassis with full hot swappable-capable modules; provides backplane connectivity and management capability for all modules; provides video and data interface connectivity. ■

## VIDEO SERVER

### CONCURRENT COMPUTER MEDIAHAWK

678-258-4000; www.ccur.com

Placed on an existing LAN, the unit functions like a digital videotape player; designed to deliver full-screen, TV-like quality video (25fps to 30fps) to a desktop computer. ■

## FRAME/LINE SYNCHRONIZER

### CRYSTAL VISION SYNAD124

+44 1223 497049; www.crystalvision.tv

Includes tracking audio delay for up to two groups of embedded audio; allows video feeds containing embedded audio to be re-timed; eight mono channels of audio can be delayed to match the video from any two audio groups. ■

## UNIVERSAL-FORMAT DVE SYSTEM

### ACCOM DVEOUS/MX

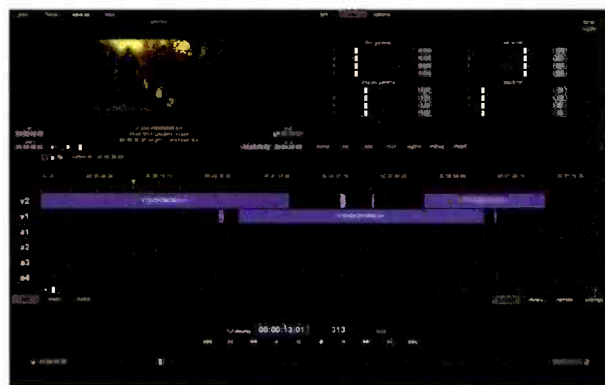
650-328-3818; www.accom.com

Allows the creation of real-time video effects in either SD (525 or 625) or HD (720, 1035 or 1080) at all known frame rates; internal hard drive for more storage and fast save/recall of files. ■

## DIGITAL INTERMEDIARY TOOL

### BOXX CINEBOXX

877-877-2699; www.boxxtech.com



Features 2K film; HD and SD sequential image review with option I/O module; NLE editing of 2K film, HD and SD material; ingestion system for sequential image export; network shared storage for frame depot and crash and batch capture with EDL import. ■

## DIGITAL MATRIX INTERCOM

### TELEX RTS CRONUS

952-884-4051; www.rtsintercoms.com

Thirty-two port system occupying 2RU; its standard configuration offers the ability to link up to four units into a single 128-port matrix over distances of hundreds of meters. ■

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**MEDIA LIFECYCLE-MANAGEMENT TOOLS****BBC TECHNOLOGY COLLEDIA**888-BBC-3820; [www.bbctechnology.com](http://www.bbctechnology.com)

Enables broadcasters to produce high-quality content more efficiently at every stage of the creation, management and distribution lifecycle. ■

**AUDIO TEST SOFTWARE****AUDIO PRECISION PC AUDIO TEST APP2010**503-627-0832; [www.audioprecision.com](http://www.audioprecision.com)

Measures the audio performance of a PC sound device such as a sound card or a motherboard implementation; comprises a suite of tests that measure level, phase, distortion, noise, crosstalk and other parameters. ■

**HD ENCODING SOFTWARE****HEURIS MPEG POWER PROFESSIONAL – DTV HD**314-534-1514; [www.heuris.com](http://www.heuris.com)

Program runs on both PC and Mac platforms and allows customers to create ATSC-compliant streams on the same computer system as their favorite HD nonlinear editing systems. ■

**CONNECTORS****SWITCHCRAFT AAA SERIES**773-792-2700; [www.switchcraft.com](http://www.switchcraft.com)

Available in three to seven pins or contacts; features easy twist on combination handle/strain relief, and only two parts to assemble; strain relief is designed to accommodate most popular cable sizes; also features a rugged die-cast metal handle for optimum protection and increased signal shielding. ■

**AUDIO ROUTER****NVISION NV7256-PLUS**530-265-1000; [www.nvision1.com](http://www.nvision1.com)

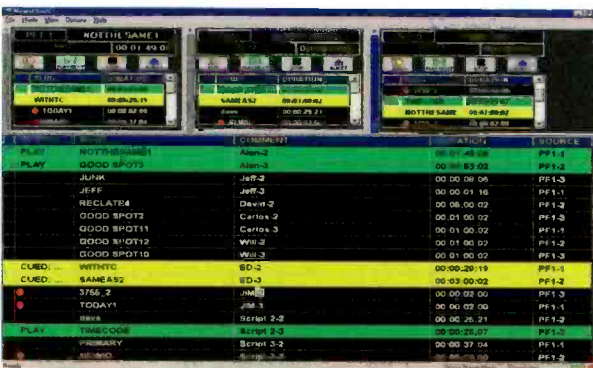
Provides support for analog as well as digital signals; allows you to mix and match analog audio, AES and time code in the same frame; a single NV7256-Plus frame supports matrix sizes up to 256x256; multiple frames may be linked together to build larger systems; expansion is linear. ■

**MONITORING SYSTEM****TEKTRONIX WVR600 SERIES RASTERIZER**503-627-7111; [www.tektronix.com](http://www.tektronix.com)

Monitors both analog and digital video signals in an advanced all-digital architecture; offers high-resolution output to external displays; includes two SD SDI inputs and two audio inputs (analog and/or AES/EBU). ■

**Product Source****SPORTS CONTROLLER****DNF CONTROLS DMAT-0**818-898-3380; [www.dnfcontrols.com](http://www.dnfcontrols.com)

Designed for Odetics protocol-based video servers; allows users to assign playout speed for every element in their highlight list; access up to four record trains for the creation of clips and highlight lists. ■

**NEWS AUTOMATION****CRISPIN NEWSPLAYX**919-845-7744; [www.crispincorp.com](http://www.crispincorp.com)

Works in conjunction with news automation systems including Avid's iNews, AvStar and a MOS interface with AP's ENPS; translates the rundown and controls video servers, switchers and tape machines. ■

**DIGITAL COMPOSITING SYSTEM****ULTIMATE ULTIMATTE 10**818-993-8007; [www.ultimate.com](http://www.ultimate.com)

Automatically calculates optimum matte settings upon backing color selection; features include an eight-input router, full RGB foreground and background color controls. ■

**CONTROL PANEL****VISTEK V1602**973-313-6416; [www.vistek.tv](http://www.vistek.tv)

Can be controlled externally; all parts of the panel provide continuous status monitoring; any error conditions can be immediately flagged; alarms can be configured to suit user requirements. ■

**ANALOG CODER****NUCOMM ANALOG CODER**908-852-3700; [www.nucomm.com](http://www.nucomm.com)

Extends the use of analog microwave systems into the digital domain; once upgraded, the system will support a variety of digital signal and data rates from 1Mb/s to 30Mb/s, including SMPTE-310, DVB-ASI and a T1 Data Pack. ■

**MICROWAVE ANTENNAS****RADIO FREQUENCY SYSTEMS COMPACTLINE**203-630-3311; [www.rfsworld.com](http://www.rfsworld.com)

Range now includes a four-foot antenna to be used for point-to-point applications; incorporates all the standard features of the company's single and dual polarized CompactLine ranges. ■

**SOFTWARE-ONLY MEASUREMENT PACKAGE****HAMLET VIDSCOPE**+44 1494 793763; [www.hamlet.co.uk](http://www.hamlet.co.uk)

Designed for the desktop editing market; provides real-time precise waveform and vectorscope displays of DV video, and level and phase displays of embedded audio. ■

**DIGITAL AUDIO MIXING CONSOLE****EUPHONIX NEW SYSTEM 5-B**650-855-0400; [www.euphonix.com](http://www.euphonix.com)

Upgraded software increases capacity from 72 to 96 digital channels using a single DSP core; includes a dedicated mix-minus bus with single-button-press mix-minus outputs and talkback from each channel. ■

**WAVEFORM MONITOR SERIES****TEKTRONIX WFM700**503-627-7111; [www.tektronix.com](http://www.tektronix.com)

Advanced video measurement tools for production, post-production, distribution and transmission of HD and SD content. Features an optional audio monitoring module to validate standards and document compliance. ■

**VIRTUAL TELEVISION PRODUCTION SYSTEM****RADAMEC SCENARIO-XR**877-RADAMEC; [www.RadamecBroadcast.com](http://www.RadamecBroadcast.com)

Renders ray-traced virtual studios in real time; allows the virtual and real video world to be mixed seamlessly in real time; enables real-time control of lighting, transparency and color. ■

**VIRTUAL TELECINE****VIDEO DESIGN RESEARCH LUCI AND RICKI**416-538-1775; [www.videodesignresearch.com](http://www.videodesignresearch.com)

Virtual telecine comprised of Cintel's primary and secondary color corrector (LUCI) and Video Design Research's HD-DDR (Ricki); combination reduces the time needed on the telecine by one-fourth. ■



# WHEN YOU'RE LOOKING FOR

# THE "LITE" TOUCH

## Make PESA's MCLite Master Control Your Choice for SD Operations.

Master Control has become one of the fastest evolving areas in the modern broadcast plant. The PESA MCLite Digital Master Control Switcher, with its flexible and open architecture, has been developed to fulfill the needs of all present and future requirements.

The MCLite is a compact, low-cost, multi-channel SDTV Master Control Switcher available with a wide range of processor and control panel options. Multi-channel, multi-format and centralcasting operations benefit from the modular nature of the MCLite, allowing each channel to be fitted with just the appropriate amount of processing power. Multiple processors and control panels can be arranged in any combination, with up to 16 channels being controlled all from a single control panel or from station automation.

### FEATURES

- Multi-Channel SDTV Operation
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**CODEC**

**AUDIO PROCESSING TECHNOLOGY  
WORLDNET MILANO**

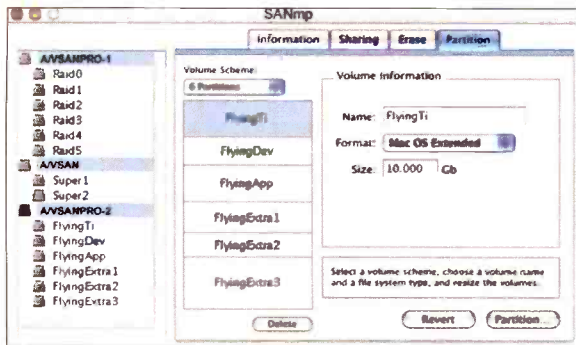
+028 9037 1110; [www.aptx.com](http://www.aptx.com)

Multi-algorithm ISDN codec for broadcast, post production and voice-over applications; provides connectivity with APT codecs including WorldNet DSM100/Pro-Link, DRT128 and BCFs. ■

**MANAGEMENT AND  
SHARING SOFTWARE**

**STUDIO NETWORK SOLUTIONS  
SANMP**

877-537-2094;  
[www.studionetworksolutions.com](http://www.studionetworksolutions.com)



Allows workstations with different operating systems to concurrently access info. from a storage area network; does not require a server or Ethernet connection; can configure, manage, share and access SAN resources. ■

**DIGITAL SOLID-STATE  
UHF TRANSMITTER**

**LARCAN MAGNUM**

905-564-9222; [www.larcan.com](http://www.larcan.com)

Offers 2.5KW to 20KW of power; features include a fully redundant design, intuitive advanced diagnostics and an extensive monitoring system designed to simplify maintenance. ■

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Why are you paying to have your patchbays wired to DA frames? Do you know there is a product that eliminates that step? PatchAmp Distribution Systems are specifically designed to cut out the labor of wiring jacks to DA's.

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FIBER CABLES**

**GEPKO HDC120 SERIES**

847-795-9555; [www.gepco.com](http://www.gepco.com)



Consists of the HDC120 and HDC120PU; designed for SMPTE 311M HD camera applications; both feature an increased overall diameter, larger gage copper conductors, and Kevlar-reinforced and tube-jacketed single-mode fibers for durability. ■

**INTERACTIVE SERVICE**

**NDS VALUE@TV**

949-725-2500; [www.nds.com](http://www.nds.com)

Tools and applications offer users interactive services including sports, t-commerce, gaming, voting and enhanced TV; provides stand-alone applications and enhanced content to help users increase average revenue per user, retain users and increase ratings. ■

**SERVER EXPANSION SYSTEM**

**MASSTECH MASSEXPAND**

321-255-3653; [www.masstechgroup.com](http://www.masstechgroup.com)

This hardware and software platform expands disk-to-disk storage of digital content for content-delivery systems and video servers; features more than 1.4TB of RAID 5 storage on a 1RU chassis. ■

**MULTI SDI MONITOR**

**LEADER INSTRUMENTS  
LV 5700**

714-527-9300; [www.LeaderUSA.com](http://www.LeaderUSA.com)

Features an XGA TFT color LCD; tests 14 HD-SDI and SD-SDI formats with digital processing compliant to SMPTE 259M, SMPTE 292M anleaderd SMPTE 296M; automatically detects input format and colorimetry. ■

**MULTIPLEXER**

**OPTICOMM DIGIBAND  
DVX-5400**

858-450-0143; [www.opticomm.com](http://www.opticomm.com)

Multiplexer uses time-division multiplexing (TDM) to transmit four channels of uncompressed serial digital video across one laser; delivers a payload of 270Mb/s for each channel, or a net payload of 1.080Gb/s. ■

**HD SET-TOP BOX**

**PIONEER VOYAGER 3501HD**

310-952-2799; [www.pioneerelectronics.com](http://www.pioneerelectronics.com)

Enables cable customers to view HD programs in all 16 ATSC formats supported by the cable industry, including 720p and 1080i, in both 4:3 and 16:9 aspect ratios. ■

**VIDEO STABILIZER**

**FOR-A IVS-500 AND IVS-300**

714-894-3311; [www.for-a.com](http://www.for-a.com)

IVS-500 provides digital input and output; IVS-300 provides analog composite I/O; both correct picture shake and judder while preserving intentional camera movements. ■

**DIGITAL VIDEO ROUTER**

**NVISION NV8256-PLUS**

530-265-1000; [www.nvision1.com](http://www.nvision1.com)

A unique architecture and a high density 256x256 crosspoint module enables new 256x256 system to expand to 512x512 without DAs or secondary switching. ■

**AUDIO, VIDEO AND  
DATA TRANSPORT**

**HARRIS NETVX**

513-459-3400; [www.harris.com](http://www.harris.com)



One-box solution used to transport audio, video and data; supports IP routing, ATM switching, E-3 and DS-3 microwave transport and more, simultaneously. ■

**COAX CAMERA CONTROL SYSTEM**

**TELEMETRICS COAX-LINK**

201-848-9818; [www.telemetryinc.com](http://www.telemetryinc.com)

Uses the common RG-59 coax cable to link the camera and base station; provides video transmission with return monitor video to the camera, camera controls, program audio, intercom transmission, and IFB talent feedback. ■

**STORAGE SYSTEM**

**SUN MICROSYSTEMS STOREDGE  
9000 SERIES**

800-555-9SUN; [www.sunmicrosystems.com](http://www.sunmicrosystems.com)

Series includes the Sun StorEdge 9970 and 9980 systems; optimized for the Solaris operating environment; certified for Sun Cluster 3.0. ■

**MICROPHONE**

**SENNHEISER MKH418S**

860-434-9190; [www.sennheiserusa.com](http://www.sennheiserusa.com)

Allows adjustable M-S stereo imaging via an independent dual capsule system; documents directional information for use in future stereo mixes. ■



## HYBRID EDITING SYSTEM

**EDITWARE FASTRACK SE**  
530-477-4300; [www.editware.com](http://www.editware.com)

New editing option adds classic linear-style display next to the standard graphical timeline display; allows edits to be created or modified using linear-style keystroke functions while the timeline display updates instantly. ■

## AUDIO TRANSCODER

**PIXEL INSTRUMENTS UMAT-1200**  
408-871-1975; [www.pixelinstruments.tv](http://www.pixelinstruments.tv)



Provides reference-quality A/D and D/A conversion, digital sample rate conversion and audio monitoring through internal speakers and external headphones; stereo analog, AES/EBU balanced digital, SMPTE unbalanced digital and S/PDIF inputs and outputs are standard. ■

## ACTIVE SUBWOOFERS

**GENELEC LSE SERIES**  
508-652-0900; [www.genelec.com](http://www.genelec.com)

Incorporate built-in 6.1 bass management and an extended frequency range for multichannel playback environments; series includes 8", 10", 12" and dual-driver 12" models (pictured: the 7071A model). ■

## CHARACTER GENERATOR

**PINNACLE DEKO 1000**  
650-526-1600; [www.pinnaclesys.com](http://www.pinnaclesys.com)

Single-channel CG suited for local broadcasters or larger facilities needing additional Deko seats; delivers layer-based motion controls; supports optional ClipDeko internal clip player and the new DekoObjex option. ■

## REPLAY AND EDITING SERVER

**EVS LSM-XT**  
973-575-7811; [www.evs.tv](http://www.evs.tv)

Records super-motion sequences and normal video feeds simultaneously in uninterrupted loop-mode; allows up to four operators to carry out smooth replays instantly and edit with wipe and dissolve effects. ■

## FINISHING SOFTWARE

**MEDIA 100 844/X VERSION 2**  
800-773-1770; [www.media100.com](http://www.media100.com)

Features new tool sets for unlimited-layer compositing, editing and audio; new color correction tool set enables users to view and interactively adjust and match the color values of clips instantly and accurately. ■

## CONVERTER

**MAGNI SYSTEMS MCP-601**  
503-615-1900; [www.magnisystems.com](http://www.magnisystems.com)

First in the MagniCoder Premier line; seamlessly overlays high-resolution computer DVI/XGA standard content onto an incoming SDI 601 or analog signal. ■

## BATTERY CHARGER

**ASPEN ELECTRONICS ASPEKT**  
860-489-1193; [www.aspenelectronics.com](http://www.aspenelectronics.com)

New line of chargers addresses Aspen V-mount batteries, Aspen's Nexus system or standard NP batteries of any manufacturer; state-of-the-art charge programming; features AllChem capability and simultaneous charging. ■

## UHF RECEIVER

**AKG SR 4000**  
615-620-3800; [www.akgusa.com](http://www.akgusa.com)

Wideband diversity frequency-agile UHF receiver; offers maximum dynamic range; features a backlit display and jog wheel; also includes a data-encrypted Pilot Tone decoder unit. ■

## NTP TIME SERVERS

**ESE NTP TIME SERVERS**  
310-322-2136  
[www.ese-web.com](http://www.ese-web.com)



Allow users to put time information onto a network; when the time server is plugged into the network and configured, any client on the network can request time. ■

## MASTER CONTROL PANEL

**UTAH SCIENTIFIC MC-2020**  
801-575-8801; [www.utahscientific.com](http://www.utahscientific.com)

Fully compatible with all previous generations; features multiple keys, internal DVE options, embedded audio operation and multichannel support; compatible with the MC-500 series. ■

## PC DATA LINK

**NEUTRIK MINILINK**  
732-901-9488; [www.neutrik.com](http://www.neutrik.com)

Field-retrofitable link enables PC-based communications between Minilyzer and Digilyzer; consists of a small plug-in USB communications interface board that can be retrofitted inside all Minilyzers and Digilyzers. ■

## SYNC GENERATOR

**DK AUDIO PTV PT5202**  
800-421-0888; [www.dk-audio.com](http://www.dk-audio.com)

Compact VariTime sync generator includes all features necessary for professional sync, timing and test signals in one half-sized box; front panel controls enable users to operate the sync generator without a PC. ■

## SYSTEMS INTEGRATION SERVICES

**THE SYSTEMS GROUP**  
201-795-4672; [www.tsg-hoboken.com](http://www.tsg-hoboken.com)

Consults, designs, engineers and integrates electronics for modern broadcasting facilities; has completed multichannel origination and master control consolidation projects. ■

## DIGITAL IOT TRANSMITTER

**AXCERA VISIONARY DT**  
724-873-8100; [www.axcera.com](http://www.axcera.com)



Uses a DT2B-based exciter driving LDMOS IPAs for continuous linear and nonlinear adaptive pre-correction; exciter can be locked to any precision 10MHz standard for a  $\pm 2$ Hz frequency stability. ■

## DVB-MHP MIDDLEWARE

**ALTICAST ALTICAPTOR**  
512-225-6665; [www.alticast.com](http://www.alticast.com)

Capable of running on existing set-top boxes; includes an optimized pJava-based Java Virtual Machine; supports major chipsets and major RTOS; offers a small DRAM and Flash footprint. ■

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## HD SET-TOP BOX

## SCIENTIFIC-ATLANTA EXPLORER 3250HD

770-236-6190; [www.scificatlanta.com](http://www.scificatlanta.com)

Features more audio options, and new stretch and zoom capabilities for HDTVs; utilizes a 166MHz processor; provides 40MB of application and program memory to manage multiple tasks and applications. ■

## SERVER UPGRADE

## QUVIS QUBIT MODEL ST

785-272-3656; [www.quvis.com](http://www.quvis.com)

Features 50 video/graphics formats; includes QSDTI, a new high-speed media transport interface; redesigned audio processing architecture; hot swappable drive support; two front removable drives. ■

## 8-VSB DEMODULATOR

## TANDBERG TELEVISION TT6330 MEDIALINK

407-380-7055; [www.tandbergtv.com](http://www.tandbergtv.com)

Demodulates off-air 8-VSB signals into individual ASI streams for remultiplexing and remodulation prior to transport through a cable network; features multichannel capacity. ■

## DATACASTING SYSTEM

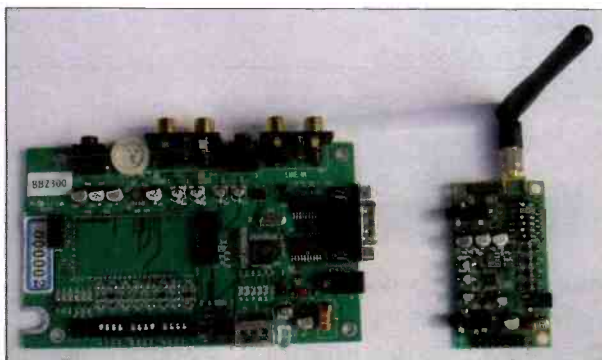
## TRIVENI DIGITAL SKYSCRAPER

609-716-3500; [www.TriveniDigital.com](http://www.TriveniDigital.com)

Platform for managing data to be broadcast through the digital television infrastructure; new features for receiver targeting, encryption and support for multi-station networks provide increased opportunities for broadcasters, and content providers to design and deploy innovative, revenue-generating solutions using digital television. ■

## AUDIO MODULE

## AUDIO PROCESSING TECHNOLOGY APT-X MODULE

+028 9037 1110; [www.aptx.com](http://www.aptx.com)

Utilizes 2.4GHz Bluetooth; designed to offer third-party manufacturers a module for wireless speaker, headphone, microphone, in-ear monitoring and PA systems; offers 20kHz bandwidth at a sub five-millisecond delay; additional features includes reverse control channel, forward error protection and adaptive frequency hopping. ■

## STUDIO EDITING VTR

## SONY ELECTRONICS SRW-5000

201-930-1000; [www.sony.com/professional](http://www.sony.com/professional)

Can record and play back the 1920x1080 HD format at 23.98p, 24p, 25p, 30p, 50i or 59.94i; can also record and play back the 1280x720@59.94p HD format; can play back all existing HDCAM tapes; captures all of these formats at 10-bit depth, records 12 channels of 24-bit audio; features dynamic tracking playback, pre-read, and edit confidence and record monitoring. ■

## PHANTOM POWER TESTERS

## CANFORD P-48 AND PHANTOM TONE GENERATOR

+44 191 418-1000; [www.canford.co.uk](http://www.canford.co.uk)

Delivers up to 48TB of data per library at an unprecedented 400MB/s; Each library can sustain up to a maximum of 400MB/s of I/O compared with tape speeds of 20MB/s; the self-monitoring analysis and reporting technology (SMART) tool helps avoid data loss by serving as an early warning system to disk failure; available in three basic configurations. ■

## CONTENT MANAGEMENT SYSTEM

## PANASONIC DCM SOLUTION

201-392-4127; [www.panasonic.com](http://www.panasonic.com)

Expanded digital content management powered by SISCOM software; features Windows Media 9 encoding/decoding; system provides proprietary digital logging and retrieval platform. ■

## MODULAR DVR

## LEITCH NEO VR

757-548-2300; [www.leitch.com](http://www.leitch.com)

Full-featured modular digital video recorder packaged on a single, space-saving module; equipped with dual fixed onboard hard drives, can record a total of four hours of high-quality programming; up to 12 units to be housed in a single frame. Supporting industry-standard control protocols, the NEO VR operates with existing VTR control panels. ■

## TRANSPORT STREAM MONITOR

## SENCORE TSM 1770

605-339-0100; [www.sencore.com](http://www.sencore.com)

Performs confidence monitoring of up to four transport streams in real time; can analyze individual streams up to 213Mb/s with a maximum total bandwidth of 320Mb/s. ■

## NEWSROOM SYSTEM

## AVID INEWS

978-640-6789; [www.avid.com](http://www.avid.com)

Offers advanced machine control, the ability to store CGs with the script, and the synchronicity of words with pictures inside NewsCutter and Media Browse systems; ControlAir system controls up to 32 on-air playback devices. ■

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\*2002, Paramount Research Study, World Edition.

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## MSDC IOT TRANSMITTER

### AI QUANTUM

888-881-4447; [www.acrodyne.com](http://www.acrodyne.com)



Offers a single-cabinet version for power levels up to 30kW; Remote Parameter Monitoring and Control system (RPM) allows monitoring through a standard Internet connection. ■

## VIDEOTAPE RECORDER

### PANASONIC AG-DV2500

201-392-4127; [www.panasonic.com](http://www.panasonic.com)



Studio or portable VTR, suitable for IEEE-1394-based nonlinear editing applications; offers playback compatibility with 1/4-inch-tape-based DV compression video formats and can operate in both NTSC and PAL television standards; can either be AC- or DC-powered, and records on miniDV cassettes or full-sized DV cassettes without the need for an adaptor; the maximum recording time is 276 minutes on a single cassette. ■

## DIGITAL AUDIO ROUTER

### AUDIOARTS ENGINEERING ADR-32

252-638-7000; [www.wheatstone.com](http://www.wheatstone.com)



Compact rackmount digital audio router features front-panel X-Y control and a built-in monitor speaker; designed to interface with Wheatstone and Audioarts digital console source display strips; can be populated with modular I/O cards for up to 32x32 matrix; two RS-485 ports provide links for communications, consoles and automation systems; optional event scheduler software available. ■

## DV DISK RECORDER

### FOCUS ENHANCEMENTS FIRESTORE DR-DV5000

408-866-8300; [www.focusinfo.com](http://www.focusinfo.com)



Up to six hours of DV video can be recorded to a single removable disk drive; unit weighs two pounds and mounts directly between the video camera body and battery system. ■

## MASTER SYNC/CLOCK GENERATOR

### EVERTZ 5600MSC

905-335-3700; [www.evertz.com](http://www.evertz.com)

Provides a range of synchronizing signals and locks the in-house master clock system to the master video sync pulse generator; six independently phasable reference outputs and two independent LTC time code outputs. ■

## GALLERY

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and NTP  
and 10MHz  
and...

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Inputs: GPS, N-SC/PAL Reference, 10-MHz, Dial-up

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Automatic Changeover 5600ACO

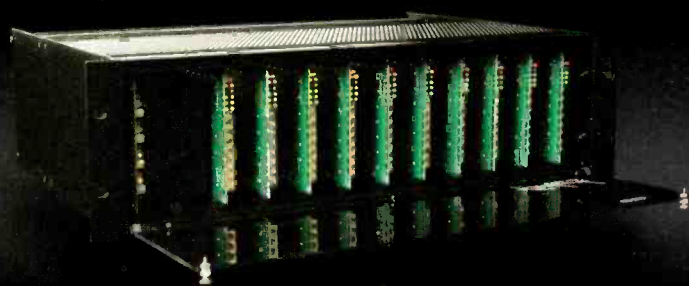
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- Tri-level 1080p/24
- Tri-level 1080i/59.94
- Tri-level 1080p/23.98f
- Tri-level 720p/59.94
- Tri-level 1080p/25
- Bi-level PAL-B
- Tri-level 1080p/23.98
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**ASSET MANAGEMENT SOFTWARE**

**CHYRON PRO-BEL MAPP ASSET MANAGEMENT**

631-845-2000; [www.chyron.com](http://www.chyron.com)



Software suite has been extended to support distributed broadcast models such as centralcasting; media and metadata can be transferred between multiple MAPP systems and third-party management products; system now checks quality of material automatically during acquisition. ■

**SDI SYNCHRONIZER/LLEGALIZER**

**FORTEL DTV FS-415**

770-806-0234; [www.fortelDTV.com](http://www.fortelDTV.com)

For applications in which analog I/O is not needed; features a modular design and up to nine AV synchronizers or 18 video-only in one 4RU frame with redundant power supplies. ■

**ROBOTIC CAMERA CONTROL**

**VINTEN AUTOCAM CONTROLLERS**

888-284-6836; [www.vinten.com](http://www.vinten.com)

Series 200 controllers enable control of from eight up to an unlimited number of cameras; PCS-125 controller is an entry-level single-camera mobile software control solution for any Windows-based PC or laptop. ■

**CONSULTING SERVICES**

**DIELECTRIC COMMUNICATIONS**

207-655-4555; [www.dielectric.com](http://www.dielectric.com)

Designs, engineers and manufactures broadcast antennas for DTV and NTSC, FM antennas, combiners, switches, transmission lines, waveguides and dehydrators; provides custom solutions for its customers' unique requirements. ■

**SIGNAL PROCESSING PRODUCTS**

**NETWORK ELECTRONICS CONQUER**

631-928-4422; [www.network-electronics.com](http://www.network-electronics.com)

A new line synchronizer, video delay, multiplexer and serial digital video DAs complement A/D and D/A video and audio converters, embedders, de-embedders, frame synchronizers, DAs, and video and audio delays. ■

**EDITING SYSTEM**

**QUANTEL EQ**

203-972-3199; [www.quantel.com](http://www.quantel.com)



Resolution Coexistence allows material of any resolution, color space and bit depth to be loaded without the need to restart or partition the disk; timeline interface provides easy access to editing tools; comes with RAID disk protection; supports 16-bit processing with Quantel's Dynamic Rounding. ■

**CINE-STYLE ZOOM LENS**

**FUJINON HA13X4.5B**

973-633-5600; [www.fujinon.com](http://www.fujinon.com)

Features a 4.5mm focal length at its widest end; provides a 93.6-degree horizontal field of view and focus rotation up to 280 degrees for easier and more exact focusing, with little focus breathing. ■

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ARRI	21	845-353-1400	<a href="http://www.arri.com">www.arri.com</a>
Axcera	15	724-873-8100	<a href="http://www.axcera.com">www.axcera.com</a>
Benchmark Media Systems	33	800-262-4675	<a href="http://www.benchmarkmedia.com">www.benchmarkmedia.com</a>
BTX	31	800-666-0996	<a href="http://www.btx.com">www.btx.com</a>
Canon USA Broadcast Lens	9	800-321-HDTV	<a href="http://www.canonbroadcast.com">www.canonbroadcast.com</a>
ESE	27	310-322-2136	<a href="http://www.es-web.com">www.es-web.com</a>
Evertz Microsystems	33	905-335-3700	<a href="http://www.evertz.com">www.evertz.com</a>
Harris Corp., Broadcast Div.	3	800-4HARRIS	<a href="http://www.harris.com">www.harris.com</a>
Lectrosonics	17	800-821-1121	<a href="http://www.lectrosonics.com">www.lectrosonics.com</a>
Leitch	BC	800-231-9673	<a href="http://www.leitch.com">www.leitch.com</a>
Patchamp	30	201-457-1504	<a href="http://www.patchamp.com">www.patchamp.com</a>
PESA Switching Systems	29	631-845-5020	<a href="http://www.PESA.com">www.PESA.com</a>
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Switchcraft	35	773-792-2700	<a href="http://www.switchcraft.com">www.switchcraft.com</a>
Technical Operations	33	212-465-1318	<a href="http://www.tech-ops.com">www.tech-ops.com</a>
Thomson Grass Valley	11	800-998-3588	<a href="http://www.thomsongrassvalley.com/newsproductions">www.thomsongrassvalley.com/newsproductions</a>
Utah Scientific	19	801-575-8801	<a href="http://www.utahscientific.com">www.utahscientific.com</a>
Videotek	13	800-800-5719	<a href="http://www.videotek.com">www.videotek.com</a>
Wheatstone	IFC	252-638-7000	<a href="http://www.wheatstone.com">www.wheatstone.com</a>
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Video Patchbay

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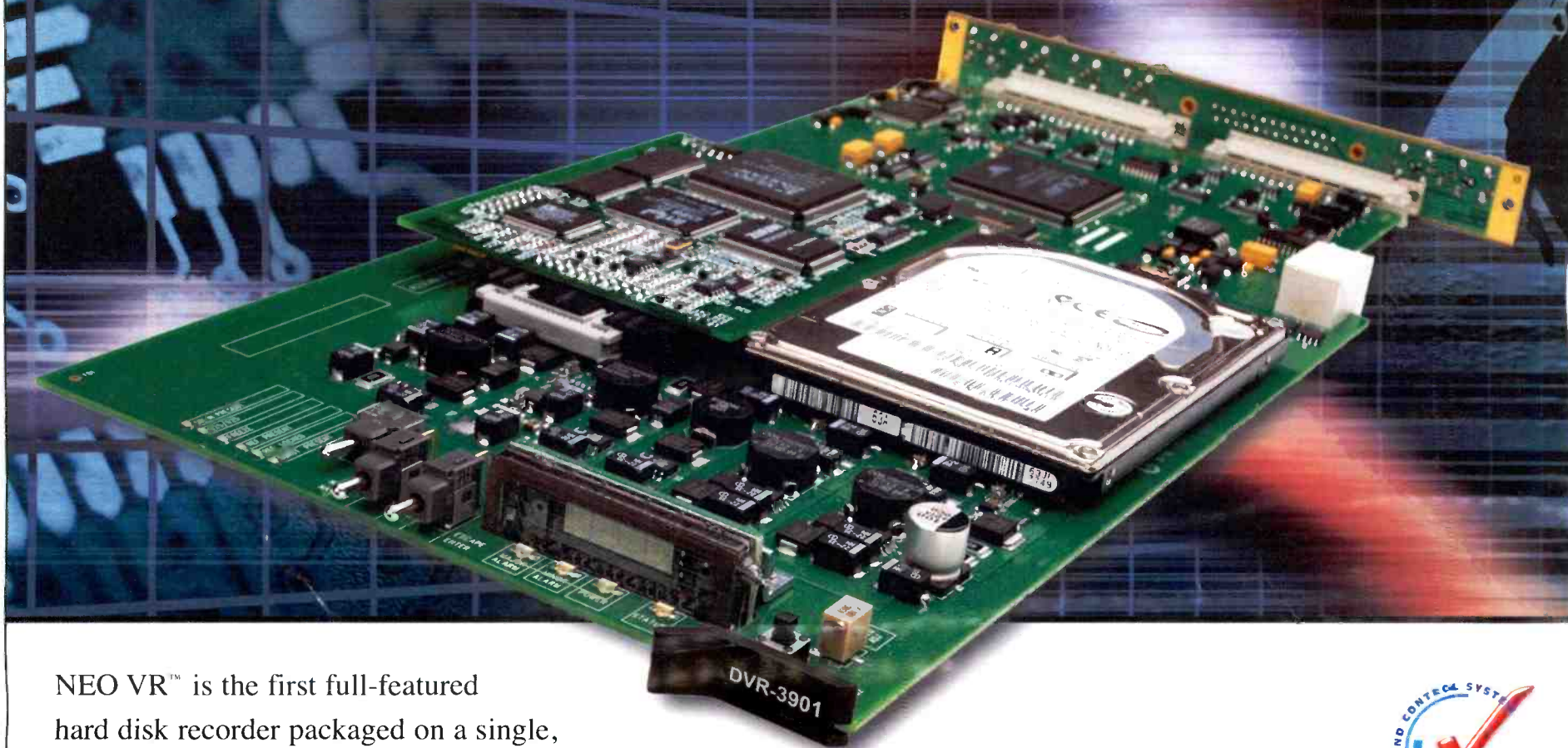
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