

2002 PRODUCT SOURCE

Hot new products from NAB2002



See why hundreds of users
worldwide have chosen Duet

Duet®: The New Standard

- Scalable from PCI board sets to full function CGs
- Award-winning Lyric® content creation and playout
- Native iNFiT!® compatibility
- Import multiple file formats without conversion
- Networking and centralized graphics



We've Got What You Want

It's New. It's Wheatstone. It's **DIGITAL!**

The **D-5.1** Live Television Console



 **Wheatstone**
tel 252-638-7000 / www.wheatstone.com

copyright © 2002 by Wheatstone Corporation

Harris Offers You More

Harris transmitters give you more ways to start and complete your transition to digital TV. So regardless of the path you take, Harris has the right solutions for your journey. Plus, Harris has more trained, experienced service people than anyone else in broadcasting. Which means more peace-of-mind today and tomorrow.



MORE POWER

MORE EFFICIENCY

MORE SOLUTIONS

MORE SUPPORT

MORE UP TIME

More Value. No one delivers higher reliability, legendary 24/7 service, enhanced operating efficiency and greater long-term capability. In short, there is no better value than TV transmitters from Harris.

More Confidence. Harris leads the industry in digital broadcasting. And because Harris builds every transmitter with the future in mind, the system you buy today will serve you well for years to come.

There's much more to the Harris value story, of course. So contact your Harris representative today for all the facts.

next level solutions

SERVICE

SYSTEMS

AUTOMATION

TRANSMISSION

www.broadcast.harris.com

HARRIS

We deliver!

The hottest Product Source in the industry is in your hands. *Broadcast Engineering* editors work hard to provide you more new product and company information than any other source. Even so, we can highlight but a fraction of all the new products that are introduced each year. And, coming off this year's quite successful NAB convention, there's even more to talk about.

To help you discover all the new technology available for broadcast and production applications, *Broadcast Engineering* editors have gathered together almost 300 new products showcasing the latest in technology and services. From cameras to transmitters and everything in between, the solutions to your problem probably lie just ahead.

Each new product contains company contact details, so you can follow up with questions or request more information. And we'll post the *Broadcast Engineering Product Source* on the Web site for your yearlong reference.

The products shown here were assembled from 700 vendors at this year's NAB convention and, for many, represent the first time they've been seen in *Broadcast Engineering* pages. We know it's impossible to see everything at NAB, so just relax and let our editors help. Read on. Hundreds of solutions are just pages away.

Brad Dick
Brad Dick, Editor

Editorial Director:
Brad Dick
International Editor:
Jerry Walker
Technical Editor:
Donald Keller
Sr. Assoc. Editor:
Susan Anderson
Assoc. Editor:
Laura Collins
Asst. Editor:
Chevonn Payton
Asst. Editor:
Elizabeth Wakeman
Senior Art Director:
Michael J. Knust
Assoc. Art Director:
Robin Morsbach
Technical Consultants:
Computers & Networking – Brad Gilmer
Antennas/Radiation – John H. Battison
Digital Video – Michael Robin
Transmission Facilities – Donald L. Markley
Legal – Harry C. Martin
New Technology – John Luff
News Technology Editor – Larry Bloomfield
Industry Watcher – Paul McGoldrick
New Media – Craig Birkmaier
International Technology – Sypha
VP:
Peter May
Publisher:
Dennis Triola
Marketing Dir.:
Christina Heil
VP, Production:
Thomas Fogarty
VP, Mktg/Comm.:
Karen Garrison
Sr. Ad Prod. Coord.:
Sonja Shaffer
Sr. Dir. of Production:
Curt Pordes
Classified Ad Coord.:
Mary Mitchell
VP, Audience Dev.:
Christine Oldenbrook
Audience Marketing Dir.:
Sheri Gronli
Audience Marketing Mgr.:
Gayle Grooms

Primedia Inc.
Chairman & CEO:
Tom Rogers
Vice Chairman & General Counsel:
Beverly Chell
President:
Charles McCurdy

MEMBER ORGANIZATIONS
Sustaining Members of:
• Society of Broadcast Engineers
• Society of Motion Picture and TV Engineers
Member, American Business Media; Member, BPA International



BROADCAST ENGINEERING, ISSN 0007-1994, is published monthly by PRIMEDIA Business Magazines & Media Inc., 9800 Metcalf Ave., Overland Park, KS 66212 (primediabusiness.com). Current and back issues and additional resources, including subscription request forms and an editorial calendar, are available on the World Wide Web at broadcastengineering.com.

SUBSCRIPTIONS: Non-qualified persons may subscribe at the following rates: United States and Canada; one year, \$65.00. Qualified and non-qualified persons in all other countries; one year, \$80.00 (surface mail); \$145.00 (air mail). Subscription information: P.O. Box 12937, Overland Park, KS 66282-2937.

ARCHIVES AND MICROFORM: This magazine is available for research and retrieval of selected archived articles from leading electronic databases and online search services, including Factiva, LexisNexis and Proquest. For microform availability, contact ProQuest at 800-521-0600 or 734-761-4700, or search the Serials in Microform listings at proquest.com.

REPRINTS: Contact Wright's Reprints to purchase quality custom reprints or e-prints of articles appearing in this publication at 877-652-5295 (218-419-5725 outside the U.S. and Canada). Instant reprints and permissions may be purchased directly from our Web site; look for the iCopyright tag appended to the end of each article.

PHOTOCOPIES: Authorization to photocopy articles for internal corporate, personal, or instructional use may be obtained from the Copyright Clearance Center (CCC) at 978-750-8400. Obtain further information at copyright.com.

MAILING LISTS: Primedia Business makes portions of our magazine subscriber lists available to carefully selected companies that offer products and services directly related to the industries we cover. Subscribers who do not wish to receive such mailings should contact the Primedia Business subscriber services at 800-441-0294 or 913-967-1707.

CORPORATE OFFICE: Primedia Business Magazines & Media, 9800 Metcalf, Overland Park, Kansas 66212 • 913-341-1300 • primediabusiness.com
Copyright 2002, PRIMEDIA Business Magazines & Media Inc. All rights reserved.

PRIMEDIA

Business Magazines & Media

CEO: Timothy M. Andrews
President: Ronald Wall
COO: Jack Condon
Sr. VP, Integrated Sales: Dan Lovinger

Primedia Business to Business Group - 745 Fifth Ave., NY, NY 10151

President & CEO:
David Fern
Chief Creative Officer:
Craig Reiss
Creative Director:
Alan Alpanian

Customer Service: 913-967-1707 or 800-441-0294

Sales Offices

US/CANADA

WEST
Duane Hefner
(818) 707-6476; Fax: (818) 707-2313
dnhefner@pacbell.net

Chuck Bolkcom
(775) 852-1290; Fax: (775) 852-1291
chuckbolk@aol.com

EAST
Josh Gordon
(718) 802-0488; Fax: (718) 522-4751
jgordon5@bellatlantic.net

EAST/MIDWEST
Joanne Melton
(212) 462-3344; Fax: (212) 206-3618
joanne_melton@primediabusiness.com

INTERNATIONAL

EUROPE
Richard Woolley
+44-1295-278-407
Fax: +44-1295-278-408
richardwoolley@compuserve.com

EUROPE
Tony Chapman
+44-1635-578-874
Fax: +44-1635-578-874
ARCintect@aol.com

ISRAEL
Asa Talbar
Talbar Media
+972-3-5629565; Fax: +972-3-5629567
talbar@inter.net.il

JAPAN
MediaHouse Inc.
+81-3 3222-7811; Fax: +81-3 3234-1143
mediahouse@mediahs.com

CLASSIFIED ADVERTISING OVERLAND PARK, KS
Jennifer Shafer
(800) 896-9939; (913) 967-1732
Fax: (913) 967-1735

REPRINTS
Statistics
(203) 778-8700; Fax: (203) 778-4839

A supplement to *Broadcast Engineering* - June 2002

2002 PRODUCT SOURCE

Hot new products from NAB2002

1

2

3

4

5

6

On the cover

- | | |
|--|---------------------------------------|
| 1 Frezzi Energy Systems
Micro-Sun Gun HMI | 4 Axcera Innovator DT VHF |
| 2 Wheatstone TV-80 | 5 Snell & Wilcox Archangel |
| 3 Medea VideoRaid RTS | 6 Leitch dpsVelocity 8.0 |

PESA's New master control solution

To demonstrate its commitment to the broadcast industry, PESA has developed the new MC-Lite Master Control Switching solution. This new system is a compact, low-cost, multi-channel SDTV Master Control Switcher and is available with a wide range of processor and control panel options. Multi-channel, multi-format and central casting operations benefit from the modular nature of the MC-Lite, allowing each channel to be fitted with only the appropriate amount of processing power required. Multiple processors and control panels can be arranged in any combination, and up to 16 channels can be controlled from a single control panel or from station automation. With the increased reliance on station automation in today's broadcast plant, a choice of manual control panels are available, each with increasing levels of functionality to reduce the replication of existing in-plant systems such as machining control and signal monitoring.

PESA's UCI2000



PESA has recently expanded its UCI2000 product line to include another version of the multi-lingual Universal Control Interface. This new UCI2000P now provides protocol translation bi-directionally with Philips routing systems. Either a PESA or Philips control system can talk to a combination of matrices, helping to preserve any existing investments in routers when expanding with PESA routers. The UCI series also offers control interfacing to DiTech and SONY products, with other interfaces currently in development.

PESA's Ocelot 8x8



Building off of the successful Ocelot line of routing switchers, PESA now offers the Ocelot OC88HD. This high definition routing switcher is configured for eight (8) input and eight (8) outputs and is perfect for the economical transition to HD.

PESA's Cheetah

The new Cheetah is a full feature digital routing switcher with the power to handle SDI and HDTV, as well as other non-standard digital signals, in the same frame. Both copper and fiber input and output modules are available for maximum flexibility and four standard frame sizes are offered, the 64x64, 128x128, 256x256 and the 512x512.



PESA's Signal Conversion Cards

PESA introduced two new modular conversion cards for the VDA3100 product line. The VADD3101-10 provides excellent 10bit video A-D conversion from NTSC/PAL to serial digital component video and the VDAE3101-10 offers similar quality for 10bit serial digital D-A conversion to NTSC/PAL/RGB or YpbPr.

PESA's Family of Router Solutions

Tiger 144x144

Jaguar 64x64

Cheetah 512x512

128x128

256x256

16x16

Ocelot

32x32

Cougar



PESA Switching Systems, Inc. • 35 Pinelawn Road, Suite 99E • Melville, NY 11747 USA
 Tel: +1 (631) 845-5020 • (800) 328-1008 • Fax: +1 (631) 845-5023

CONTROL PANEL

Ross Video Synergy 100

Features 16 digital inputs, 10 source buttons with shift, "squeeze & tease" DVE effects and 3 axis joystick; includes 3 keyers, 2 chroma keyers, 8 aux buses, a disk drive and advanced DSK borders; has preview overlay, industry standard editor interface and free software upgrades from the world wide web.

613-652-4886; www.rossvideo.com



TV AUDIO PROCESSOR

Modulation Sciences msi 3300

All inputs and outputs are both digital and analog; includes an audio processor and an A/D / D/A converter; eliminates the need for external codes; features a bright fluorescent display; a single knob brings up all windows.

732-302-3090; www.modsci.com



MICRO LIGHTING KITS

Frezzi Energy Systems Micro-Sun Gun HMI

Includes a Micro-Light, battery, charger and battery pouch; all Micro-Lights includes a bulb and standard shoe mount; FNP-1S battery runs a Micro-Fill with a 35 watt bulb for more than 45 minutes and a 20 watt bulb for more than 75 minutes.

973-427-1160; www.frezzi.com

IMAGE PROCESSOR

Media 100 GenesisEngine

Features three silicon processors capable of processing 12 streams of uncompressed video simultaneously in real time; perform real-time effects operations and image processing functions with 10-bit or greater internal precision.

800-773-1770; www.media100.com

GRAPHICS SYSTEMS

Chyron Aprisa four-channel 200SX

Four-channel system with new SX graphics replay option; users can play back stills, text rolls, text crawls and animated flipbooks over a clip with audio and key.

631-845-2000; www.chyron.com



DIGITAL AUDIO MULTI-PAIR

Gepco 552624GFC

Joins the 5526GFC series of 110 Ω digital audio multi-pair; provides a convenient way to interconnect between digital audio consoles, recorders, processors and routers; features an exacting 110 Ω impedance, low jitter and attenuation, ease of termination, and flexibility.

847-795-9555; www.gepco.com



AUDIO RECORDER

360 Systems DigiCart-E

Networkable audio recorder operates at 16 or 24 bits and at all sample rates; features a large LCD display; files are compatible with earlier DigiCarts; editing tasks include trims, fades and level adjustments.

818-991-0360; www.360systems.com

AUDIO CONVERTER

SALZBRENNER STAGETEC TrueMatch Reference

Microphone Converter:

Features 28-bit resolution, with sample rates of up to 96 kHz; traces and eliminates all circuit-related inaccuracies; analog audio signals range between -128 and +22 dBu.

+49 95 45 4 40 300; www.stagetec.com



MICROPHONE

Audio-Technica AT3035

Part of Audio-Technica's new 30 series of microphones; large-diaphragm, side-address cardioid condenser microphone; features a flat, extended frequency response of 20 to 20,000 Hz, a professional shock mount and switchable low-frequency roll-off.

330-686-2600; www.audio-technica.com

DIGITAL AUDIO CONSOLE

Calrec Audio Alpha 100

Console provides 48 multitrack/matrix outputs, 20 auxiliary busses, eight audio groups and four main outputs; each track can be mono, stereo or surround.

+44 1422 842159; www.calrec.com

DIGITAL PRODUCTION MIXER

Studer Professional Audio Vista 7

Features Studer's Vistonics user interface, which integrates touch-sensitive rotary controls and buttons within a flat screen display; allows variations of control color and design; can be used in 48 kHz or 96 kHz mode; audio interfaces offer full 24-bit resolution.

818-841-4699; www.studer.ch

CONSOLE

Klotz Digital America VADIS 880

Mainframe designed for decentralized digital audio/media networking; accepts a wide variety of audio, data and DSP modules without limitation to inputs or outputs; worldwide platform to mixing console and control surface manufacturers serving the broadcast, audio recording, multimedia and sound reinforcement industries.

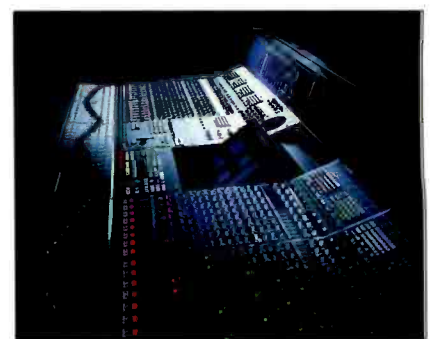
678-966-9900; www.klotzdigital.com

DIGITAL AUDIO MIXING SYSTEM

Euphonix System 5

Consists of the System 5-B digital broadcast console configured for live and live-to-tape production, the System 5-F digital film console configured with motion picture mixing in mind, the System 5-P digital post-production console configured for mixing audio for video, and the System 5-M music recording and mixing system configured for music and live applications.

650-855-0400; www.euphonix.com



BROADCAST CONSOLE

Solid State Logic Aysis Air Plus

Has built-in redundancy and security; features hot-swappable faders and is capable of expansion; includes reset capabilities and flexible stereo or 5.1 surround operation; has a 32-fader and channel strip.

212-315-1111; www.solid-state-logic.com

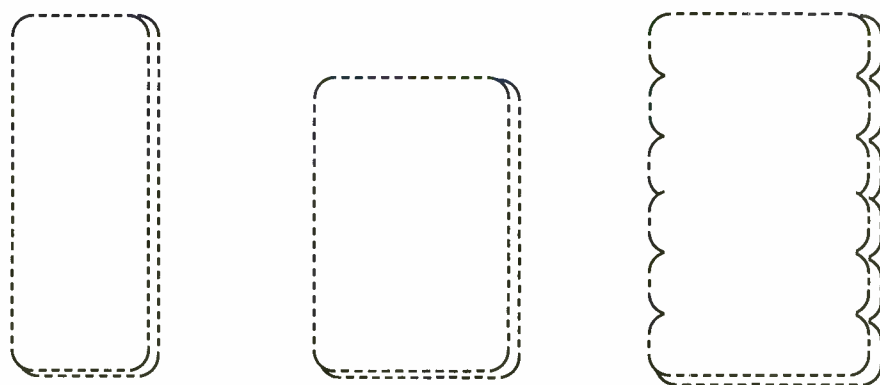
LOUDNESS METER

Dolby Laboratories LM100

This analysis tool provides a broadcast-friendly solution for measuring the loudness of content; enables broadcasters to eradicate the subjective loudness differences in their television audio; capable of accepting PCM, Dolby Digital (AC-3), Dolby E, analog and combined RF cable television signals.

415-558-0200; www.dolby.com

There are TWO ways to get a three year warranty:
Put THREE of yours here..



Or choose ONE of ours.



With Anton/Bauer you don't have to settle on one type of battery for your system. You can choose from the small economical ProFormer, the industry standard ProPac, the all purpose lightweight Trimpac or the highest performance, longest lasting battery available - the HyTRON 100.

And all come with the  3 year warranty.

Three years of guaranteed performance. Three years of the best technology and value. Think about how much you spend on three of your batteries. Think about your investment.

Then make your choice Anton/Bauer.

 **The worldwide standard[®]**

The power behind the best cameras capturing the best images in the world.SM

For information contact Anton/Bauer or any Anton/Bauer dealer or distributor worldwide.
Anton/Bauer, Inc. 14 Progress Drive, Shelton, Connecticut 06484 USA • (203) 929-1100 • Fax (203) 925-4988 • www.antonbauer.com
Anton/Bauer Europe, B.V. Eurode Business Center, Eurode-Park 1, 6461 KB Kerkrade, The Netherlands • (+31) 45 5639220 • Fax (+31) 45 5639222
Singapore Office - Anton/Bauer 6 New Industrial Road, # 02-02 Hoe Huat Ind. Bld., Singapore 536199 • (65) 62975784 • Fax (65) 62825235

DIGITAL AUDIO WORKSTATION

TASCAM SX-1:

Combines automated digital mixing, hard disk recording, MIDI sequencing, powerful editing, DSP plug-in technology and multiformat capabilities; offers complete surround sound mixing capabilities.

323-726-0303; www.tascam.com

AUDIO DESCRIPTOR

Eyeheight AD-2E

Provides full monitoring of the audio description source embedded in a serial digital interface signal; the audio occupies channels three and four within the digital video ancillary data space of the SDI data stream.

+44 1923 256 000; www.eyeheight.com

SWITCHER

Solid State Logic MT Version 6

Incorporates new channel and main busy dynamics options; features new digital algorithms and a selectable moving/non-moving fader control surface.

212-315-1111; www.solid-state-logic.com



HEADPHONES

Sennheiser HMD series

Lightweight designed 102dB SPL headphone monitoring system attenuates ambient noise by 32dB; features a super-cardioid microphone mounted on a flexible, acoustically isolated boom.

800-434-9190; www.sennheiser.com

DIGITAL PRODUCTION TOOL

Sony Electronics eVTR

A plug-in card that enables Sony MPEG IMX VTRs to connect to Gigabit Ethernet networks; can transfer video segments as files over IP networks to other MPEG IMX VTRs or servers anywhere in the world; also enables remote control of VTRs.

201-930-1000; www.sony.com/professional

MULTI-CHANNEL AUTOMATION CONTROL SYSTEM

OminBus Systems Colossus

Features 1000+ channels and assignable operator control; includes a timeline-based user interface, fast schedule editing and automatic error recovery; has a multiple operator-configurable data view.

530-470-1700; www.omnibus.tv



MINIATURE DIGITAL DOWNCONVERTER

AJA Video Systems HD10MD

Uses a 10-bit data path and multi-point interpolation; features HD-SDI input and two equalized loop-thru outputs; includes multi-standard input; is configurable for 16:9 or 4:3 output; has 4:3 safe-zone graticule.

800-251-4224; www.ajavideo.com

CONTENT PROTECTION SYSTEM

Irdeto Access Pisys

Provides conditional access and encryption key management functionalities for cable, satellite, and IP content providers; designed to meet the demanding needs of large-scale platform operators with millions of subscribers; enables platform operators to manage both IP and DVB subscribers.

858-618-4878; www.irdetoaccess.com

AUTOMATION SYSTEM

Sundance Digital NewsLink

Provides control and management that interlocks video servers, editors and newsroom computers; provides a high-efficiency on-air interface, master system databasing, scheduled and ad-hoc recording, and integrated content archiving.

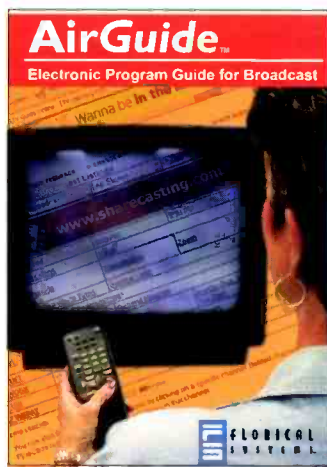
972-444-8442; www.sundancedigital.com

SECURE DATA BROADCAST SYSTEM

Triveni Digital SkyScraper

Assists broadcasters to broadcast large quantities of data in a secure end-to-end environment from information providers through broadcast stations to information customers; includes head-end servers to manage the data flow from information providers to broadcast stations and customer-site receivers to extract the data from broadcast and make it available to end users.

609-716-3500; www.trivenidigital.com



ELECTRONIC PROGRAM GUIDE

Floral Systems AirGuide

Updated electronic program guide for PSIP and the Internet that is updated from AirBoss, Floral's on-air presentation system; specifically designed to facilitate the multiple channel environment and provides TV stations an automated way to maintain its program guide.

352-372-8326; www.floral.com

LIVE PRODUCTION AUTOMATION SOLUTION

ParkerVision PVTV NEWS CR4000

Provides expanded video, keyer, audio and control capabilities; performs back-to-back transitions with up to five upstream layers; features include a CG list display from new automation scripts and rundowns.

800-532-8034; www.parkervision.com

ASSET MANAGEMENT DATABASE

Crispin AssetBase 2000

Web-browsable facility database with flexible device server architecture; based on a Microsoft SQL server with total facility playlist and asset control.

919-845-7744; www.crispincorp.com

MULTICHANNEL MASTER CONTROL SOLUTION

Miranda Technologies Glass Cockpit

Combines elements of branding, on-air presentation switching and monitoring into a compact single operator station; maximizes operator control and efficiency; keeps overheads to a minimum.

514-333-1772; www.miranda.com

DMG PLATFORM

Pathfire Digital Media Gateway

Users can aggregate content from a variety of sources; content arrives automatically on DMG servers at stations; minimizes the need to schedule or monitor satellite feeds; reduces the need for tape; integrates with other station gear.

770-619-0801; www.pathfire.com

HD CAMERAS

Sony Electronics HDW-730 HDCAM

Features IT CCD image sensors that offer high sensitivity, high signal-to-noise, and low vertical smear on severe highlights; includes switchable 60i/50i operation.

201-930-1000; www.sony.com/professional



View an online product demo whenever you see this logo.

www.broadcastengineering.com

up to 16x

See us at INFOCOMM
Las Vegas, NV
Booth #17131

MONITOR MORE FOR LESS



7765MVM

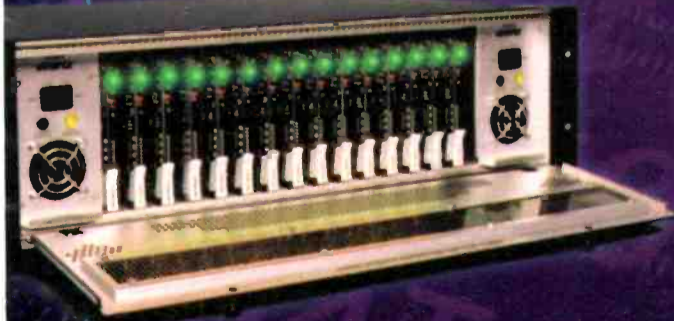
Audio / Video / Data Monitoring and Quad² Display



Evertz's modular video signal multi-viewer and signal analyzer solution - the industry's most feature-rich monitoring tool - effectively increases your signal monitoring capacity sixteen-fold!

Conveniently fitting into the standard 7700FR-C frame, 7765MVM MultiViewer Monitoring packages display up to 16 active video inputs and provide operators with on-screen audio level bar graphs, phase meters, status display and SID/UMD windows as well as fault alerts.

Available in 8-, 12- and 16-window display configurations, the 7765MVM packages provide cost-effective signal integrity, confidence monitoring of audio and video signals along with data status information. 7765MVM MultiViewer packages are also VISTA LINK™ enabled offering centralized monitoring and control of remote facilities via SNMP with automated alarms, reporting, logging and more...



Tel: 1-905-335-3700 / Fax: 1-905-335-3573
www.evertz.com

evertz



PROFESSIONAL ENG LENSES

Fujinon A13x6.3E and A13x6.3

6.3 mm focal length at wide end with magnification of 13 times (82 mm focal length at telephoto end); inner focus incorporated; high-quality images; substantial reduction of variation in angle of view caused by focus operation.

972-385-8902; www.fujinon.com

VIRTUAL STUDIO PRODUCTION SYSTEM

Radamec Broadcast Systems Scenario XR

Provides real studio image quality; an addition to Radamec's Virtual Scenario studio system; includes reflections of live inserted elements; runs under Windows NT operating system; imports 3D set designs.

877-RADAMEC; www.RadamecBroadcast.com

TRIPOD SERIES

Miller Fluid Heads Sprinter

Features include dual, side-action Sprint-Loks, fully variable mid-level spreader, rapid set-up transport clips, sprint-grip carry handle and reinforced 100 mm bowl.

973-857-8300; www.miller.com



ON-BOARD BRICK BATTERY

Frezzi Energy Systems BP-14MH

Can handle the higher power requirements demanded by today's ENG crews; Frezzi's advanced Energy Gage is available on all BP-14MH batteries, provides accurate capacity information regardless of the battery's age.

973-427-1160; www.frezzi.com



CINEMA-STYLE GAMMA OPTION

Panasonic AJ-HDC27 VariCam HD Cinema Camera option

Option extends the AJ-HDC27 range to provide control of the image's color saturation; improves master gamma, knee point and detail control; users can obtain more detail in an image's white area, while maintaining detail in the black areas.

800-528-8601; www.panasonic.com/broadcast

CINE/HD CAMERA STABILIZING SYSTEM

Sachtler Artemis

Offers an improved sled with a +/-90-degree rotation of the battery mount to allow fast and precise counterbalancing; features reduced weight of the spring arm and an optimized fit of the vest.

516-867-4900; www.sachtler.com

Get spoiled.



Go ahead. Edit, design and create *affordably* in 10-bit, uncompressed SDI or HD-SDI.

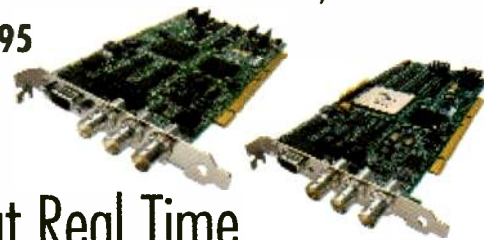
Native OS X. New for 2002, KONA-SD and KONA-HD are the first uncompressed QuickTime™ capture cards available for Apple™'s powerful new OS and Final Cut Pro 3™ editing software. **Flexible.** KONA's desktop feature turns the video monitor into a second Mac monitor. Create design elements—*live*—right in your video monitor with Photoshop™, After Effects™, or even Power Point™! **Real Time.** KONA's powerful hardware handles popular effects in real-time, without duration limits, and with minimal RAID requirements. **Quality.** With direct connections for 10-bit SDI video/6-channel 48KHz AES audio, and 8-, 10-, or 16-bit video codecs by Blackmagic Design, KONA is ready to handle your media at the highest quality level. **Future Proof.** KONA's hardware is programmable—firmware updates with new effects or features, as they become available, are a simple download away. So go ahead, get spoiled: **KONA-SD \$3,295 • KONA-HD \$10,995**



800.251.4224
530.274.2048
Grass Valley, California
www.aja.com

KONA. It's About Real Time.

Apple, QuickTime, Final Cut Pro, After Effects and Photoshop are registered trademarks of their respective owners.





ROHDE & SCHWARZ

EFA



Model 53

*EFA Family of
Television Test
Receivers*

8VSB TV Test Receiver

Specifications:

- Model 53 [4.5 ... 1000 MHz, -72 ... +20 dBm]
(w/ option EFA-B3, RF Preselection)
- Simultaneous Demod & Measurement
- SMPTE 310 Serial Output
- 6 MHz SAW Filter

Measurements:

- Level
- Pilot Value
- Carrier Frequency
- BER, SNR, MER, EVM
- FCC Shoulder

Displays:

- Ghost Pattern
- Frequency Response
- Constellation Diagram
- Amplitude/Phase Response
- Spectrum Display

COMPLETE PRODUCT INFORMATION:
"SEARCH EFA" ON OUR INTERNET SITE.

<http://www.rohde-schwarz.com>

ROHDE & SCHWARZ, INC.

7150-K Riverwood Drive - Columbia, MD 21046-1245

Phone: (410) 910-7800 Fax: (410) 910-7801

CAMERA ROBOTICS CONTROL PANEL

Telemetrics CP-D-3A

Features a modular design that can be expanded and upgraded; basic panel includes a 3-axis joystick for pan, tilt and zoom functions; options include camera ROP control, iris master black control, and a rocker switch for variable speed control of the Televator Elevating Pedestal or camera track left and right.

201-848-9818; www.telemetricsinc.com



MINI-DV CAMCORDER

Panasonic AG-DVX100

Captures cinema-style, 24-frame progressive scanned images; equipped with three 1/3-inch progressive scan CCDs; offers a high sensitivity of F11 at 2000 lux.

800-528-8601; www.panasonic.com/broadcast



CHARGER

PAG Quasar

Compact 2-channel charger and battery management system; incorporates a 40W camera supply; available with either PAGlok connectors or Snap-On compatible connectors; detects cell chemistry, state of charge, capacity and condition.

818-760-8285; www.pagusa.com

TOWER CAMERA

TRON-Tek TOWER CAM

Designed as a cost-effective alternative to airborne video systems; features a 1/2-inch color video camera and a 1-inch format 16 to 160 mm lens; yields an overall zoom capacity of 32 to 320 mm; downlinked to the studio via S-band video link.

918-663-4877; www.tron-tek.com

LENSES

Canon HD-EC

Prime and zoom lenses featuring advanced focus rotation angle and improved markings; share a uniformed design concept to achieve a consistent "Canon look," color temperature and minimized focus breathing.

800-321-4388; www.canonbroadcast.com



TELEVISION CONSOLE

Wheatstone TV-80

Designed to be streamlined, economical and ergonomic; accommodates local news as well as independent, syndicated and network affiliate programming.

252-638-7000; www.wheatstone.com



TRIPOD

Bogen Photo Manfrotto 540ART Road Runner

Composed of carbon fiber tubes to support ENG cameras weighing up to 33 lbs; features an integrated automatic mid-level spreader mechanism for quick setup and a multisurface system for all-terrain stability; 100 mm bowl and 75 mm bolt-on adapter to accommodate all popular video heads.

201-818-9500; www.bogenphoto.com



BATTERY

Aspen Electronics XL-7B Bracket

Control module for adapting 14.4 V batteries to supply Canon 7.2 V cameras and 12 V lights simultaneously; can be used with the XL bracket for mechanical stabilization for lightweight Canon cameras.

714-379-2515; www.aspenelectronics.com



MPEG IMX CAMCORDER

Sony Electronics MSW-900

Features a MPEG-I Frame structure at a bit rate of 50 Mb/s and Power HAD; offers a high signal-to-noise ratio and high sensitivity for low-light levels; includes 12-bit A/D and advanced digital signal processing technology.

201-930-1000; www.sony.com/professional

CG/GRAPHIC SOFTWARE

Broadcast Software Solutions CGXPress

Character generation and graphics for 32-bit digital pcCodi; features a drag-and-drop interface; EAS, TV ratings and easy display of logos; available as software-only or turnkey systems.

800-273-4033; www.broadcastsoftware.tv

SOFTWARE

Inscriber Technology RT-FX

Delivers real-time animation and 3D effects with the innovative ability to combine streams of dynamic data with video and graphics; live broadcast productions such as sporting events or election coverage can produce stunning graphics while integrating statistics or other newswire information.

519-570-9111; www.inscriber.com

DIGITAL SIGNAL PROCESSOR (DSP)

Equator Technologies BSP-15

DSP now supports Microsoft Windows Media video encoding and decoding solutions including the next generation of Windows Media, code-named Coronoa; enables Windows Media Playback at resolutions up to 720P; allows real-time encoding of full-resolution (D1) video.

408-369-5200; www.equator.com



MPEG-2 AND ATM TEST SET

Rohde & Schwarz DVATM

Sends, receives, analyzes and records MPEG-2 and ATM data streams; installs and operates transmission links; can be inserted anywhere in a transmission link; requires a universal concept; features SDI, MPEG-2, SDH/SONET and E3/D3 interfaces.

410-910-7800; www.rohdeschwarz.com

Fiber Management Trays



ADC's Fiber Management Trays offer the flexibility to address practically any network application - enabling you to manage your fiber in an all-front-access, one-rack-unit, modular design. From simple yet elegant slack storage, to termination and splicing, ADC's FMT provides the fiber management profitable networks thrive on.

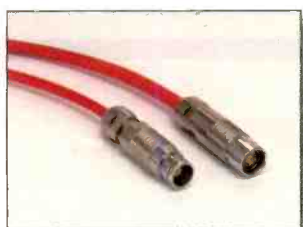
Enterprise Media™ Converters



Enterprise Media Converters from ADC provide a simple way to deliver fiber to the desk, protecting investment in copper plant and electronics, and minimizing capital outlay for network upgrades. With the Enterprise solution, media conversion is performed behind the faceplate, keeping fiber cable out of harms way. There's no jumble of components at the desktop - just a clean, simple, uncluttered, cost-effective approach to media conversion.

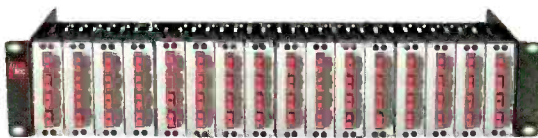
Global ProAx™ Triaxial Camera Connector

ADC introduces its new global ProAx™ triaxial camera connector family, featuring European Fischer standard compatibility. The new global format retains patented features from the U.S. standard including faster and less complicated termination, fewer parts, gender reversibility after termination, field-repairable center conductors, and format reversibility with U.S. standard triaxial. These innovative features provide camera technicians with a quick and simple method of adjusting equipment.



ADC introduces its new global ProAx™ triaxial camera connector family, featuring European Fischer standard compatibility. The new global format retains patented features from the U.S. standard including faster and less complicated termination, fewer parts, gender reversibility after termination, field-repairable center conductors, and format reversibility with U.S. standard triaxial. These innovative features provide camera technicians with a quick and simple method of adjusting equipment.

UniPatch® Patching System



The UniPatch™ Modular Patching System with universal chassis allows technicians to combine audio, video, data patching as well as media conversion modules in a single two-rack-unit modular panel. Robust and dependable, UniPatch is the patching solution for the future.

UniPatch™ AES Balun Modules



The new patent-pending 4-circuit, AES 110 Ohm to 75 Ohm Balun Modules provide precision impedance matching for interfacing balanced twisted pair AES audio to unbalanced coaxial audio. Eliminate the nuisance of XLR soldering and the mess of baluns hanging from equipment. Replace them with ADC's clean, simple solution. Also available is a cost-effective 2-in, 4-out AES split.



A Clearer Picture in an Ever-Changing World.

Higher quality. More choices. Optimal reliability. Right where it's always been. At ADC. As the industry leader in audio, video, and data connectivity, ADC has the innovative products and demonstrated expertise to help you keep pace and remain flexible in the ever-changing broadcast marketplace.

Your customers demand crystal-clear signal quality. We help you deliver it. We are committed to designing future-proof patching and connectivity solutions with unmatched reliability. And we control every step in the manufacturing process to ensure your signal quality remains clear and true. Isn't it good to have connections you can rely on? Contact: 1.800.227.6143 ext. 425, or visit www.adc.com/broadcast.



UHF ATSC transmitters

Harris Series

Specifically developed with medium and small market broadcasters in mind; available in 460W or 900W power output ratings; offer functionality not previously available in a low power transmitters; can be outfitted with Harris' CD-Eye 8-VSB monitoring software and Real-Time Adaptive Correction.

513-459-3400; www.harris.com

INTERCOM SYSTEM

Drake Electronics 4000 Series II

Available in three frame sizes; all matrices have been designed to share the same core functionality, software, range of control panels and accessories; features include CD-quality audio; crosspoint, processor and PSU redundancy; and interfacing to ISDN and digital networks.

+44 1727 871200;
www.drake-uk.com



WIRELESS CAMERA D-ENG SOLUTION

TANDBERG Television Voyager Lite

Transports up to 40 channels of uncompressed SDI, HD-SDI, SDH/SONET and GigE over a single fiber; converts analog and digital video and audio as well as data from an electrical signal to an optical wavelength, including audio embedding and de-embedding.

866-928-4433; www.tandbergtv.com



WORKSTATION

SGI (Silicon Graphics) Fuel Visual Workstation

Includes an MIPS R14000A processor, a VPro 3-D graphics system and a high-bandwidth design; features 48-bit RGBA; fuel supports up to 4 MB of cache and up to 4 GB of memory.

800-800-7441; www.sgi.com

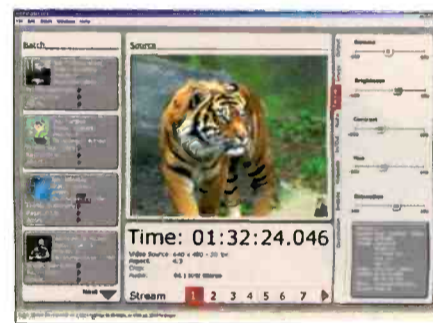


LED TOWER BEACON

Dialight LED tower beacon

Designed to be resistant to lightning strikes and other static surges; guaranteed to meet current FCC light output specifications for five years; protection against electrical surges and voltage spikes exceeding 250 volts.

732-919-3119; www.dialight.com

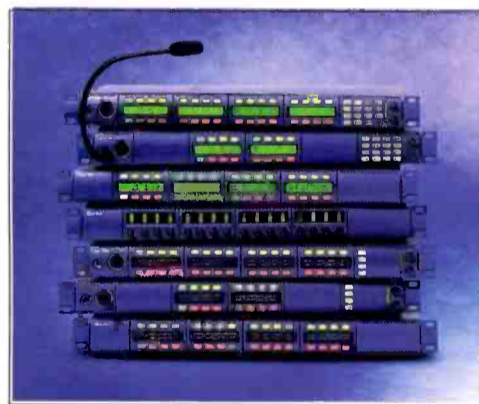


INTERNET ENCODER

Thomson/Grass Valley Group Aqua

Designed to provide high streaming throughput; features One Pass Encoding, which allows users to pre-process, capture and clean content, and render it into multiple streaming formats.

530-478-3000; www.grassvalleygroup.com



INTERCOM STATIONS

Clear-Com i-Stations

1-RU stations for Matrix Plus digital intercom systems; series of 35 stations featuring different combinations of display and non-display key modules, level-control modules, keypad modules and auxiliary input modules.

510-496-6624; www.clearcom.com



SDI/HDTV MULTIPLEXER

Telecast Fiber Systems Plus4

Transports four channels of serial digital video on a single optical fiber; handles all standard digital formats from 19.4 Mbits/s up to uncompressed HDTV at 1.5 Gbits/s; applications include connections in and between production and post-production facilities, and SDTV/HDTV traffic between metropolitan switching centers.

508-754-4858; www.telecast-fiber.com

PROFESSIONAL EDITOR

Pinnacle Systems silver

Bridges analog and digital domains; includes a scaleable MPEG-2 compression (5 to 50 Mbytes/s); includes real-time workflow, InTime processing and open network capability.

650-526-1600; www.pinnaclesys.com

VISUAL EFFECTS SYSTEMS SOFTWARE

Discreet combustion 2

The latest version of Discreet's unified paint, animation and 3D compositing software application for motion graphic designers, animators and visual effects artists; resolution-independent, vector paint, animation and compositing solution for multi-format work from the web to video and HDTV to feature film.

415-547-2457; www.discreet.com



WEB SUPERVISION CENTER

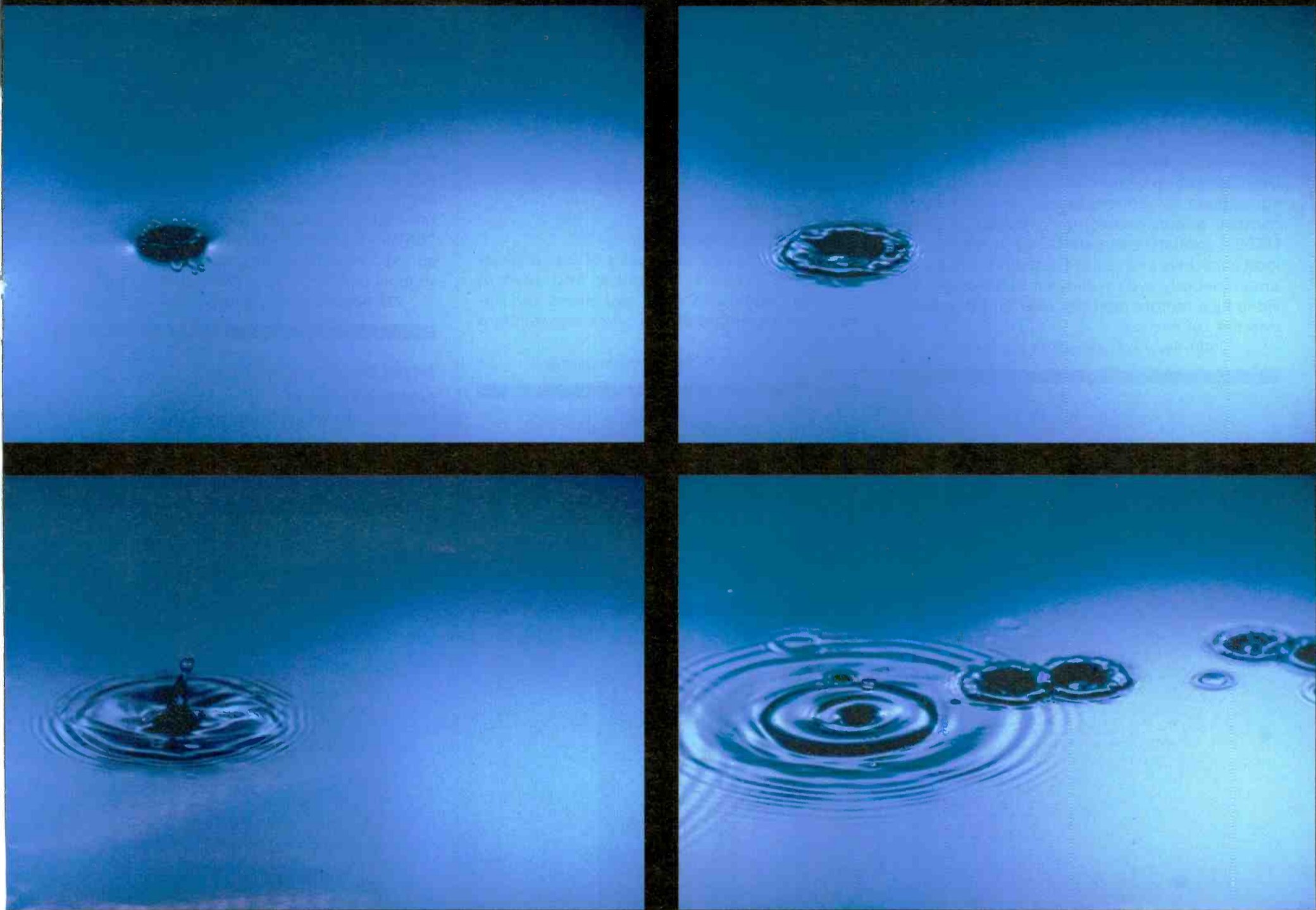
Thales Broadcast & Multimedia LAZULITE

Offers remote management and control of all broadband applications and equipment throughout a network using a single and integrated management system; powered by Thales' Open Supervisor software and allows access for multiple users.

413-569-0116; www.thales-bm.com



www.broadcastengineering.com



Frame synchronization is only a drop
in the bucket of everything we do.



[NEW HANABI OU32]



To fill that bucket with excitement, we introduced six new versions of the popular **HD** and **SD HANABI SWITCHER/DVE**. Three versions of the standard definition Hanabi switchers will have a choice of 16 SD, 24 SD, and 28 SD inputs with four still stores each and an additional three high definition versions 16 HD, 24 HD AND 28 HD inputs with four still stores each.

And for those of you who only know us for our frame synchronization – we happen to produce the most sophisticated and affordable **VIRTUAL STUDIO** in the market – as well as industry leading color correctors, switchers, graphics cards, signal processors, video mixers, and tape-less recorders, just to mention a few.

To see how else we are making a splash, visit our website at www.for-a.com.

FOR.A[®]
INNOVATIONS IN VIDEO
and AUDIO TECHNOLOGY

USA/FOR-A Corporation of America: 2400 N.E. Waldo Road, Gainesville, FL 32609, USA
CANADA/FOR-A Corporation of Canada: 425 Queen St. W. #210, Toronto, Ontario M5V 2A5, Canada

Tel: +1 352-371-1505 Fax: +1 352-378-5320
Tel: +1 416-977-0343 Fax: +1 416-977-0657

CAMERA CONTROL AND VIDEO SYSTEM

Livewave Contingency News Gathering

Users can set up systems at a location and manage camera movements in real time by remote control; allows recording in DV50, DV25 or MPEG-2 formats; a camera feed can record to a local hard drive and remote networked locations simultaneously; system allows monitoring of live video by a remote operator over an Intranet or Internet connection.

401-848-7678; www.livewave.com



WEB BUILDER

Miranda iControl Web Builder

Creates custom representations of user installations and facilities; monitor and control Miranda's audio and video equipment and signals from a standard Web browser over standard IP networks.

514-333-1772; www.miranda.com

ONLINE EDITOR

Quantel Version 9 for Editbox

Boosts performance in primary editing, audio management and multi-layer compositing; features tail-free desk editing; new in, out and viewer 'tuck' marking; included folded view editing for faster shot reordering.

800-331-8327; www.quantel.com



MEDIA ENGINE

Laird Telemedia Dvora

Professional, realtime turnkey hardware systems, integrated and optimized for your video edit software of choice by AVID, Adobe, AIST, Canopus, DPS, Matrox or Pinnacle; Exact Pentium processor compatibility; all aluminum non-magnetic silver cabinet with advanced air handling system; full tower and rackmounts available.

800-898-0759; www.lairdtelemedia.com



NONLINEAR EDITOR PLUG-IN

Inscriber Technology TitleMotion Pro

Plug-in for Inscriber TitleMotion to add functionality with new striking 3D text and effects; makes any non-linear project more dynamic with 3D text, animated textures over time, animated kerning over time and the ability to apply 3D effects to text and graphic objects over time; graphics plug-in for leading Windows based non-linear editors.

519-570-9111; www.inscriber.com

ROBOTICALLY CONTROLLED CAMERA JIB ARM

Radamec Robojib

Robotically controlled camera jib arm creates angles that are difficult to achieve with pedestal-mounted cameras; provides variable speed "on-air" quality movement and repeatability of all axis, including azimuth and elevation; can support pan/tilt head at a ten foot radius.

732-846-0536; www.radamecbroadcast.com

NONLINEAR EDITOR

Avid NewsCutter v3

Features interoperability with iNews products, new Web publishing features and XP model support for DV 50.

978-640-6789; www.avid.com



NONLINEAR EDITOR

Accom Affinity NLE

Features Dimension 8.2 software; offers 30 new features including enhancements to the key frame editor, improved EDL support and improved processing speed.

650-328-3818; www.accom.com



NONLINEAR EDITOR

BOXX HDBOXX

Editor offers variable frame rate support for Panasonic's AJ-HDC27V HD Cinema camera; features 10-bit and eight-bit YUV and eight-bit RGB support; system supports all HD and SD formats, including 16:9 aspect ratios and 2K film resolution.

512-835-0400; www.boxxtech.com

TIME SERVERS

ESE Network Time Protocol

Provides a method of putting accurate time information onto a network; includes ES-104, ES-289, ES-299 and ES-911/NTP.

310-322-2136; www.es-web.com

WBS

VIDBuddy™



Monitor your connections on the fly
Battery powered, fully portable
Accepts SDI, analog video
High resolution 600 x 234 display
Comes with it's own padded carry bag. VIDBuddy is only
7 3/4" H x 4 1/2" W x 3 3/4" D.

WARD-BECK

Get Connected

Ward-Beck
Toronto Ontario Canada
800 771 2556
Portland Oregon U.S.A.
866 771 2556

www.ward-beck.com



No Compression No Compromise

The DIGIBAND[®] DVX-6000
Uncompressed Digital Transport System
is setting the pace!



DVX-6000

- Singlemode (1310, 1550nm) laser-based transmission
- Component Video per SMPTE 259M, 292M, ITU-R 601, CCIR 656
- SDI, HSDI & HDTV up to 1.485 Gb/s Digital
- **10 Bit Code Uncompressed BER 10⁻¹⁴**
- Compatible with NTSC, PAL, and SECAM video signals
- Digital Audio AES/EBU Tech 3250E 24 bits

Model Shown: 19" Rack Mount Chassis
12 Slots/1 PS & 10 Slots/2 PS Redundant

DIGIBAND[®]

HDTV, DVB & SDI Systems
Fiber Optic Serial Digital Video
Uncompressed Digital Transport

OPTICOMM designs & manufactures high quality baseband broadcast fiber optic video, audio & data transmission equipment. Our products offer a wide range of solutions to any applications demanding high quality transparent fiber optic transmission.

Accept NO compromise!
Call today.
(800) 8-OPTICOMM



OPTICOMM

OPTICAL FIBER NETWORK SYSTEMS

— Founded in 1986 —

OPTICOMM Corporation • 6046 Cornerstone Ct. W. #209 • San Diego, California 92121
info@opticomm.com • (858) 450-0143 • Fax (858) 450-0155 • www.opticomm.com

16 Years
in Business!



NONLINEAR EDITING SYSTEM

Matrox DigiSuite MAX

Delivers maximum editing power and creative freedom with more real-time features; analog and digital inputs and outputs is supported to enable users to work in their formats of choice; users deliver in record time on tape, CD and DVD.

514-822-6000; www.matrox.com

SD/HD NOISE REDUCER

Teranex StarFilm

Incorporates advanced algorithms for grain removal, dirt concealment and noise reduction for SD and HD material; allows the user to work with either NTSC or PAL material, or HD 1080p23, 24 or 25 frame film-based material in the same platform.

407-858-6000; www.teranex.com

MATTE EXTRACTION TOOLS

Ultimatte matte extraction tools

Designed for Adobe, Avid, discreet and other leading effects and NLE products; provide an intuitive UI design filled with features such as separate shadow channel, smart matte sizing, image decompression and dynamic screen correction.

818-993-8007; www.ultimatte.com



PIP VIDEO INSERTER

Keywest Technology Big VooDoo

Broadcast-quality picture-in-picture inserter with digital comb filter and full time base correction; delivers an easy way to overlay a foreground video image on background video, graphics or text; gives users infinite control over the size and placement of foreground video.

913-492-4666; www.keywesttechnology.com



HD/SD SWITCHERS

FOR-A Corporation of America Hanabi

Three new versions of the HVS-3000S: the HVS-3000S16, the HVS-3000S24 and the HVS-3000S28; three new versions of the HVS-3000HD: the HVS-3000HD16, the HVS-3000HD24 and the HVS-3000HD28; 3RU high and is suited for OB vans and live applications.

352-371-1505; www.for-a.com



HD ON-SCREEN MONITOR

Videotek VTM-420HD/SD

Monitors and measures picture, waveform, vector and audio on a single high-resolution XGA monitor; adds 601 processing to the existing inputs, Ethernet connectivity, closed-caption monitoring, auto-detect of HD or SDI and expandability of up to 24 inputs.

610-327-2292; www.videotek.com

POST-PRODUCTION SWITCHER

Snell & Wilcox HD 2524

Features 24-input, 2.5M/E HDTV production switcher; can receive more inputs by assignment using external router support; features five keys (two on each M/E and one DSK).

408-260-1000; www.snellwilcox.com

MULTIFORMAT SERVER

Panasonic AJ-YA152

Facilitates serial digital input and output of both DVCPRO50 and DVCPRO; supports embedded audio and is compatible with AES/EBU audio; capable of writing and reading VBI signals and LTC I/O.

800-528-8601; www.panasonic.com/broadcast



MULTI-ACCESS VIDEO AND AUDIO SERVER

Sony Electronics VSR-2000A

Supports 24 Mbits/s MP@HL high-definition video with up to eight channels of PCM audio; enables a single VSR-2000A to store and playback more than 20 hours of HD video material.

201-930-1000; www.sony.com/professional

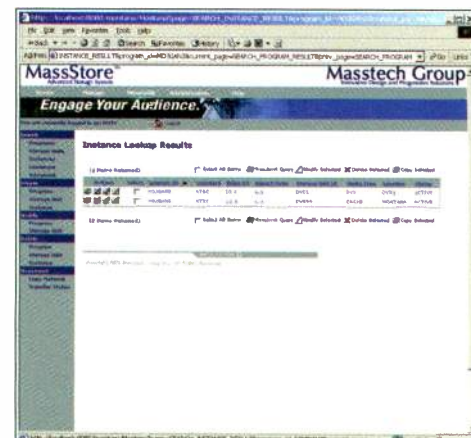


SERVER

SGI (Silicon Graphics) Media Server

Facilitates simultaneous ingest, data network-based file transfers to the server; features a versatile solution for centralcasting; server can interface with browsing and asset management systems-streamlining the process of re-purposing content for Web.

800-800-7441; www.sgi.com



STORAGE SYSTEM

Masstech Group MassStore

An end-to-end advanced nearline, archive and asset management hardware and system software; provides 1000 to 100,000+ hours of non-linear audio/video storage; supports long form and short form programming.

905-886-1833; www.masstechgroup.com

MEDIA STORAGE

Ciprico DiMeda 2400

NAS performance levels exceeding 75 Mbits/s aggregate bandwidth is delivered through a single node; features fault-tolerant dual-node architecture.

763-551-4000; www.ciprico.com



LONG-PLAY STUDIO VTR

Panasonic AJ-HD 1600 VTR

Records for up to 124 minutes on a single cassette; can playback all DV-based cassettes; offers eight 16-bit PCM audio channels to accommodate 5.1 surround sound plus stereo sound mixes.

800-528-8601; www.panasonic.com/broadcast



ONE SERVER. UNLIMITED OPPORTUNITIES.

SEE HOW EMMY AWARD-WINNING TECHNOLOGY WORKS FOR YOUR TELEVISION ENTERPRISE.

One SeaChange Broadcast MediaCluster has the power to manage all of your video content, while providing boundless opportunities for its use — for thematic channels, regional broadcasts, web-casting, and more. In fact, the industry recently recognized the Broadcast MediaCluster with an Emmy for “outstanding achievement in technological advancement.”

What makes this server so advanced? The Broadcast MediaCluster play-to-air system combines

mind-boggling storage capacity, multichannel flexibility, and sophisticated software management with the industry’s only “single copy” 100% fault-resilience. Which means that just one SeaChange MediaCluster server protects your digital content more effectively than two competitive servers. So it provides unlimited opportunities and outstanding economy for your television operation. The future of television certainly looks bright.



www.seachangeinternational.com



©2002 SeaChange International, Inc. 124 Acton Street, Maynard, MA 01754
phone: 978-897-0100 fax: 978-897-0132 All rights reserved.
MediaCluster is patented, and is a registered trademark of SeaChange International, Inc.



One Server. Unlimited Opportunities.



SERIAL DIGITAL MONITOR

Hamlet Video Digi Scope

Provides the same high level of functionality and ease of integration but without the integral screen, displaying on any external monitor (SDI, component YUV or RGB, composite or SVGA) wherever the measurement display is required.

866-4-HAMLET; www.hamlet.us.com

SERVER

Omneon Video Networks Networked Content Server

Maximizes transport of video over high-speed IP networks; channel density has been leveraged through additional interface ports; uses the Extended File System and multiple Directors (servers); configurations provide fault tolerant systems for redundancy.

408-585-5000; www.omneon.com

WALL MOUNT

Chief Manufacturing 2000 series

Series includes pitch-adjustable wall mount, static mount-portrait/landscape and static wall mount; low-profile flat-panel display mounts with Q-Latch.

952-894-6280; www.chiefmfg.com

AUDIO MONITOR

Wohler Technologies VAMP-1

Composite video and two channel analog audio monitor offers the ability to monitor both audio and video from a single analog source; contained in a 2U unit; monitors video in either NTSC or PAL.

650-589-5676; www.wohler.com

MONITORING SOFTWARE

Thomson/Grass Valley Group Netcentral

Software monitors the health of SNMP-compliant devices; warns users via e-mail pager, phone or GUI.

530-478-3000; www.grassvalleygroup.com

ROTARY PHASE CONVERTER

Kay Industries Phasemaster MA

General-purpose rotary phase converter provides three-phase power at its output terminals with each phase shifted 120°; features automatic controls for remote monitoring, surge protectors, transformers and outdoor enclosures for weather protection.

219-236-6220; www.kayindustries.com

AUDIO VIDEO MONITOR

Ward-Beck Systems AVM4

Unit combines aural and visual monitoring in a 2 RU package; visual display features a high resolution (600 x 234) LCD screen; accepts 4 AES audio, 4 stereo analog audio and 4 composite (NTSC) video inputs.

416-335-5999; www.ward-beck.com

EDITING CONSOLES

Forecast Consoles ImageMaster series

Pre-engineered line of consoles can be used in linear, nonlinear, multimedia and graphics applications.

631-253-9000; www.forecast-consoles.com



LCD MONITOR

Marshall Electronics V-R82P-SDI:

Rack-mountable LCD monitor features two 8.4-inch active matrix LCD Panels; panel contains composite video, SDI and XGA inputs and a 3-color tally system; panels have an integral scaler that accepts several resolutions.

310-336-0606; www.mars-cam.com

SYNC GENERATOR

DK Audio PT 5201

Compact VariTime sync generator includes all basic features for sync, timing and test signals in one half-rack sized box; configuration is based on a Windows interface making it easy to manage all the timing, test signals and audio features on one screen; modification from factory present can be saved as a file on a PC hard disk or uploaded to the PT5201 as a setup.

+45 4453 0255; www.dk-audio.com

STANDARDS CONVERTER

Snell & Wilcox Alchemist Platinum

Upgrade features high-definition (2 x HD-SDI) and standard definition (2 x SDI) outputs; includes a 12-bit 4:4:4, internal processor; has a signal to noise ratio less than 72 dB; features a proprietary 46-point interpolation, a CleanCut interpolation, and Genlock, 2 x SDI references.

408-260-1000; www.snellwilcox.com

SIGNAL GENERATOR

HORITA BSG-50

Multiple-output blackburst, sync pulse and audio tone generator; six user-configurable BNC video/pulse outputs; sync signals may be set individually as composite sync, composite blanking, H drive or V drive; also features a separate buffer for each output.

949-489-0240; www.horita.com

A/V SYNCHRONIZER

Fortel DTV FS-414A

Provides superior analog decoding and digital synchronizing technology; modular design for compact installation, with remote control via Ethernet and is NTSC and PAL switchable; has audio embedding, including video legalizer and color corrector.

770-806-0234; www.forteldtv.com

HD TEST SIGNAL GENERATOR

Ensemble Designs Avenue 7405

Provides four HD Serial Digital outputs and genlocks to Tri Level sync or Composite Video; offers a wide variety of test signals that are user selectable; supports 1080i, 1080p, 720p and 1080sf.

530-478-1830; www.endes.com



SINGLE-MODULE APPLICATIONS

Leitch NEO Prism

Provides synchronization, processing and multiplexing and demultiplexing of both video and audio signals on a single module; includes composite video encoder synchronizers, video decoder synchronizer products, audio/video routing and distribution for signal transfer and Diamond Audio compression.

800-231-9673; www.leitch.com

FIBER MANAGEMENT TRAYS

ADC Telecommunications FMT

Configurable slack storage tray offers bulk storage for up to 60 fibers and discrete slack storage for up to 16 fibers; the termination-only fiber management tray provides termination for 24 or 32 fibers in an all-front-access design; provides the flexibility and designs necessary for practically every application.

952-917-0306; www.adc.com

So, no one told you the DA frame you bought wouldn't pass HD signals. Wondering why? Maybe they want you to buy a new frame for HD (of course the new frame would be a lot shinier and have a cool HD sticker on it).

GET REAL!

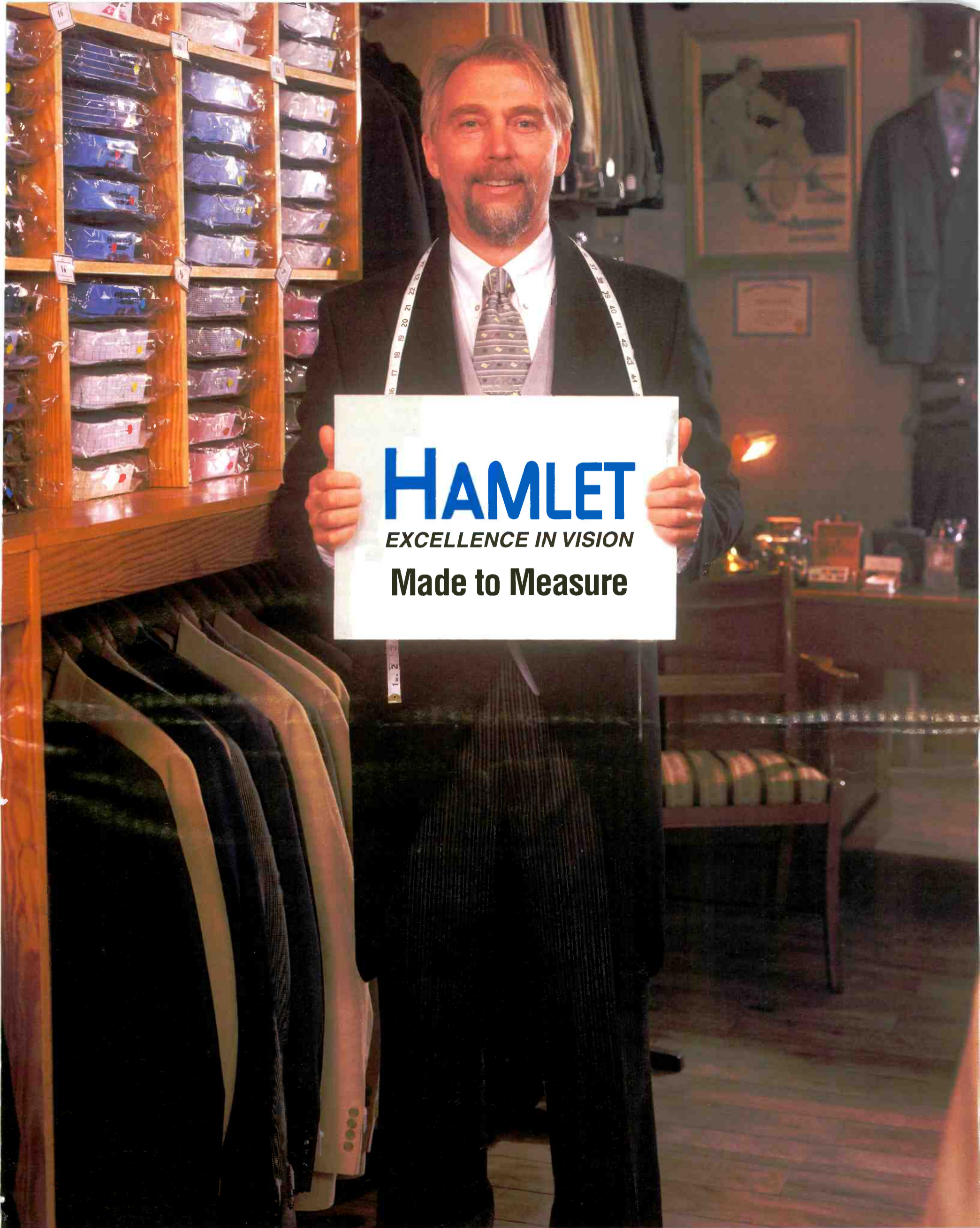
Don't waste money when you can buy one frame that can go from Analog to HD without needing an HD sticker.

PatchAmp frames are what we call Coaxial Universal. They will accept any coaxial signal and with the use of the right DA module, will pass the signal right back out stronger and healthier than ever.

Too good to be true? Call us and we'll prove it.

Call us for a side-by-side comparison of leading manufacturers vs. PatchAmp

201-457-1504
20 East Kennedy Street, Hackensack, NJ 07601
www.patchamp.com



HAMLET

EXCELLENCE IN VISION

Made to Measure

New Superior Test and Measurement Products at Sensible Prices

Hamlet Video International Limited, BOX 6530, Malibu, CA 90264
Toll Free: 866-4-HAMLET Tel: 310-457-0881 Fax: 310-457-4494
Email: sales@hamlet.us.com Web: www.hamlet.us.com

HAMLET
EXCELLENCE IN VISION

NONLINEAR EDITING SYSTEM

Leitch dpsVelocity 8.0:

New version of the dpsVelocity dual-stream real-time nonlinear editing system with real-time Webstreaming directly from the timeline; available as a fully integrated turnkey system or as hardware software bundle for installation in a Windows 2000 computer; includes multi-camera editing, real-time garbage matters, interface enhancements and multiple timeline support.

757-548-2300; www.leitch.com

UNIVERSAL SYNCHRONIZER

Pixel Instruments VS5200

Features a 10-bit frame synchronizer; includes a built-in TBC with auto mode select; transcodes from any selected input to all outputs simultaneously; has a wide range output timing and digital proc amp.

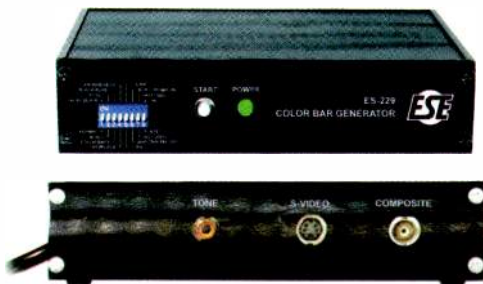
408-871-1975; www.pixelinstruments.com

AUTOMATED VIDEO MONITOR

Magni Systems AVM-510A

A waveform monitor and vectorscope with four-channel audio level mastering and automated measurement screens; includes Incidental Carrier Phase Modulation, Differential Gain and Differential Phase monitoring features;

503-615-1900; www.magnisystems.com



COLOR BAR GENERATOR

ESE ES-229

Allows for aligning monitors, tape leader or for checking the signal fidelity of a color system; generates RS-170A full-field bars or black burst via a BNC composite output and one S-Video output; front panel dip switches allow selection of auto-black, color bars/black, interlace/progressive, NTSC pedestal on/off, Chroma on/off and Pal mode.

310-322-2136; www.es-web.com

TIME CODE GENERATOR

Adrienne Electronics AEC-BOX-8

LTC generator with video sync input; generates DF/NDF play speed LTC locked to the video input (if present).

702-896-1858; www.adrielec.com

CONVERSION EQUIPMENT

Axon Digital Design Synapse

Allows for embedding and de-embedding in frame synchronizers, video A/D and D/A converters; features a minimum of four relocked outputs, the ability to swap channels in embedded audio and a jitter-trap in its cards with SDI I/O.

212-265-6402; www.axon.tv

PREVENTATIVE MONITORING SOLUTION

Pixelmetrix DVStation-Q

Features four hot-swappable port version of DVStation for remote applications; compact, rack mountable device is only 2RU high; includes two hot swappable redundant power supplies.

954-472-5445; www.pixelmetrix.com

DIGITAL AUDIO MONITOR

Wohler AMP2-L8SDA/HD

Features 1.5 Gbits/s of baseband HD-SDI input; includes 4 AES/EBU digital inputs; reduces adjacent bay crosstalk; provides an audible indication of phase/polarity problems; include phase correlation display of selected channels and a headphone jack and muted speakers.

888-5-WOHLER; www.wohler.com



HANDHELD MPEG TESTER

Tektronix AD920:

Battery-powered unit identifies faults and reduces downtime; ensures reliability in networks that distribute video, audio and data in digital formats; designed for broadcast installation, maintenance and field service.

800-835-9433; www.tektronix.com

A/D-D/A CONVERTER

Aphex 212

Features the Aphex Drift Stabilized Analog to Digital Converter; offers multiple stereo outputs and two separate AES mono outputs; optional BNC outputs can be substituted for the AES XLR outputs to be established 75 Ω applications.

818-767-2929; www.aphex.com



DTV TERRESTRIAL MONITORING SYSTEM

Sencore TMS1780

Offers both 8-VSB RF and MPEG-2 transport stream monitoring and video/audio decoding in one package; inputs allow users to analyze both the input to the DTV transmitter and the RF output.

605-339-0100; www.sencore.com

MULTI SDI MONITOR

Leader Instruments LV 5700

Rasterizer; XGA TFT color LCD tilt panel; total digital processing; 20 HD+SD-SDI 525/625; Ethernet; digital audio de-embedded displays surround; bargraphs; hex readout all data; AC/DC operation standard; optional auto-HD eye.

800-645-5104; www.leaderusa.com



SAP/STEREO/VIDEO RECEIVER

Modulation Sciences msi 189

Provides simultaneous all-mode reception for SAP, Stereo, and monaural audio via balanced, line level KLR connectors; features a stable synthesized tuner; uses dual antennas inputs; operating channel is selected by jumpers inside the receiver.

800-826-2603; www.modsci.com



DIGITAL ENCODER

Motorola, Broadband Communications Sector SE-1000

Compact MPEG-2 encoder with front panel controls; ATSC and DVB compliant; designed to optimize for low bit-rate applications.

215-323-1880; www.motorola.com/broadband

RF SYSTEMS

Teracom Components

RF systems for TV and DTV; complete range of components, including filters, combiners, antennas, connectors, rigid line and engineering software.

207-627-7474; www.teracom-c.com



View an online product demo whenever you see this logo.

www.broadcastengineering.com



On the Road to DTV

Which direction should you choose?



You need a DTV transmitter - but who can you trust to help you select the best system for your needs? Start by contacting Axcera - the RF Experts™.

Unlike manufacturers with limited product lines, we won't tell you what to buy - we'll help you to decide. After all, the direction you take should be what's best for you, not your supplier. At Axcera, meeting your needs is our primary focus.

Our Visionary DT™ and Innovator DT™ high power transmitters allow you to reach your licensed power from the start. If you prefer to build for city-of-license coverage, choose a DT Gateway™ or a low power Innovator DT™ today, and you can upgrade to a high power unit in the future with nearly 100% component re-use. Or you may opt for a DT800A Series transmitter - the quickest and most economical route to DTV.

With the most complete line of advanced products offered by any transmitter manufacturer, Axcera will help guide you to your destination - no matter which direction you choose.

Axcera Accessing the new era of digital communications.

www.axcera.com \ T: 724-873-8100 \ F: 724-873-8105 \ info@axcera.com





MULTIVIEWERS

Zandar Technologies DX Digital Series
Features 4, 8, 12 or 16 channel configurations; includes SDI or composite inputs with auto-detect of input format; has a selection of outputs; includes In-Picture audio monitoring using the ZAM-32 system, In-Picture display of UMDs and tally status, software for display configuration and software for multi-system control.
321-939-0457; www.zandar.com

LOW-POWER TRANSMITTER

Thales Broadcast & Multimedia Affinity
Designed to be frequency-agile; available from 10W to 400W average output power; fully compatible with the DVB-T and ATSC standards; features an advanced embedded software for alignment and system management.

413-569-0116; www.thales-bm.com

BROADCAST KLYSTRONS

Marconi EEV klystrons
Range of EEV klystrons fits most transmitter types; extends from the older unpulsed tubes to modern wideband types; includes the latest Energy Saving Collector klystrons.

914-592-6050; www.marconitech.com

HIGH-DENSITY DIGITAL ROUTING SWITCHER

Utah Scientific UTAH-400
Expands seamlessly from 64x64 to 1000x1000 and beyond; product line includes HD and SD digital video switchers and a digital audio switcher; all SD switchers are fully upgradable to HD operation by means of an I/O board exchange.

801-575-8801; www.utahscientific.com

A/V SEAMLESS SWITCHER

Folsom Research PresentationMASTER
Designed specifically for systems integrators; supports true seamless switching and superior scaling technology for professional A/V presentations; features eight universal A/V inputs that accept composite (NTSC/PAL), s-video, component, computer and HDTV video.

916-859-2505; www.folsom.com

ROUTING MATRIX

Thomson/Grass Valley Group Concerto series
Compact router features FlexFrame platform; allows users to mix formats within a single frame; users can change a 32x32 system to a 64x64 configuration with a single card, and take advantage of an optional TDM backbone for audio data.

530-478-3000; www.grassvalleygroup.com

ROUTING SYSTEM

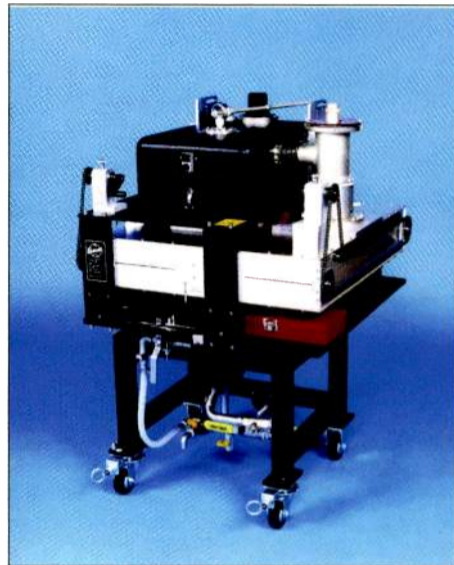
ParkerVision XSWITCH
Provides complete system control and redundancy for the PVTV News line of live production automation systems; gradually switches to live production from traditional live news operations; consolidates all switching and routing requirements.

800-532-8034; www.parkervision.com

DIGITAL COAX

Belden Electronics 1505F
New version of the 1505A RG-59 precision digital video coax for use in patch panels and jumpers; features a stranded center conductor and a double braid shield; mates with all 1505A BNC connectors.

765-983-5200; www.belden.com



INDUCTIVE OUTPUT TUBES

Eimac K2D150 W and K2100 W
IOT has a peak power output of 150 kW with 37 kW average power for DTV service; provides 100 kW peak-of-sync output (visual only) or common mode output of 84 kW peak-of-sync visual combined with 8.4 kW aural.

650-594-4004; www.eimac.com

DUALBAND ANTENNA

Dielectric Communications TUV-M and TUV-L
New additions for the low and mid-band (Channels 2-6) VHF broadcaster who has a UHF DTV channel with limited tower capacity or aperture; superturnstile antenna for VHF service.

207-655-8152; www.dielectric.com

HDTV ENCODER

Radyne ComStream/Tiernan THE-1
Supports both broadcast and distribution applications; provides compliant ATSC or MPEG-2 transport streams as well as standalone PSIP support with programmable parameters; when operating under the MPEG-2 profile transport stream, data rates of up to 108 Mbits/s are available.

602-437-9620; www.radynecomstream.com

CONSTANT EFFICIENCY AMPLIFIER

Northrop Grumman Electron Devices L-4200 Series
Next generation of high-power broadcast tubes for the UHF television industry; operates at peak powers up to 130 kW; offers a 50 percent improvement in efficiency compared with a standard IOT when operated in digital service.

570-326-3561; www.littonedd.com

BROADBAND ANTENNA

Radio Frequency Systems Broadband Omnislot UHF Antenna
Covers up to 120 MHz and powers up to 120 kW TPO; ideal for stacked arrangements; extends the capability of stacked broadband solutions when mounted on top of a broadband UHF panel array

203-630-3311; www.rfsworld.com

VHF TRANSMITTER

Rohde & Schwarz NM 7010
1 kW VHF Transmitter: medium power transmitters in the range of 500W to 2 kW; features a digital exciter, a MOSFET amplifier, power supply and air cooling; includes a channel and harmonic filter.

410-910-7832; www.rhodeschwarz.com



DIGITAL SOLID-STATE UHF TRANSMITTER

Larcen MAGNUM
Scalable on-site from 2.5 kW to 20 kW; "hot pluggable" broadband RF modules for any frequency, no tuning required; patented 2X power PA circuitry, LDMOS technology; remote monitoring and control; redundant amplifiers and power supplies; built-in diagnostics; flexible air cooling distribution system.

905-564-9222; www.larcen.com

TRANSMITTER

Ai (formerly Acrodyne Industries) Quantum QEXD1
Remote parameter monitoring available; alternative to going low power in NTSC or DTV, QEXD1 offers a budget-conscious version of high-power Quantum in a single-cabinet, single tube system.

410-568-2105; www.acrodyne.com

▶ What company creates advanced media for the new and emerging technologies?



©2002 Maxell Corporation of America
Colonial Division IITV, 400 Route 206, NY



maxell

Expanding Memory & Mobility ▶

Focused on advanced technology, Maxell is on the cutting edge of professional media development. Our high-definition products, HDCAM and D-5, meet the needs of even the most demanding applications. New manufacturing processes and tape formulations provide unrivaled performance both on location and in the studio. And, in addition, our data storage products (DVD-R, DVD-RAM and DLT-IV) continue to set standards for storage capacity and archival stability. Thus, Maxell plays a leadership role throughout the recordable media industry. To learn more about Maxell Professional Media, call 800-533-2836 or visit www.maxellpromedia.com.

Recordable Media Data Storage Portable Energy Technological Partnerships



INTERNET CONTENT GUIDE

Decisionmark TitanTV.com

Provides a comprehensive listing of content available to viewers' homes, and allows one-click recording and viewing; based on proprietary broadcast data and patented Geneva technology, which predicts signal strength at a given address to help determine which channels will receive; guide also assists viewers in choosing an antenna to pick up signals in their area.

319-365-5597; www.decisionmark.com

COAXIAL SWITCH

Dielectric Series 60000

12VDC, 24VDC or 115VAC operation with no field modifications, available in size from 1-5/8-inch to 6-1/8-inch, directly replaces the 50000 series in an economical package.

207-655-4555; www.dielectric.com

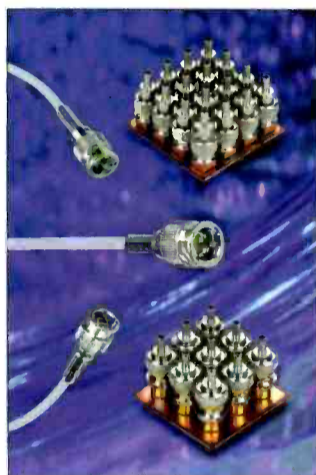


10-CHANNEL HD VIDEO SNAKE

Gepeco VS10230

Thin-profile, extra-flexible remote video snake that uses Gepeco's high-definition miniature 23 AWG coax; ideal for remote production applications in standard or HD digital video formats; provides a convenient and rugged way of transmitting digital video signals within a single cable.

847-795-9555; www.gepeco.com



MINIATURE BNC CONNECTOR

Trompeter Electronics 250

Allows for 40 percent greater connector density in a given area; designed for high-frequency digital applications; features 75 ohm impedance throughout the entire HD frequency range.

800-982-2629; www.trompeter.com

ETHERNET TO FIBER-OPTIC MEDIA CONVERTER

Multidyne E-FMX-150

Supports full auto-negotiation for twisted pair and fiber optic media; operates at 1300/1550 nm wavelength over one single mode fiber optic cable; supports up to 25 km and up to 50 km distances with two models.

800-4TV-Test; www.multidyne.tv

TRANSCODER

Pixel Instruments UMAT-1200

Universal monitoring audio transcoder with voice-over option; provides reference-quality A/D and D/A conversion, digital sample rate conversion, and audio monitoring through internal speakers and external headphones.

408-871-1975; www.pixelinstruments.com

CONTROL PLATFORM

DNF Controls ST500

Delivers revolutionary flexibility and operational simplicity to broadcast control applications; can grow from the smallest point solution to a sophisticated network controlling generations of video and audio devices.

818-898-3380; www.dnfcontrols.com

MULTI-FORMAT ROUTING SWITCHER

PESA Switching Systems Cheetah

Handles any signal from 3 Mbits/s up to 1.5 Gbits/s; features four standard frame sizes; build I/O modules in groups of 16; single or dual outputs are available.

800-323-1008; www.pesa.com



PORTABLE MICROWAVE RADIO

Microwave Radio Communications STRATA

User-configurable and remote controllable; incorporates a modular design for a high degree of flexibility; designed for analog portable and outside broadcasting applications.

978-671-5700; www.mrcbroadcast.com

OPTICAL TRANSPORT MODULES

Network Electronics HD-EO/OE

HD optical and electronic modules for the Flashlink optical transport platform; format-independent cards within the Flashlink frame convert 19.4 Mbits/s and 143 Mbits/s to 1.48 Mbits/s signals; capable of transporting 40-channel DWDM, two-channel WDM and point-to-point on a single strand of fiber.

866-873-7494; www.network-electronics.com

BROADBAND APPLICATIONS

Nextream video/data/voice solutions

Focus on several applications, including DSNG and fixed contribution to transport a range of multimedia services over ATM, and video over xDSL networks; services include network headends and interactive video service over cable TV networks through its DVB/DAVIC and DOCSIS return path solution.

+33 1 34 20 70 01; www.nextream.com

TRANSPORT MULTIPLEXER

Motorola, Broadband Communications Sector TMX-2010

Modular solution for multiplexing, grooming and IP encapsulation of multiple MPEG-2 services; provides either DVB-ASI, DS3, DHEI or SMPTE 310 output transport streams.

215-323-1880; www.motorola.com/broadband

WBS

Ward-Beck terminal gear.
First choice for quality connections.

Serialboxx

Digital/Analog audio & video cards
Manage your connections

XTM4

Extended range meter
Monitor your connections

WARD-BECK

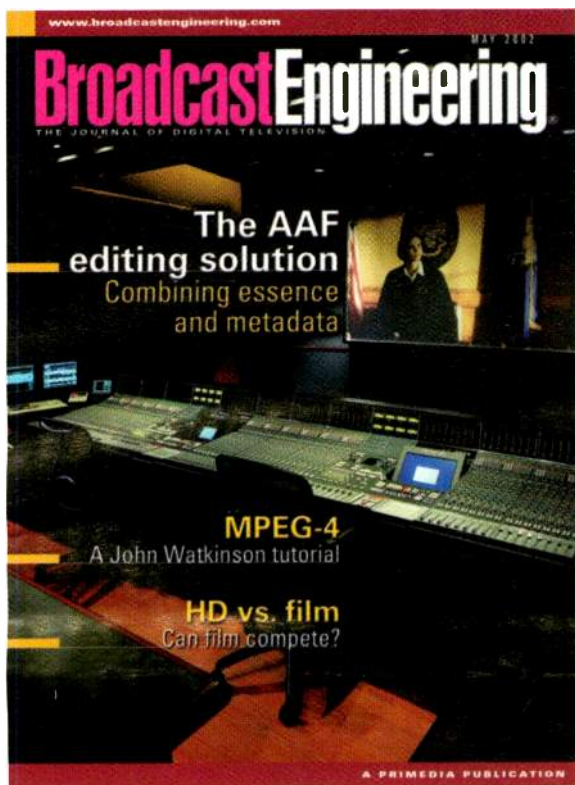
Get Connected

Ward-Beck
Toronto Ontario Canada
800 771 2556
Portland Oregon U.S.A.
866 771 2556

www.ward-beck.com



Power beyond the printed word.



Broadcast Engineering's ability to help you solve business problems extends beyond the great editorial in this publication.

Amplified coverage through our Web site.

Visit www.broadcastengineering.com and you'll find a wealth of information to help you do your job better, including:

- Archives of important articles from past issues
- Informative demonstrations of industry products
- Archives of news in the broadcast industry
- A link to our Buyers Guide to help in buying decisions
- Links to other sources of industry-related information

Supplier Directory. Find a product or service in our multi-industry Supplier Directory. Go to PrimediaBusiness.com and click on the Supplier Directory link.

Content for your Web site. Get the latest industry-specific news automatically delivered fresh to your corporate Web site, intranet or extranet. Go to PrimediaBusiness.com and check out the Primedia Insight newswire.

Opportunities for Advertisers. We can connect you with the exact buyers you're looking for through newsletter sponsorships, customized online special reports, targeted Web advertising, and more. Contact your Broadcast Engineering magazine sales representative, or Rob Shore (rshore@primediabusiness.com or 212-462-3401).

Click or call today to tap into the power beyond the printed word.

BroadcastEngineering
THE JOURNAL OF DIGITAL TELEVISION

www.broadcastengineering.com

Amplified coverage.



Broadcast Engineering's ability to help you solve business problems extends beyond the great editorial in this publication.

Visit www.broadcastengineering.com and you'll find a wealth of information to help you do your job better, including:

- Archives of important articles from past issues
- Informative demonstrations of industry products
- Archives of news from the broadcast and production industries
- A link to the Buyers Guide to help in buying decisions
- Links to other sources of helpful, industry-related information

Tap into the power beyond the printed word.

BroadcastEngineering®
THE JOURNAL OF DIGITAL TELEVISION

www.broadcastengineering.com

GRAPHICS SOLUTION

FOR-A Corporation of America digiStorm

Turnkey 3-D on-air graphics solution that leverages the best-of-breed components of FOR-A's lines of real-time graphics and virtual studio systems; real-time, high-quality 3-D CG graphics animation for sports, weather, mapping and statistics box applications.

352-371-1505; www.for-a.com

VIRTUAL SET

Darim Vision VS2000

Capable of broadcasting a combined 3-D virtual set that is fully interactive with multiple live video feeds; provides intuitive and interactive control of virtual cameras, objects and actors; creates localized programming and can help generate new revenues.

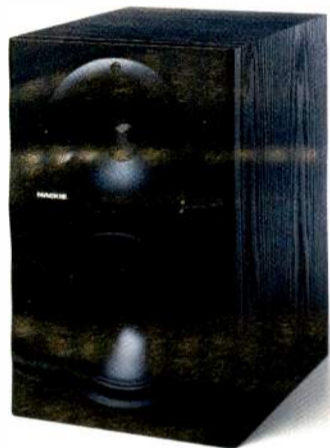
925-251-0178; www.darim.com

PORTABLE CAMERA

Ikegami HK-387pw

Portable companion with performance and functionality equivalent to the HK-387w; fully compatible with the HK-388 camera series, and uses the same base station and control panels.

201-368-9171; www.ikegami.com



SPEAKER

Mackie Designs HR624

Two-way bi-amplified, active speaker system incorporates an elliptical wave-guide for improved dispersion; components include a 6.7-inch high-precision and an extended LF transducer; driver is magnetically shielded.

800-258-6883; www.mackie.com

GRAPHICS SYSTEM

Chyron Duet PCI+

Solution for user-configured environments; includes the 32-bit PCI digital graphics card, Lyric content creation and real-time 2-D/3-D animation capabilities; playback software compatible with iNFiNiT!

631-845-2000; www.chyron.com

VISUAL EFFECTS SYSTEMS SOFTWARE

Discreet inferno 4.6, flame 7.6 and flint 7.6

Software upgrades offer more than 100 new features and enhancements, focusing on product design, workflow and performance, and extending the range and depth of their toolsets; offers improved performance and creative interactivity for digital artists.

415-547-2457; www.discreet.com

HD TEST SIGNAL GENERATOR

Ensemble Designs Avenue 7405

Provides four HD serial digital outputs and genlocks to tri level sync or composite video; offers a wide variety of test signals that are user selectable; supports 1080i, 1080p, 720p and 1080sf; modules can be updated with current software as new formats and test signals are added.

530-478-1830; www.endes.com

PROFILE ENCODER/DECODER

Miranda Media Networks DV-45

MPEG 4:2:2; profile encoder and decoder codecs with SDI and digital audio I/O; modules are compatible with existing DV-45 chassis.

514-335-3015; www.mirandamedianetworks.com

WEBCASTING TOOL

Thomson/Grass Valley Group Webable

Streamlines the process of moving material from the Profile XP media platform to the Web; features a simple drag-and-drop method for creating streaming media; allows users to locate and view media assets, and encode them for online viewing.

530-478-3000; www.grassvalleygroup.com

PROFESSIONAL DIGITAL A/V MIXER

Panasonic WJ-MX50A

Four sources can be switched and any two of them routed to the program buses; A/B program buses can be monitored at the A/B program outputs while the mixed picture is monitored at the preview output; compatible with a wide variety of video editing devices.

800-528-8601;

www.panasonic.com/broadcast

3-D DVE option

Ross Video Squeeze & Tease 3-D

Addition to the synergy digital production switcher; brings 3-D manipulation, perspective, sub-pixel motion and scaling to Squeeze & Tease's ability to fly any type of key.

613-652-4886;

www.rossvideo.com



MOTION-COMPENSATED VIDEO ARCHIVE PROCESSOR

Snell & Wilcox Archangel

Enhancements include an expanded filter set for the real-time restoration of film and video-based archives; uses Ph.c phase correlation technology, which allows the noise-reduction circuitry to differentiate between noise and motion within the footage.

408-260-1000; www.snellwilcox.com

IP GATEWAY

Thales Broadcast & Multimedia OPAL

Designed for high-speed Internet data broadcasting over any DVB-compliant network; dedicated to encapsulate Internet data into an MPEG-2 transport stream; supports Optimux, a technology that optimizes IP data insertion.

413-569-0116; www.thales-bm.com

PATCHBAYS

Switchcraft SWC MVP/SWC VAP

New line of mid-size video jacks, patchcords and patchbays.

773-792-2700; www.switchcraft.com

DVCPRO CAMERA

Thomson Multimedia LDK 140

Offers 22-bit digital signal processing capabilities; designed for camera operators who are challenged by a broad range of assignments requiring frequent adaptation to the differing requirements of diverse customers.

818-729-7700; www.thomsonbroadcast.com

Now You Can Have Higher Accuracy Plus Value
GPS MASTER CLOCK & TIME CODE GENERATOR



QUALITY STANDARD FEATURES:

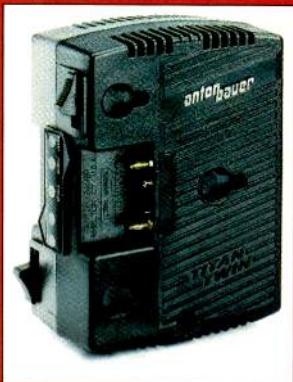
- SMPTE/EBU, ESE, IRIG-B, ASCII Time Code Outputs • 1PPS Output
- 8 Satellite Tracking • Battery Back-up • GPS "Lock" Indicator
- Automatic Daylight Savings Time Correction • Time Zone Offset • Antenna
- 45 nanosecond accuracy • 3 Year Warranty • Plus More, for just \$2495

AVAILABLE OPTIONS:

- Parallel BCD Output • 1 KPPS • 10MHz Output • 220 VAC • 12-35 VDC
- Video Inserter • Video Sync-Generator • Hourly contact closures



142 Sierra Street • El Segundo, CA 90245 USA
 Phone (310) 322-2136 • Fax: 310.322.8127
www.es-web.com



CHARGER

Anton/Bauer Titan Twin

Companion to the Titan 70 camera/power supply; has an input range of 90-250 VAC 50/60 Hz; allows charging of two batteries at once; chemistry independent; provides a charge routine specifically designed for the battery.

203-929-1100; www.antonbauer.com

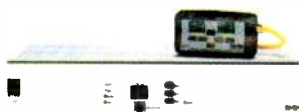


TELE ZOOM LENS

Thales Angenieux ENG Tele 26x7.8aif.hr

Combines the widest angle f7.8 mm to a 26x zoom ratio; focal range covers most applications from f7.8 mm to f203 mm, reaching f406 mm with the built-in range extender; features fast aperture of f/1.8.

413-569-0116; www.angenieux.com



PROGRAMMABLE SOURCE ASSIGNMENT PANEL

Clear-Com RCS-2000

Accessory to Clear-Com's party-line; main switching unit is an eight-channel by 24-station group assignment matrix; up to six RCS-2000s can be wired together; programmable via PC; offers remote controlled switching for medium to large systems.

510-496-6666; www.clear-com.com

12-BIT COMPONENT DIGITIZER

Fortel DTV ADC-331

Generates three SDI outputs; input signals can be in RGB, Betacam, MII, SMPTE or EBU format; automatic scaling is controlled by front-panel selection of the input format; input luminance is accepted with or without setup.

770-806-0234; www.fortelDTV.com

ADVANCED SCRIPTING PRODUCT

eyeon Software DFScript

Includes an infinite number of scripting scenarios, such as the updating of paths for moved files, local low-resolution copies of files and 3D render management; performs complex post render composites; scripts can be executed locally or remotely via multiple licenses of Fusion.

416-686-8411; www.eyeonline.com

BATTERY SYSTEM

IDX Technologies Endura

Allows two E-50 direct mount batteries to be stacked together on a camera back; fits directly onto new cameras that have the wedge style V-mount already built in; uses the lithium ion technology.

310-891-2800; www.idxtek.com

WIRELESS INTERCOM

Telex Communications BTR800

Features two intercom channels, stage announce with relay closure, wireless talkaround, 1440 frequencies and all metal backpacks.

952-884-4051; www.telex.com

PARALLEL HD/SD DIGITAL DISK RECORDER

Leitch dpsRealityHD

Work on projects for both HD and SD formats and DVD and Internet distribution; make edit decisions and preview work on SD equipment while producing HD material; HD VCRS and monitors can be used throughout the process.

757-548-2300; www.leitch.com



LOW-DELAY MPEG-2 ENCODER

Standard Communications L1000

Features encoding delay of less than 100 ms in either 4:2:2 or 4:2:0 formats; dissipates less than 20w of power on AC or battery operation; switchable between DVB-T or DVB-S modulation; suitable for SNG, ENG and action sports.

310-532-5300; www.standardcomm.com

COMMUNITY BROADCAST FACILITY

Spectrasite Broadcast Group community broadcast facility

Allows multiple broadcasters to use a common transmission site in order to shorten project timelines and preserve capital; Spectrasite obtains the site, gets zoning approval, and builds and manages the facility.

888-468-0112; www.spectrasite.com

AUDIO PRODUCTION CONSOLE

Midas Broadcast 2000

Offers an eight-input pre-selector that is split into two halves; the first four inputs are set up for mic inputs, and the second set of four inputs are set up for line inputs.

+44 1562 741515; www.midasconsoles.com

TIME BASE CORRECTOR/VIDEO SYNCHRONIZER

Prime Image Model Digital 50 III

TBC/synchronizer includes full proc amp control on all inputs; features freeze control for either field or a frame, and full-time or selectable composite color bar generator.

408-867-6519; www.primeimageinc.com

ASPECT RATIO CONVERTER

Leitch ARC-6001

Dual standard serial digital 270 Mbits/s aspect ratio converter supported in the Genesis platform; allows conversion from ratios such as 4:3, 14:9, 16:9, and 21:9 to 4:3, 14:9, 16:9, and 21:9 and will perform picture aspect ratio conversion on a video signal under GPI control or automatically.

800-231-9673; www.leitch.com

BROADCAST CAPTURE AND PLAYBACK CARD

Digital Voodoo D1 64

Includes one SD-SDI video input, two SD-SDI video outputs with key output 4:2:2:4 or 4:4:4:4; features a genlock sync input.

702-948-4976; www.digitalvoodoo.net

CAMERA

JVC VN-C30U

Features an all-in-one design with built-in Web server and a function supported FTP client; features a 15X optical zoom lens, remote pan and tilt mechanism with a high resolution 380,000 pixel CCD, F1.4 lens and MPEG and IPEG compression; can be connected to a computer network and controlled and viewed by a remote computer.

973-317-5000; www.jvc.com

UHF SOLID STATE TRANSMITTER

Thales Broadcast & Multimedia Ultimate

Covers analog power from 500W to 60 kW and in digital from 125W to 15 kW rms; allows easy upgrade of transmitters from analog to digital changing the exciter.

413-569-0116; www.thales-bm.com

ONLINE CHARACTER GENERATOR

Aston Aston Red

Combines purpose-built VLIW graphics processing power with PowerPC G4 technology to deliver an unprecedented level of speed and functionality to the broadcast user; exploits Aston's ViVid multi-processor architecture, providing high speed rendering and huge animation capabilities while maintaining full compatibility with Aston's other CGs.

+44 1252 836221; www.aston.tv

AUDIO DISTRIBUTION SYSTEM

Benchmark Media Systems System 1000

Offers more than 15 different modules and four power supply options, numerous controllers and accessories; cost-effective mono, stereo and microphone pre-amp power DAs and router-switcher, mix and control modules.

315-437-6300; www.benchmarkmedia.com



REBRANDER

Thales GYPSUM

DTV rebrander, designed to rebrand and customize PSIP data, connects to ATSC DTV streams and modifies the PSIP data information according to a DTV station's requirement and then retransmits a fully compliant ATSC transport stream. No additional PSIP generator required.

413-569-0116; www.thales-bm.com

DATA COMMUNICATIONS CABLE

Belden Electronics Datatwist 600e

Unshielded twist pair cable; delivers a guaranteed 8 db of power sum nextheadroom over category 6, nearly 5 db of return loss improvement at 100 MHz; an attenuation margin and positive power sum to 460 Mhz.

800-belden-4; www.belden.com

MEDIA ASSET MANAGEMENT SYSTEM

Harris MAM system

Composed of three interrelated areas; Ingest using Invenio Media utility; streamlines the process of recording media into all formats; provides automatic cataloging and simultaneously recording multiple resolutions. Intelligent archiving with Invenio Content; this links recorded media to a search engine; finally the media is transferred to where its needed with Global Media Transfer.

513-459-3400; www.harris.com

SERVER SYSTEM

Leitch VRMediaNet

A client/server system built on MS 2000, provides comprehensive metadata management and can be expanded to include wire services, script writing, story management, tracking of media usage and broadcast rights; allows the integration of the databases from multiple servers systems.

800-387-0233; www.leitch.com



AUDIO CLIP PLAYER

360 Systems Instant Replay

New editing software for the Instant Replay, makes quick work of head and tail trim, fades and level corrections, on-the-fly edits without additional equipment, audio can be recorded, titled, arranged and played with simple key-strokes, no cut limitations.

818-991-0360; www.360systems.com



DIGITAL TRANSMISSION SYSTEM

Opticomm FDV-38000

A 10-bit modulated, LED or laser based NTSC, PAL and SECAM-compatible video multiplexer; combine either simplex or duplex audio 24-bit and data; features multimode or singlemode operation over one fiber and true DC restoration.

858-450-0143; www.opticomm.com

PRODUCTION SWITCHER

Thomson Broadcast XtenDD

Designed for SD environments, features LAN networking technology, high-performance chromakey capabilities, machine control and macro key memory, available in 2-,3- and 4 M/Es in the same frame, each with Dynachrome chroma key capability per M/E bank and up to eight DSKs, up to 90 inputs and 36 outputs with 20 Aux busses, four channels of DVEs provide 3D planar effects and can provide 32 seconds of clip store.

818-729-7700; www.thomsonbroadcast.com

LYRIC PLUG-IN FOR AVID

Chyron Lyric

Chyron's media file format now supported by the Avid Unity MediaManager system, allows Duet family of systems to save and share files with MediaManager, all Chyron media files can now be easily located, exported to any other Chyron device as well as virtually any Avid editing application.

631-845-2000; www.chyron.com

HD PRODUCTION SWITCHER

Snell & Wilcox HD 108 switcher

Compact switcher, designed for telecine and mobile applications, eight directly accessible inputs, two keyers with chroma keying functions, single YUV color corrector and 4:2:2 framestore, internal 10-bit I/O processing supports all current HD standards.

408-260-1000; www.snellamerica.com

GRAPHICS INTERFACE

Discreet Backdraft 5

New user interface, aligns with the artist's UI from other Discreet products, offers improved efficiencies, including a clip library, easier to organize and drag and drop clips, reels and other media, automatic network-intensive transfers or archives can be performed during off-hours, scripts can trigger email, cell phone or pager notification, support provided for multiple video devices, real-time 2:3 pull-down insertion and removal, SD and HD I/O and HDCAM archiving.

800-869-3504; www.discreet.com

DTV ENCODERS

TANDBERG Television E5720/E5710

New series of DTV encoders, targeted for both single and multiple-channel environments, the E57220 SD encoder can be field upgradeable to HD, comes complete with six option slots, the E5710 requires only 1RU space and provides two option slots.

407-380-7055; www.tandbergtv.com

HDTV UNCOMPRESSED VIDEO DISK RECORDER

Doremi Labs V1-UHD

Designed for HDTV broadcast, post-production and digital animation capture and replay; records and plays uncompressed HDTV 720p, 1080i and 1080p at 8- or 10-bit resolution; features include instant locate and instant play.

818-562-1101; www.doremilabs.com

MODULE

5D Cyborg with Mokey

Image processing system now features a new module from Imagineer Software integrated into its GUI; the Mokey software solution separates foreground elements from a clip, such as camera rigs and wires; the module also generates a moving matte for the foreground element without using traditional keying techniques such as chromakey; module offers resolution independence to support 5D Cyborg's ability to manipulate mixed-resolution images in the same workflow pipeline.

+44 (0)20 7620 4800; www.five-d.com

Zandar TECHNOLOGIES

THINK MULTIVIEWER, THINK ZANDAR

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

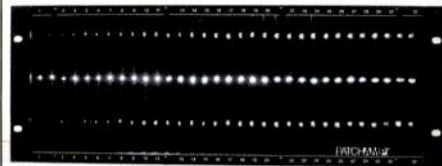
Think Zandar for:

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

IRELAND:
TrioTech House, Abbey Road,
Deansgrange, Co. Dublin, Ireland.
Tel: +353 1 280 8945
Fax: +353 1 280 8956
E-mail: sales@zandar.com

USA:
1970 E. Osceola Parkway, No. 320,
Kissimmee, FL 34743, USA.
Tel: 321 939 0457
Fax: 321 939 0458
E-mail: advancedms@msn.com

www.zandar.com



DISTRIBUTION AMPLIFIER FRAME

PatchAmp PA-3200

A 4-RU high density DA frame holds up to 32 1x5 DA modules; uses coaxial connections; low insertion loss mid plane design provides 75-ohm from signal in to signal out.

201-457-1504; www.patchamp.com

CONTENT DELIVERY SYSTEM

AT&T Broadband Digital Media Center

Will allow content owners to repurpose their content and offer it on a pay-per-view basis over the Internet; two viewing options; users can register and pay for a scheduled event, and then watch it at a specific time, or view Webcasts at their convenience; for the second option, AT&T would host the content, collect payment from the end user and track customer usage, as well as preventing unauthorized access to the content.

800-288-3199; www.att.com/business

STREAMING SOLUTION

Generic Media Publishing Service

Automates the process of encoding and delivering digital content in multiple formats; Publishing Service streams a single digital file to a variety of device types, connection speeds ranging from 28.8 Kbits/s to 500 Kbits/s; supports output formats including Real Media, Windows Media and QuickTime Streaming.

650-324-0662; www.genericmedia.com

PLATFORM FOR BROADCAST NETWORK

Matrox Networked Broadcast Studio

Provides a format-compatible method of joining video servers, editing systems and content creation systems; components use a standard AVI file format; systems can be connected to a SAN for media sharing; multiple workstations can manipulate media files simultaneously; media stays native throughout post production.

514-822-6000; www.matrox.com



HD VIDEOCASSETTES

Maxell HDCAM videotape

Recording density is 1.4 times greater than Digital Betacam; tapes feature multi-orientation technology; exhibit a coercivity of 1650 Oe and retentivity of 2800 Br; line includes small lengths of 6, 12, 22, 32 and 40 minutes, and long lengths of 34, 64, 94 and 124 minutes.

201-794-5900; www.maxell.com



DISK ARRAY

Medea VideoRaid RTS

Low-cost redundant disk array are available in a compact five-drive desktop tower; available in capacities of 160 GBytes, 320 GBytes and 640 GBytes; arrays feature an Ultra160 SCSI interface; can sustain a data transfer rate of up to 100 MBytes/s; incorporate Medea's proprietary MST algorithm, which allows the arrays to support the playback of NLE timelines with up to two real-time uncompressed video streams.

818-880-0303; www.medea.com

TRANSMISSION AUTOMATION SYSTEM

Sundance Digital Titan

Scalable solution; designed for large, multichannel, server-based broadcast facilities, controls hundreds of channels in a facility, or remotely manages channels at multiple remote locations by having a Titan list processor server at each remote location, while an air control station at the central facility is configured to monitor and control both local and remote sites; can control peripheral devices such as character generators and still stores.

972-444-8442; www.sundancedigital.com



www.broadcastengineering.com



GRAPHIC AUTOMATION SYSTEM

VertigoXmedia "Product X"

Offers a one-step approach for creating high-end graphics and screen layouts; can be used to create templated graphics and automate various functions; users can drag high-level broadcast elements onto a graphical workspace from a gallery and link gallery elements to live data sources.

435-655-7138; www.vertigoxmedia.com

DIGITAL PRODUCTION CONSOLE

Yamaha DM2000

Offers 96 kHz effects, advanced surround production facilities, extensive integrated DAW and machine control, computer and memory-card based data management, and a flexible bus system with digital patching.

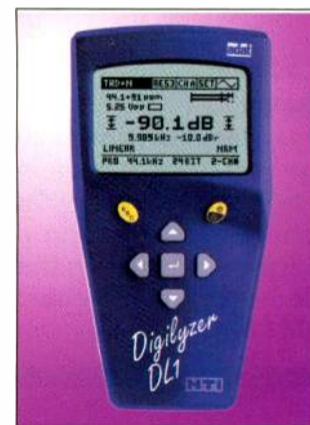
714-522-9011; www.yamaha.com

RECEIVER

NxtWave NXT2003

DTV cable and terrestrial receiver is configurable to work on either the ATSC-compliant 8VSB mode for terrestrial broadcasting or the OpenCable/ITU-J83B/SCTE DVS-031/DOCSIS-compliant 64 QAM and QPSK modes for digital-cable-ready 1 and 2 downstream reception; applications include off-air and cable DTV receivers, set-top boxes, PCTV and datacast appliances.

949-585-1800; www.nxtwavecomm.com



DIGITAL AUDIO ANALYZER

Neutrik Digilyzer DL1

Features audio signal analysis, ancillary data interpretation, carrier signal analysis and analysis of video-related audio problems; handles AES3 signals, unbalanced S/PDIF signals and optical connections; supports formats up to 24 bits; samples frequencies from 32 to 96 kHz; includes a built-in monitor speaker and headphone connector.

732-901-9488; www.neutrik.com

Wireless microphones

A legendary past. A view of the future.



UCR201

A new form...

A lot has been learned since the first *LECTRO* wireless mic appeared 27 years ago. The knowledge gained during this time has been enhanced by computerized engineering and microprocessor control. The result is a new form for high-end receivers. Legendary *LECTRO* reliability combines with a powerful LCD operator interface to provide outstanding performance. A single glance at the receiver will tell you what you need to know about RF and audio levels, transmitter and receiver battery levels and squelch status. This is the new form of professional wireless receivers.



UCR211

The new reality...

DTV broadcasts are the new reality. They occupy RF spectrum and make it far more difficult to find clean operating frequencies for low powered devices like wireless mics, IFB and intercom. The need to find clear channels has never been more acute.

A new function...

A built-in spectrum analyzer lets you perform a complete RF site analysis with the wireless receiver itself to find a clear channel. With only a few button presses, you can scan a 25.6 MHz band, find a clear channel, and get to work providing outstanding audio.



UCR411
Digital Hybrid
Wireless™

The receivers that make it happen...

The receivers pictured here range from a high value model designed for corporate and event videography (UCR201) to the advanced digital hybrid model (UCR411) designed for the most demanding applications in broadcast and motion picture production. The Digital Hybrid Wireless™ is simply the most advanced wireless microphone available. Pure digital audio. Hybrid RF link. Simply great.

An expanded family of transmitters...

A complete family of transmitters lets you use any microphone you prefer or need. You can use the familiar 100mW and 250mW belt-packs for electret lavalier mics, dynamic mics and line level inputs up to +20dBu. A new 100 mW plug-on model with selectable 5, 15 and 48 volt phantom power will handle any high current condenser microphone. A new miniature, stainless steel, watertight transmitter for electret lavalier mics is available in analog and digital hybrid versions to match any receiver model. This is the power of flexibility.



Get all the details.

Call toll free or visit the web.

(800) 821-1121

www.lectrosonics.com/R/be0602



LECTRO™

LECTROSONICS, INC.

581 Laser Road, Rio Rancho, NM 87124 USA - tel (505) 892-4501 - fax (505) 892-6243
e-mail: sales@lectrosonics.com - web site: www.lectrosonics.com



VIDEO MONITOR SYSTEM

Ward-Beck Systems VMS4

Low-cost system provides four-color LCD video screens in two rack units of space; available with analog inputs or serial digital inputs.

866-771-2556; www.ward-beck.com

DIGITAL MIXING CONSOLE UPGRADE

Studer D950 M2

Software enhancements include a new router and the AutoTouch Plus automation; AutoTouch Plus provides an off-line mix edit facility that permits the editing and copying of automation data for faders, knobs and switches within a mix, or merged across 2 mixes; mix files are automatically saved to hard disc.

818-841-4699; www.studer.ch

COMPACT RECEIVER

Lectrosonics URC411

LCD interface provides a full display of all operational levels; includes a spectrum analyzer, a tracking front-end, high level mixer and SAW filters; can be powered with two internal 9 volt batteries or external DC from 10 to 18 volts.

800-821-1121; www.lectrosonics.com

A/D-D/A CONVERTER

Aphex 212

Features the Aphex Drift Stabilized Analog to Digital Converter; offers multiple stereo outputs and two separate AES mono outputs; optional BNC outputs can be substituted for the AES XLR outputs to established 75-ohm applications.

818-767-2929; www.aphex.com

CHARACTER GENERATOR AND BROADCAST GRAPHICS SYSTEM

Pixel Power Collage 2

Features dual power PC processors and multiple Pixel processors; adds real time pushbacks and multiple continuous tickers for data displays; control different regions of a graphic independently; external data sources can be accessed via DCOM protocols.

561-395-4801; www.pixelpower.com

NETWORKED DIGITAL AUDIO SYSTEM

Aztec Radiomedia Hitplayer-L

Combines two stand-alone MPEG audio players with IP network services into a solution for both automated and interactive audio applications; an internal hard disk stores weeks of audio content; playlists can be updated by automatic or on-demand synchronization with remote FTP servers.

+33 3 88 30 90 99; www.Aztec-radiomedia.com

NONLINEAR EDITING SYSTEM

Lightworks Touch

Includes real-time 2D DVE, color correction and luma/chroma keying functions; can be configured as a stand-alone workstation or connected to a fibre channel network for multiple users; features dual field capture, dual stream video and full analog-style audio scrub.

514-844-8555; www.lwks.com

MEDIA CONVERSION SOLUTION

ADC Media Converter

Design eliminates the need for a fiber jumper; powers through the USB or PS/2 mouse port; includes built-in intelligence for optical link integrity and UTP link integrity indicators; solution supports 10Base-T, 100Base-TX UTP, 10Base-FL and 100Base-SX multimode fiber with auto negotiation.

800-366-391; www.adc.com

AUDIO RESTORATION TOOLS

SADiE CEDAR Retouch

Identifies and eliminates many types of sounds; processes at 64-bit resolution and is compatible with 96kZ digital audio; graphical tools allow user to identify the temporal and spectral content of the unwanted sounds; unwanted sounds are then replaced with audio derived from the surrounding signal – with no adverse effect on the desired recording.

615-327-1140; www.sadie.com



CLOSED CAPTION AND XDS MONITORING CARD

Evertz 7760CCM

Extends the signal monitoring capabilities of Evertz's audio/video monitoring product line by focusing on Vertical Blanking Interval data extraction, decoding, monitoring and display.

905-335-3700; www.evertz.com

When a full-rack is over-kill, and the standard brick solution just doesn't cut it...

Reach for **GearLite**

The NEW! Ross GearLite IIe

provides "broadcast quality" solutions, at a lower cost, for conversion and distribution jobs that are too small or isolated for the traditional "rack & card" solution but require higher quality signal processing than the products offered by the "standard brick" manufacturers.

Less Filling (Zero Rack Space)
More Satisfying (Ross Quality Engineering)

ROSS
Switchers, Keyers, & Terminal Gear

www.rossvideo.com

Feed-Friendly Decoder

\$1,395
with synchronizer: **\$1,795**

ADC-8032A NTSC/PAL to 4:2:2

A superior quality analog-to-digital converter specially designed to handle tough microwave and satellite feeds as well as all general decoding requirements.

ROSS
Switchers, Keyers, & Terminal Gear

www.rossvideo.com Tel: (613)652-4886 Fax: (613)652-4425

Don't leave your Signal Sniffing To the Dogs...

Use **evertz VistaLINK™** Monitoring & Display Products Instead!

MONITOR MORE FOR LESS	MONITOR MORE FOR LESS	MONITOR MORE FOR LESS
Loss of Video	Audio Level High	Audio Level Low
Video Format Error	Picture Black (postcut)	Picture Missing
Picture Black (postcut)	Video Frame (postcut)	VITC Error
Loss of Audio	AES Error	Loss of VCI/HP
EDM Error	No Search ID	Tally Action
7760AVM 7761AVM DC	7765AVM	7765AVM 4

evertz Ph: 905-335-3700 / Fx: 905-335-3573 / www.evertz.com

MEDIA CLUSTER

SeaChange International bmc 16XX series
Contains 16 drives per cluster node to scale to more than 8200 hours of online storage with up to 56 inputs and outputs; ensures 100 percent fault resilience from a single media file.
978-897-0100; www.seachange.com

AUDIO CAPTURE, CONDITIONING AND ENCODING SYSTEMS

Waves MaxxStream

Can simultaneously encode to multiple target resolutions and formats; integrates audio capture, processing, and encoding into one rack-mounted or desktop computer; uses its own DSP processor; includes an unlimited number of user presets

865-546-6115; www.maxxstream.com;
www.waves.com

DATABASE INTERFACE

Florical MediaReporter

Database tool identifies material that needs to be ingested into the video servers, material that needs to be purged or deleted from the system and material that has expired. Users can view and print out reports to keep track of the assets maintained by the automation system.

352-372-8326; www.florical.com

CONTENT MANAGER

Odetics AIRO Content Manager

Features a single screen for media preparation and data entry; includes a user configurable database view screen layout and an open distributed database architecture; has an integrated metadata management entry and customizable save, search and sort queries; browse and preview video server content with VideoSpy directly.

714-774-2200; www.odetics-broadcast.com

VIDEO MONITORING SET

Hamlet ADEPT

DV-ready, multi-format capable, on screen display video monitoring set; provides SDI, analog component, S-video and composite 625/525 multi-standard monitoring capability, including full field line select, bow tie and gamut indication; ideal as a compact, low power replacement for CRT measuring units in all pre- and post-production areas; incorporates new proprietary processing and filtering systems.

866-4-HAMLET; www.hamlet.us.com

RECORDER/PLAYER

QuVIS QuBit 601

True 10-bit uncompressed NTSC/PAL recorder/player with 8 channels of digital audio; has the ability to be expanded into a full-featured multi-format HD system; ideally suited for standard definition production, post, telecine transfer, large screen display, single-frame animation capture and playback; fully configured, it can record/play approximately two hours of uncompressed 10-bit standard definition content; in post production, it eliminates the linear limitations of a traditional tape medium.

785-272-3657; www.quvis.com



DIGITAL CINEMA PROJECTORS

Barco D-Cine Premiere DP50 and DP40

Combines exclusive Barco features along with an enhanced m15 Texas Instruments DLP Cinema Dark Metal 3 micromirror device that allows the director to go beyond film's current capabilities, allows the exhibitor unmatched screenings flexibility and the operator easy projector management; both projectors, the D-Cine Premiere DP50, based on the reference Kinoton lamp console, and DP40, providing a compact modular solution, are equipped with a unique range of advanced display, control and operating features.

770-218-3212; www.barco.com

LOW-POWER ANTENNA

Andrew AL8 PLUS

Designed for digital and analog broadcast requirements; handles up to 10 kw of digital power; provides effective radiated power levels up to 450 kW; available in 8- and 12-bay versions.

708-349-3300; www.andrew.com

EDITING SYSTEM

Editware Fastrack

Nonlinear/linear hybrid editing system designed to interface with and control disk-based video servers, with the added benefit to control VTRs, mixers, switchers, character generators and other peripheral devices; incorporates a full Graphical User Interface for a "see and hear" editing process with up to 80 channels displayed in groups of 8, each represented by its own track on the Fastrack GUI; the Fastrack GUI gives the editor the connectivity of a Windows platform, offering many features.

530-477-4300; www.editware.com

PORTABLE SDI SWITCHER

Brick House Video VTB-1D

4-input switcher is capable of operating as a stand-alone unit in the field or as a rack-mounted switcher in edit suites; installed functions include manual and auto wipe, manual and auto dissolve and auto fade-to-black; the dual standard PAL/NTSC switcher offers 4:3 or 16:9 operation.

530-477-4300; www.editware.com



SERVERS

Avica FilmStore

Line of servers built for digital cinema applications; the product line consists of the Avica Multiplex FilmStore system, which is comprised of a central storage and management system, the A2900, and Avica A550 Cache Servers; the A550 Multiplex Cache Server, which is designed to provide the ideal low-cost solution for single screen performances in large multiplexes; and the A500 FilmStore, which is a rugged two rack-space stand-alone server designed for motion picture delivery to a single digital cinema projector.

310-450-9090; www.avicatech.com

MONITOR

JVC DT-V1900CG

HD, multi-format 19-inch monitor that features super connectivity options to provide flexibility in any studio application; with natural flat CRT, the DT-V1900CG contains three slot ports for video acceptance of a wide variety of high and standard definition input signals; available optional modules include Composite, Y/C, Component (SD, DTV and HDTV), RGB, SDI and HD-SDI; utilizes a high voltage/deflection separation circuit, constant current feedback for anti-blooming and multi-format video capability.

973-317-5000; www.jvc.com

DIGITAL CONTENT MANAGEMENT SYSTEM

BT Broadcast Services mediaREEL

Uses Informix' Media 360 technology to digitize and then simultaneously encode content in MPEG-1, -2 and -4 formats, ready for storage and Web-based retrieval; the information is then stored in the BT Tower; the storage stage includes encoding, ingesting and cataloging content, while the retrieval stage includes searching, viewing and distribution.

+44 20 7555 0037; www.bt.com

EQUALIZATION TECHNOLOGY

Axcera Full Channel ADE

Designed to continuously correct the entire 6 MHz digital channel rather than just the 5.38 MHz Nyquist bandwidth addressed by current technology adaptive correction systems; the technique replaces the transmitter's baseband adaptive linear equalizer with a unique complex type equalizer; the result is a more accurate transmitted signal with less distortion, improving the receive threshold and allowing DTV receivers to lock to the signal more easily.

724-873-8100; www.axcera.com

SDI MONITORING CARD

Evertz Quattro 7765AVM-4:

Increases signal monitoring capacity and confidence by analyzing and displaying video, audio and data status information and fault condition alerts for four video inputs simultaneously in a 2x2-matrix format; Evertz can provide up to seven Quattro processors in one 3-RU frame.

905-335-3700; www.evertz.com

MAGNETIC MEDIA PRODUCTS

Maxell Professional Media magnet media products:

Media family includes digital products such as Digital Betacam, Betacam SP, Betacam SX, DVCPRO, HD CAM, D-5, D-2 and D-3.
201-794-5900; www.maxell.com



50 Ω RF COAXIAL CABLES

Belden Electronics Division

Cables include an RG-8X Type with a 15 AWG bare copper conductor, an Intermediate Type with 13 AWG bare copper conductor and an RG-8 Type with a 10 AWG bare copper conductor; features include water-block protection in wet environments and EMI/RFI shielding for noise reduction.

800-BELDEN-4; www.belden.com

HYBRID LINEAR/NONLINEAR EDITING WORKSTATION

Canopus CWS-100

Offers a linear workflow ideal for newsroom-style editors as well as a nonlinear feature set suited for the creative environment; powered by dual AMD Athlon processors; features include integrated jog/shuttle control with professional controllers, 3-point editing from VTR directly to timeline and real-time keying.

877-739-EDIT; www.canopuscorp.com

HIGH-DEFINITION SLOW-MOTION REPLAY

EVS Broadcast Equipment HD LSM-XT

Digital disk-based system; features two or four high-definition channels capable of simultaneous record and playback; offers instant cue up and replay functions, without interruption of the recording of the live action; intuitive nonlinear tools are available for the assembly of highlights packages.

973-575-7811; www.evs.tv

MODULAR PRESENTATION SWITCHER

Eyeheight PresTX

Configurable from SDI A/B mixing up to a fully-featured mix/wipe/key/DVE/clock-insertion master control system; designed for small network channel branding.

+44 1923 256 000; www.eyeheight.com

SHADOW BROWSING SYSTEM

Internet Pro Video SpectreView

Features full frame and timecode accuracy; allows access to professional quality video material for editing and review using standard desktop PCs via industry-standard networking; applications include newsrooms, subtitling, transmission and automation, and asset management.

+44 1223 477 000; www.ipv.com



EDITING SYSTEM

Panasonic newsBYTE50:

DVCPRO50/DVCPRO native nonlinear editing system with a dual, built-in 50 Mbits/s, 4:2:2 DVCPRO50/DVCPRO VTR; features the ability to load DVCPRO50 video at 2x real time; load DVCPRO video at 4x real time; also offers high-speed, lossless DVCPRO50/DVCPRO transfers to/from tape, direct recording to the timeline and an easy-to-use interface.

800-528-8601; www.panasonic.com/broadcast

DIGITAL MONITOR

OmniTek OmniView

Monitoring package for viewing standard-definition, high-definition and dual-link SMPTE 372M television images; its real-time signal processing power enables checking of input color gamut; provides CRC, TRS and EDH error checking; supports multi-channel embedded audio level and status display.

+44 1256 88 1110; www.omnitek.tv

ON-AIR GRAPHICS SYSTEM

Orad Hi-Tec Systems CyberGraphics

Powered by Orad's new scalable videographics platform, the DVG, which is capable of chaining any number of graphical nodes to produce photorealistic 3-D graphics live on-air; features include direct plug-in to Studio Max, built-in character generator and newsroom automation systems.

212-931-ORAD; www.orad-ny.com

8-VSB INTERFACE MODULE

Pixelmetrix

Designed for Pixelmetrix's DVStation preventative monitoring system; allows DVStation to measure 8-VSB modulation quality, monitor the MPEG-2 transport stream and validate program content; graphical display uses color coding to highlight actual constellation, pilot and data carrier points.

954-472-5445; www.pixelmetrix.com

DVB STATISTICAL MULTIPLEXER

Scopus Network Technologies RTM-3300

1RU system offers up to 10 inputs; ideal for medium-size headends and digital turnaround applications, as well as for instances in which broadcasters do not require excessive capacity, such as multi-channel DSNG and DENG applications; features include statistical multiplexing support and advanced remultiplexing.

858-618-1600; www.scopus.net

MEDIA INDEXING, ARCHIVING AND SEARCH SOFTWARE

Sonic Foundry MediaSite Publisher 5.0

Enables the creation of online reference libraries of key communication content that can be shared easily across any organization; features include customizable players that display media content on demand, export/import of textual information into a metadata index, and XML-export that allows the reuse of media metadata by other search engines.

608-256-3133; www.sonicfoundry.com

IMAGE STABILIZATION PLUG-IN FOR QUANTEL'S IQ

Video Design Software Poise

Developed around ioIMAGE's stabilization technology; reconstructs the camera's motion and smooths its trajectory; works on any shot; distinguishes between intentional and unintentional camera movements.

631-249-4399; www.videodesignsoftware.com

INTEGRATED FACILITY AND ASSET MANAGEMENT SOFTWARE

Xytech Systems Enterprise 2002

Enhancements include client/server synchronization, a new application toolbar that gives 1-click access to any available module and menu item, the ability to access outside reports, spell check capability, and a labor rules setup window.

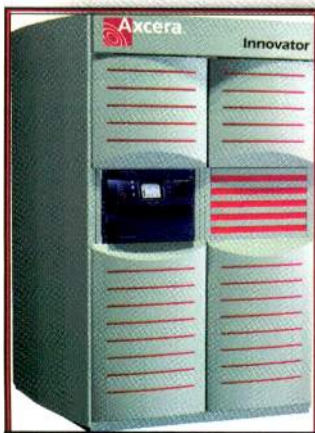
818-767-7400; www.xytechsystems.com

GRAIN AND NOISE REDUCER

Digital Vision AGR-IV

Features advanced motion processing, adaptive 3-D filters and edge-preserving spatial filter; does not reduce resolution or introduce undesirable motion artifacts; based on Digital Vision's DVNR real-time processing engine; available in SD and HD formats.

818-769-8111; www.digitalvision.se



VHF TRANSMITTER

Axcera Innovator DT VHF:

VHF version of the Innovator DT solid state transmitter; updated with MOSFET transistors; works with DT2B ATSC modulator for high efficiency; uses ADE linear and nonlinear adaptive correction.

724-873-8100; www.axcera.com



HIGH-DEFINITION DOWNCONVERTER

Evertz 2410md-hsn

Monitors 1.5 Gbits/s HDTV signal on standard-definition monitors; accepts 1080i and 720p; in segmented frame mode, the unit downconverts the 1080p/24sF input video to 525i/60 with 3:2 pulldown or 625i/50 with a 24:25 pulldown.

905-335-3700; www.evertz.com

2-RU ENCODER

Nextream DBE 4110

Incorporates an integrated modulator featuring QPSK, 8PSK and 16QAM modulation schemes; presents an IF output and an I-band output; allows remultiplexing of TS streams for multi-video DSNG transmissions; offers full compliance with DVB Basic Interoperable Scrambling System Mode 1 and BISS Mode 2.

+33 1 34 20 70 01; www.nextream-online.com



VIDEO SERVER

Seachange International Broadcast Mediaservers

Stand-alone video servers use RAID5 storage to scale to 490 hours of storage; handles 4:2:2/4:2:0 MPEG-2 and MPEG-1 media files.

978-897-0100; www.schange.com

DIGITAL SWITCHER

Pinnacle Systems PDS i-series

Consists of the PDS 9000i and PDS 6000i; provides full implementation of Pinnacle Systems' ThunderBrowse and PostDeko applications usable directly within the switcher control panel; features built-in framestores and DVEs.

650-526-1600; www.pinnaclesys.com

LOW-DELAY MPEG-2 ENCODER

Telescript Ultimate Field/ENG

Features HiBrite Performance to deliver easy-to-read text in virtually any lighting condition; designed for an easy assembly and portable operation; features Telescript's FPS-120 Field/ENG flat panel teleprompter with Quick Mount technology configured in a custom-built case.

201-767-6733; www.telescript.com

PSIP METADATA GENERATION SYSTEM

Triveni Digital Guidebuilder

Collects; translates, manages and generates PSIP data compliant with the ATSC/A65 standard; provides remote departmental user interfaces and fault-tolerant multiplexer-based table playout; its interoperable equipment list now includes harmonic encoders and multiplexers.

609-716-3500; www.trivenidigital.com

DATA ROUTER

Network Electronics D3232

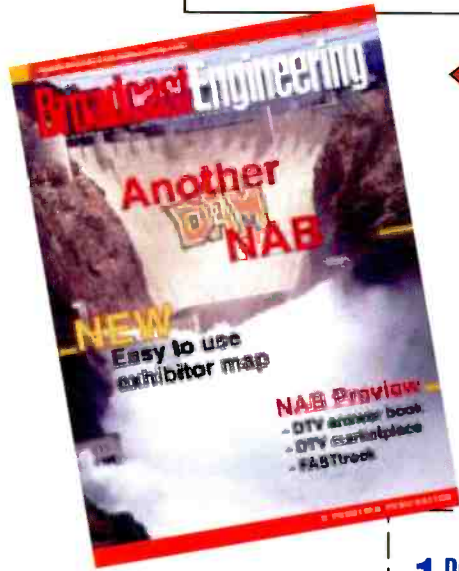
Data router simplifies installation of systems requiring machine control; RS-232 interface allows system control via Network's THOR Management System.

866-873-7494; www.network-electronics.com

ADC Telecommunications	13	800-227-6143	adc.com/broadcast
AJA Video	10	800-251-4224	aja.com
Anton/Bauer	7	203-929-1100	antonbauer.com
Axcera	23	724-873-8100	axcera.com
Chyron	1		chyron.com
ESE	29	310-322-2136	ese-web.com
Evertz Microsystems Ltd.	9	905-335-3700	evertz.com
For.A Corporation of America	15	352-371-1505	for-a.com
Hamlet Video International Ltd.	21	+44-1494-179-763	hamlet.co.uk
Harris Corp./Broadcast Div.	3	800-4Harris	broadcast.harris.com
Lectrosonics, Inc.	33	800-821-1121	lectrosonics.com/R/be0602
Leitch	BC	416-445-9640	leitch.com
Maxell Corp. of America	25	800-533-2836	maxellpromedia.com
OptiComm	17	858-450-0143	opticomm.com
Patchamp	20	201-457-1504	patchamp.com
Pesa Switching Systems	5	631-845-5020	pesa.com
Primedia Business New Media	27-28	212-204-2622	primediabusiness.com
Rohde & Schwarz	11	410-910-7800	rohde-schwarz.com
Ross Video	34		rossvideo.com
SeaChange	19	978-897-0100	seachangeinternational.com
Videotek	39	800-800-5719	videotek.com
Ward-Beck Systems	16, 26	416-438-6550	ward-beck.com
Wheatstone Corporation	2	252-638-7000	wheatstone.com
Zandar Technologies	31	321-939-0457	zandar.com

Apply for a FREE subscription on-line!

go to: <http://pbsubs.com/bebde2006.htm>



The digital landscape is changing –
Each month the US/Canadian Edition of Broadcast Engineering
delivers to you crucial, up-to-date coverage of the digital
television industry. **Stay informed, APPLY TODAY!**

or apply by mail or fax

1 Do you wish to receive/continue to receive the US/Canadian Edition of Broadcast Engineering FREE? YES! No

Signature Required _____
 Print Name _____
 Title _____ Date _____
 Phone(____) _____
 Fax(____) _____
 *E-Mail _____@_____ BD2006

*Your e-mail address is used to send order confirmation and to communicate to you about your subscription. Please check here if you DO NOT wish to receive:
 Announcements regarding other Primedia Business products or services via e-mail.
 E-mail messages with special offers from carefully selected, relevant businesses & organizations.
 For a full statement of our Subscriber Privacy Policy, visit our website at www.primediabusiness.com.

2 Which type of facility or operation best describes your primary business classification? (Check only ONE box.)

- 20 TV Station (including Networks & Low-Power TV)
- 26 Combination TV & Radio Station
- 39 Cable (including Networks)
- 45 Telecoms
- 29 Recording Studio
- 30 Teleproduction Facility/Independent Program Producer
- 40 Post-Production Facility
- 50 Streaming Media — Network Provider/ISP/IDC/Telco, Internet Content Provider/Web Publisher, Services, Software Provider
- 31 Microwave, Relay Station or Satellite Company for TV and Cable
- 33 TV Consultant (Engineering or Management)
- 46 Systems Integrator
- 34 TV Dealer or Distributor
- 35 Other (please specify): _____

3 Which of the following best describes your title? (Check only ONE box.)

- A. Company Management:**
 - 01 Chairman of the Board
 - 02 President
 - 03 Owner
 - 04 Partner
 - 05 Director
 - 06 Vice President
 - 07 General Manager (other than in charge of Engineering or Station Operations)
 - 08 Other Corporate/Financial Official
- B. Technical Management & Engineering:**
 - 09 Technical Director/Manager
 - 10 Chief Engineer
 - 11 Other Engineering or Technical Title
- C. Operations & Station Management/Production & Programming:**
 - 12 Vice President Operations
 - 13 Operations Manager/Director
 - 14 Station Manager
 - 15 Production Manager
 - 16 Program Manager
 - 17 News Director
 - 18 Other Operations Title
- D. Other (please specify):** _____

4 Which statement best describes your role in the purchase of equipment, components and accessories? (Check only ONE box.)

- A Make **final decision** to buy specific makes, models, services or programs
- B **Specify or make recommendations** on makes, models, services or programs
- C Have **no part** in specifying or buying

US/CANADIAN EDITION

Broadcast Engineering®

THE JOURNAL OF DIGITAL TELEVISION

MAIL TO: P.O. Box 12914 • Overland Park, KS 66282-2914
 FAX TO: 913-967-1903

5 Which of the following types of equipment will you be evaluating for purchase in the next 12 months? (Check ALL that apply.)

- 1. Audio Products**
 - 1A Audio consoles/mixers
 - 1B Digital audio workstations
 - 1C Distribution amplifiers
 - 1D Headphones, headsets, intercoms
 - 1E Telephone interface systems
 - 1F Magnetic tape, audio
 - 1G Microphones
 - 1L Monitors (speakers)
 - 1J Recorders, players
 - 1K Switchers, routing
 - 1N Audio Processing
- 2. Video Products**
 - 2A Camera heads, tripods, pedestals, booms, dollies
 - 2B Cameras; lenses
 - 2C Graphics, titling, effects
 - 2D Nonlinear editing systems
 - 2F Editing controllers, systems
 - 2G Frame synchronizers, time base correctors
 - 2H Lighting systems
 - 2T Magnetic tape, video
 - 2J Monitors (picture, studio quality)
 - 2K Recorders, players
 - 2L Robotic camera controls
 - 2M Signal processing
 - 2N Signal routing, distribution
 - 2W Standards, format & scan converters
 - 2P Still store systems
 - 2Q Switchers, production/master control
 - 2R Storage/video servers
 - 2S HDTV Equipment
 - 2V Virtual Sets
 - 2X MPEG compression/encoding systems
 - 2Y Projection systems
 - 2Z DVD systems
- 3. Test & Measurement Products**
 - 3A Analyzers, audio, video, RF
 - 3B Audio, video signal generators
 - 3C Waveform, vectorscope monitors
 - 3D Digital signal testing
- 4. Miscellaneous Products**
 - 4A Battery packs, chargers
 - 4B Cabinets, racks, consoles
 - 4C Cables, connectors
 - 4D Carts, cases (equipment, shipping), tools
- 5. RF Products**
 - 5B Exciters
 - 5C Fiber optics
 - 5E Power amplifiers, cavities
 - 5F Receivers
 - 5G Remote production vehicles, program relays
 - 5H Satellite T/R components, electronics
 - 5P STL/ENG components, electronics
 - 5J Switches, RF coaxial
 - 5K Transmitters
 - 5L Antenna systems, towers
 - 5M Transmitter, remote controls
 - 5N Tubes
 - 5Q Weather, radar RF products
 - 5R Cable/set top/CA systems
- 6. Automation & Computer Products**
 - 6A Accessories/peripherals
 - 6E Automation systems
 - 6H Business automation
 - 6T Commercial insertion systems
 - 6K Machine control
 - 6L Newsroom automation
 - 6P Record/playback automation
 - 6Q Software, engineering
 - 6R Software, production, planning
 - 6X Video interface cards
 - 6Y Networking products
 - 6Z Digital asset management
- 7. New Media/Internet**
 - 7A Encoding products
 - 7B Internet service providers
 - 7C ecommerce technology
 - 7D Content creation systems
- 8. System integration/engineering services**
- 9. None of the Above

6 What is the budget for equipment and services you are evaluating for purchase in the next 12 months? (Check only ONE box.)

- 1 Less than \$24,999
- 3 \$25,000 - \$99,999
- 5 \$100,000 - \$299,999
- 6 \$300,000 - \$499,999
- 7 \$500,000 - \$999,999
- 8 \$1,000,000 - \$1,999,999
- 9 \$2,000,000 and up

Incomplete forms cannot be processed or acknowledged. The publisher reserves the right to serve only those individuals who meet the publication qualifications. Please allow 4 to 6 weeks for processing.

BD2006

F

A PRIMEDIA PUBLICATION

WHILE ON-LINE VISIT:

manage your subscription



trade show coverage



preview product demos



www.broadcastengineering.com

Eyes and Ears 24/7



Signal Quality Manager

Patent Pending

We Are Here.

Signal Quality Manager™: The complete solution for, around the clock, centralized video and audio monitoring.

Whether you are managing two or two thousand sources... analog, digital or MPEG formats... Engineering, Operations, Technical Services or Facilities...the Videotek Signal Quality Manager™ (SQM) is available with a variety of modules to fill your specific needs.

With the SQM you can be assured that signal quality issues are recognized quickly and precisely, minimizing off-air time and preventing unnecessary revenue losses.

You can count on the SQM every day, every hour, every minute... every time:

- Remote control and real time, unattended monitoring
- Monitor MPEG, audio and video in analog and digital formats
- Distributed Processing provides real-time alarm reporting
- Unequaled alarm package
- Log all alarms by source, time and date code
- Data storage supports management reporting and trending
- Easily integrates into existing systems with built-in SNMP agent or utilize the SQM-MS monitoring software
- Customize system view screens with software draw package
- Basic or Advanced modules available
- Dedicated Macroblocking detection module

Let the Signal Quality Manager be your Eyes and Ears 24/7.

Call Videotek today!

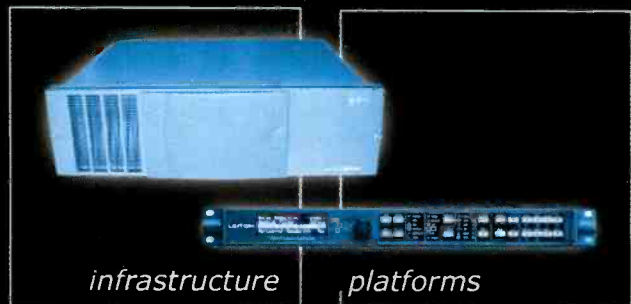
VIDEOTEK®
A Zero Defects Company

Toll Free: 800-800-5719 www.videotek.com
Direct: 610-327-2292



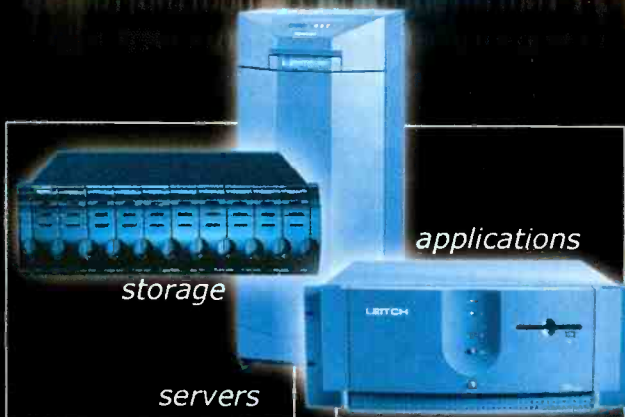
People Who Use Videotek Think Clearer.™

The World's Most Extensive Portfolio of Professional Audio/Video Products



infrastructure

platforms



storage

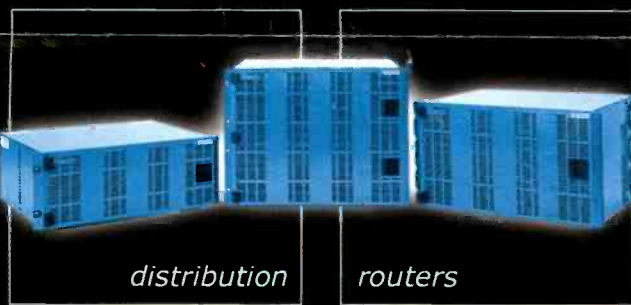
applications

servers



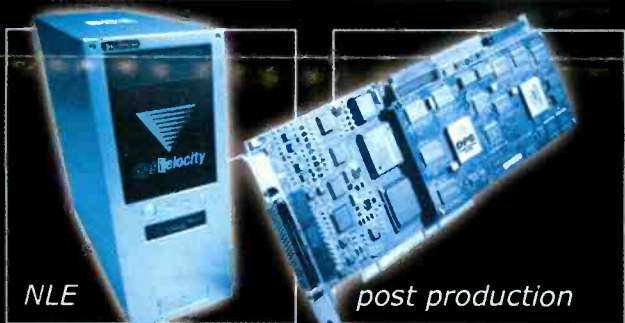
slo-motion

stills & clips



distribution

routers



NLE

post production



master control

www.leitch.com

Canada +1 (416) 445 9640 USA East +1 (800) 231 9673 USA West +1 (888) 843 7004
Europe +44 (0) 1344 446000 France +33 (1) 42 87 09 09 Hong Kong +852 2776 0628
Japan +81 (3) 5423 3631 Brazil +55 (11) 3151 5093 Latin America +1 (305) 512 0045