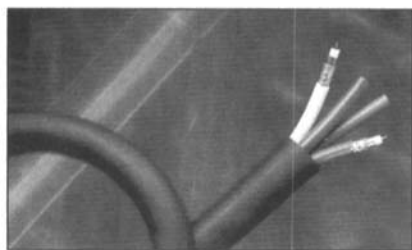
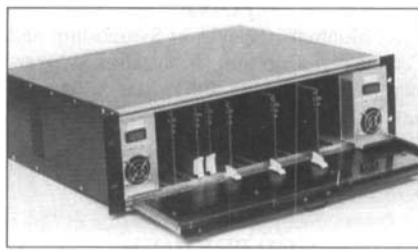


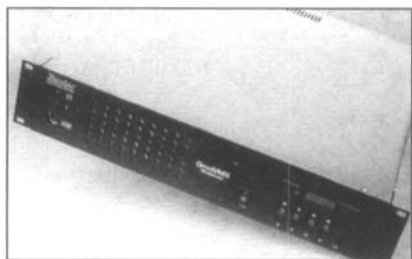
New Products



Belden Brilliance video snake cable



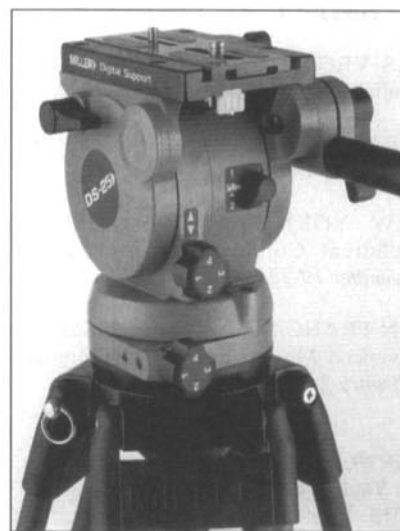
Evertz DTV frame



Zander's VMX-64 video system



Models 874 and 876 heavy-duty softcases from Miller Fluid Heads



The DS 25 fluid head from Miller

Broadcasting Equipment

Barco has announced the new **Pictor high-definition encoder** for studio-transmitter links. The 2U encoder, including front panel control encodes, one 1080i or 720p video channel with associated audio and data into an ATSC compliant transport stream. The SMPTE 310M transport stream interface allows direct use of picture in DTV applications.

The new family of DBE 4100 MPEG-2 encoders from Thomson Broadcast Systems was designed to address the following target markets: **The DBE 4110 DSNG encoder** accepts a PAL/SECAM/NTSC composite signal and allows switchable MP@ML or 4:2:2@ML encoding with a reduced low delay. This encoder can also be supplied in DSG 4000 "flyaway" version, with integral modulator and upconverter. Fast and easy setup is available from the control command front panel of the DBE 4110. The DBE 4120 contribution encoder accepts an SDI video input and up to ten stereo AES/EBU audio channels. Optionally, the DBE 4120 can accept a composite video signal. It may be directly interfaced with telecom networks through a built-in ATM interface, using the AAL1 or AAL5 switchable adaptation layer. **The DBE 4130 broadcast encoder** is designed for digital broadcast centers and network headends. The compact version (19 in-2U) performs MP@ML video encoding and can be fed with a SDI or composite signal.

Thomson Broadcast Systems has also introduced the **System 5000 multiservice encoder**. The MSE 5000 supports 13 ATSC input formats from 1080p down to 480i using the same hardware. The TNA/SNA/CNA 4600 adaptors comprise a new range of telecom network adaptors. They are suited to convey MPEG-2 transport streams between remote sites, such as a digital broadcast center to an uplink or from a central headend to several remote headends, over PDH, SDH, or ATM networks. This equipment also has multiplexing or demultiplexing of several tributaries on the same telecom network link.

Leitch Technology Corp. has introduced its new ezHD package of high-definition products which include the **Juno HDTV upconverter**. The upconverter was designed to create high-definition signals from 525-line signals. The Juno converts standard definition digital signals to high-definition, wide-screen format—with virtually no artifact. It analyzes signals pixel-by-pixel and selects the processing filter to maximize detail for every image. Once upconverted, the signal can be locally branded using the new **HDTV logo/generator inserter**. Then before encoding and transmitting, broadcasters can use the new **D/A converter** to generate a component analog signal for monitoring.

Miranda Technologies has announced a new **scalable upconverter**. The Aquila provides upconversion of any 601 input signal to a HD serial digital signal. It supports all

known signal formats, including 480p59.94, 720p59.94, 1035i29.27, and 1080i29.27. Optional input and output modules can be added or substituted from the basic package to support I/O requirements. As part of the scaling process, the Aquila upconverter also provides complete support for 4:3 and 16:9 aspect ratio conversion. Protection features include optional redundant power supplies and fully redundant frame cooling with early warning failure reporting. The system also provides advanced error reporting, including GPI alarms and monitoring, as well as input signal presence and error detection with remote reporting.

Barco Communications Systems announces new **ADVM 37, ADVM 49, and ADVM 70 broadcast monitors**. The ADVM monitors have menu driven control of geometry, color-alignment, scanning format, and degauss. They are available in 14 in. (ADVM 37), 19 in. (ADVM 49), and 28 in. (ADVM 70) sizes and include SDI and composite inputs.

UNO PRO, an enhanced version of the UNO display processor, also from Barco Communications Systems, is a DTV product that provides the ability to display both 480p and 480i material on a single high-resolution display. Images can be switched between 4:3 or 16:9. The UNO PRO provides true broadcast features such as pulse cross, blue-only, under-monitor display, and tally functions. The UNO PRO can be remote controlled via RS-485.

The **DRC 7100 interactive network adaptor** from Thomson Broadcast Systems is a data bridge for interactive services using the capable network return path. The adaptor is fully compliant with ETSI standard (ETS 300-800, based on DVB-RCCL and Davic). It provides interface between interactive service providers and set-top boxes or cable modems.

Cables

Belden Wire and Cable Co. has introduced three new additions to its Brilliance family of cables for broadcasting and audio/video markets. **Brilliance video snake cables** offer Belden's 1855A and 1505A serial digital cables in bundled multichannel A/V cables. They are designed for use where precision video is routed, for critical RGB signals, and for multiple channels of unbalanced audio (analog or AES/EBU). **Brilliance audio snake cables** with enhanced NEC ratings feature the 1408R Series CMR rated audio snakes. For installations that require penetrating multiple floors, this cable eliminates the need for metal raceways, fireproof shafts, and firestops. The **Brilliance SMPTE camera cable** consists of two single-mode optical fibers, two 24AWG copper signal conductors, and four 20AWG copper auxiliary conductors. A stainless steel strength member at the cable's core ensures ruggedness, flexibility, and extended life.

Camera Accessories

Radamec Inc. has announced its **robotic pedestal RP2-A**. It features modified height functions, navigational improvements, and adjustments to cable ergonomics. The RP2-A is suitable for both ENG and studio-style cameras and lenses and can support variable models of teleprompter.

Miller Digital Support has introduced two **heavy-duty softcases**—Model 874 which suits single tripods, and Model 876 for compact 2-stage tripod systems. Both utilize a three-sided, top zipper style design with weatherproof grey Cordura interior and exterior material. They feature offset carry handles and adjustable padded straps. The wall-lining system offers robust protection with a rigid polyethylene sheet, sandwiched between layers of polypropylene padding. Rigid end padding allows the system to stand vertically with complete protection.

Hitachi Denshi America Ltd. has introduced a **heavy-duty, environmentally sealed housing** developed by Display Devices, for its Eagle remote observation system. The highly wind and water resistant housing was designed to provide protection from outdoor elements for Hitachi's HV-D3, HVC-10A, HV-D15 and HV-C20 CCD cameras and its corresponding pan/tilt

system. Camera/lens combinations of up to 50 lbs can be accommodated within the Eagle System's housing. Heater, blower, washer, and wiper are among the available options and all are remote controllable. A built-in RS-485 interface provides PC-based control of the Eagle System's operation from remote locations. The pan/tilt head has excellent motion characteristics and can be positioned in up to 64 different preset combinations; lens settings can be memorized by the head. All settings are stored in non-volatile memory inside each head and can be easily recalled at any time. Control software is available for Windows 95/98 and Windows NT compatible PCs.

Hitachi Denshi has also introduced the **TU-Z3 component broadcast-quality triax system** for its Z-3000 series cameras. The wide bandwidth of the Y channel (luminance only) on this high-performance unit complements the Z-3000's high-resolution output. This system will also run cable lengths of over one mile, making it ideal for field production work where long cables are mandatory. The TU-Z3 was specifically designed with a 10-MHz bandwidth to provide images of the highest quality in 4:3 or 16:9 aspect ratios. The system can run from a 12-V DC supply or standard 117-V A/C power.

Cameras

Hitachi Denshi America, Ltd., has announced the unveiling of several new cameras. The **HV-D27 and HD-D37 remote head color cameras** are two-piece cameras featuring an ultracompact and lightweight three-CCD head with C-mount optics. The HV-D27 uses 1/2-in. CCDs, while the HV-D37 employs 1/3-in. CCDs. The cameras are best suited for highly demanding imaging environments. The miniature camera head can be separated from the CCU by up to 30 m of camera cable and has 800 TVL of resolution and 62 dB S/N ratio using digital noise reduction (DNR). Three scene files allow the user to store set-up information for a particular application, and with the push of a button recall a scene file for a different application. Field or frame long-term integration, along with DNR and ultra-gain, allows use of the cameras under low light levels. They have a sensitivity of 2000 lux at f8.0. An RS-232C remote control port allows for operation of the cameras from a remote computer.

The **KP-M2R and KP-F2** are two black and white, near-infrared cameras. The **KP-M2R** features high sensitivity, high resolution, and high performance in a lightweight package. It uses a 768 x 494 pixel, 1/2-in. image-sized CCD with sensitivity in the near-infrared spectrum. Horizontal resolution is 570 TVL (560 TVL CCIR), and the vertical resolution is 485 TVL (575 TVL CCIR). A high S/N ratio of 56 dB allows

good image quality even at the minimum illumination level of 0.3 lux. Peak sensitivity occurs at 640 nanometers, while useful sensitivity extends above 900 nanometers. The **KP-M2R** functions include an eight-step electronic shutter, asynchronous reset, field-on-demand, integration mode switching, HD/VD external drive and non-interlaced scanning. The **KP-F2** uses a 1/3-in. progressive scan microlens IT CCD with sensitivity in the near-infrared spectrum. The camera's CCD has peak sensitivity in the 800-nanometer region with usable sensitivity above 1,000 nanometers. Two simultaneous video signals can be obtained from either the rear panel multipin connector or two BNC lines. A multistep electronic shutter selects shutter speed in eight steps from 1/60 to 1/8000 of a sec. A frame-on-demand function allows the start and duration of image capture to be determined by an external pulse. The camera has a S/N of 50 dB and a standard sensitivity of 30 lux at f1.4.

The **SK-3000 studio/field and SK-3000P portable multistandard digital cameras** with newly developed 2,200,000-pixel CCDs provide a true 1080i output for HDTV. Due to the modular design of these cameras, 720p and 480p formats can also be accommodated. NTSC (480i) outputs are provided in both digital and analog. The SK-3000 series cameras provide separate processing and control of the HDTV and NTSC signals. Two full sets of controls are standard: one for the HDTV signal and a second set that independently adjusts the NTSC signal.

Designed for ease of operation, the SK-3000 series cameras have automatic 16:9/4:3 signal conversion. The 1.5-Gbit/sec digital output from the camera heads is brought to the camera control unit via optical fiber cable. At the camera control unit the signal is digitally converted to an NTSC (480i) rate (16:9/4:3) for the serial digital component and analog outputs. Both the SK-3000 and SK-3000P offer 1200 TVL of resolution (HDTV), f8.0 at 2000 lux sensitivity and a signal to noise ratio of 54 db. The field rates are switchable from 60 Hz to 59.94 Hz.

The **SK-26PW two-piece digital camera** was designed for shooting in especially tight enclosures. Functionally identical to the SK-2600PW, the SK-26PW differs only in that the lens mount and CCD assembly can be removed from the camera body while remaining connected to the body with a multicord cable.

The removable small lens and CCD block assembly can be used for shooting where space to mount the camera head is limited. With an optical block that has only 1.2 kg, the SK-26PW can be mounted anywhere, but was specifically designed for confined areas. A handheld CP-F300 remote control panel connects directly to the camera head and provides convenient control of camera functions including iris, master black,

white, and black paint.

A 4:3 version of the **Z-3000W portable, digital camera** is also available from Hitachi Denshi. With the exception of 16:9/4:3 switchability, this camera provides all of the features of the widely used Z-3000. It features enhanced sensitivity (F11 at 2000 lux) and a 2/3-in. CCD. It is designed for a variety of imaging applications, including: ENG usage at television stations, in-studio television production, corporate and educational video producers, wedding videographers, and independent video producers. A built-in digital noise reduction circuit provides a 65 dB signal-to-noise ratio, and settings can be instantly stored and recalled using the camera's Smart Card feature.

The camera can be remotely controlled from a personal computer via an RS-232C port, and multiple cameras can be controlled from a single computer. It can also be remotely controlled from a Canon U-4 motorized pan/tilt unit. The Z-3000 is dockable to most popular VTR formats.

The **1707 one-piece digital triax camera** from Thomson Broadcast Systems is now available in both 625 and 525 lines. Designed for intensive use in studio and outside broadcast applications, the 1707 camera is all-digital from acquisition to transmission over triaxial cable. Its features include digital triax link with no compression, and lightweight, easy-to-handle, one-piece configuration. The 1657/1557 12-bit digital cameras all use the same digital image processing, with 12-bit quantization, working 14 bits or more for accurate processing of the most difficult pictures. The 1657 is available in several configurations, suited to different shooting conditions.

Computer and Accessories

A **Windows NT front-end workstation**, available from Drake Automation, has been designed to establish a user-friendly editing environment with the opportunity to have multiple editing positions. Operators can log on and control any permitted channel, using these workstations, as well as a graphical user interface. A new range of liquid crystal control panel supports this GUI, with LCD button functions that can be dynamically reassigned to match channel selection and/or operator preferences.

Arriflex Corp. has announced the **laptop camera controller (LCC) 1.4.0** for Windows 95 and Macintosh. The LCC 1.4.0 adds remote control of the 435 Integrated Video Assist (IVS) character inserter functions, plus a handy "Find" function. The new "IVS Character Inserter" window allows easy insertion and placement of text and frame outlines in the video signal. A simple button click inserts text frame or outlines, which can be moved by dragging directly on the computer screen.

Fifty-two characters of user-defined text can be entered directly on screen. Advanced features include the ability to show any text for only a given amount of time after camera start, the automatic insertion of camera warnings (like LOW BAT) into the video signal, and the ability to display any camera-status information, including true fps, shutter angle, footage counter, scene number, take number, etc.

Fiber-Optic System

Barco Communication Systems has introduced DTV features for the **Luxor, a fiber-optic transport system**. Luxor will transport uncompressed SDI signals at 270 and 360 Mbits/sec; mezzanine level compressed HDTV signals at 360-Mbit/sec SDTI streams, and ASI formatted MPEG-2 transport streams. It serves as a solution for many STL applications, studio-to-studio contribution links for both SDTV and HDTV, and intra-facility transport of SDI and SDTI based signals.

Film

Kodak has introduced an improved black-and-white separation film designed to extend the life of valuable color motion pictures. **Kodak panchromatic separation film 2238** is coated on a rugged estar base that resists shrinkage, other physical damage, and chemical deterioration. It can be used for restoring color films with dye-fading problems and for specialized optical special effects applications, including fine-grain separations for blue- and greenscan traveling mattes, and density cover mattes. The film features improved image structure, resulting in enhanced sharpness and less highlight grain. The blue record is faster, and has a thinner emulsion and new gelatin hardener.

Fluid Heads

Miller Digital Support has released **DS 25 and DS 30 ENG fluid heads**. Designed for ENG and field production camcorders, the DS 25 is a 100mm ball-leveling fluid head featuring four-position pan and tilt drag selection plus selectable counterbalance to help tune the head's balance into the camera/lens payload. It is available in eight system configurations with a choice of aluminum and carbon fiber tripods and both single and 2-stage extensions. The DS 30 counterbalance supports heavier lens/battery/adaptor payloads, as used for EFP or documentary productions. It is available in six system configurations and also has a choice of single stage and 2-stage tripods.

Frame

Evertz Microsystems Ltd. has announced the **Evertz DTV Frame 7700FR**. This is an advanced 3RU frame system that is

capable of housing HDTV, SDI, and analog applications concurrently within the same frame. The 7700FR was designed to meet the wide range of requirements encountered during the transition from standard-definition to high-definition television. System features include front loading, hot-swappable redundant power supplies, front-loading hot-swappable module configuration, front loading redundant cooling fans, monitoring window to verify module status and power supply status, auto-ranging power supplies, and more.

Measurement Package

Tektronix has introduced the latest in their series of **application-specific measurement packages** that use Java technology. The TDSJIT provides advanced, automatic measurement and analysis of clock timing in industry-specific terminology, automating such crucial measurements as cycle-cycle jitter, N-cycle jitter, skew, period, and duty cycle. These measurements are performed on contiguous clock cycles from single-shot acquisitions. Profile plots that display measurements versus cycle quickly show how various timing parameters change over time. Comprehensive statistics and histograms of timing parameters enhance the powerful analysis capabilities of the TDSJIT.

Modular Jacks

Molex Inc. has announced **high-speed modular jacks**. Modjacks are ideal for high-speed networking applications that include LAN equipment, routers, bridges, and hubs. The overmolded module design compensates for the impedance changes commonly caused by jacks, eliminating the need for external components to minimize crosstalk. Modjacks are available in shielded and unshielded right angle and vertical configurations. The shielded version provides advance EMI/RFI protection.

Multiplexer

Barco Communication Systems has introduced the new **Pegasus MPEG-2 multiplexer**. The 3U multiplexer provides a DVB compliant transport stream output at bit rates up to 100 Mbits/sec. The transport stream includes user-selected programs up to 10 multi- or single-channel inputs. Pegasus automatically updates DVB SI tables ensuring a DVB compliant transport stream output. Optionally, it can be equipped with internal E3 and DS-5 interfaces.

Switcher

The **9300 digital switcher (2 M/E)** from Thomson Broadcast Systems is the intermediate size switcher in the range. Depending on which options are selected, it can have 1.5 M/E with DSK, 2 M/E, or 2

M/E with 3 DSKs. As standard there are 12 inputs, which may be expanded to 64. The 9300 can interface with all types of DVE, controlling up to 48 auxiliary buses.

Transmission Automation

Drake Automation has announced the A-8000 master transmission automation. The A-8000 uses a radically new distributed processor architecture to permit in-service system expansion from 1 to 100 plus channels with full source sharing and extensive operator access. Equipment can be freely allocated and connected to any playout channel. The A-8800 ingest automation system complements the A-8000 by providing advanced material capture, archive and distribution—capable of replacing traditional “tape protection” processes. A-8800 facilities include material review and mark in/out prior to capture. Once an item has been captured, it can be reviewed and validated before being archived into a robotic data tape library or transferred over fiber channel to an on-air server. Additional features include live event and timed event capture, plus the ability to automate back-up or distribution records.

Video Analyzer

Synthesys Research Inc. has introduced the BitAnalyzer HDTV high-definition video analyzer (HDVA292). The HDVA292 has been significantly improved by the addition of support for multiple standards and a test pattern generator option. Both generation and analysis supports every source format documented by SMPTE 292M, including the progressive 24 Hz frame-rate standards needed for post-production. Test pattern generation features include line- and frame-based patterns, user-patterns, motion, error insertion, jitter injection, embedded audio, and networking connectivity. Analyzer features include 15 realtime error detection types, error logging, numeric, vectorscope, waveform, and color picturemode displays, and a unique feature called Error Detective that captures errored pixels for offline analysis.

Videocassette

Maxell Corp. has introduced its DVCPRO digital videocassette. It features the company's new 0.1 µm diameter ultrafine Ceramic Armor Metal Particle technology. Uniformly dispersed fillers in the tape formulation minimize head abrasion by reducing friction between head and tape during high-speed head rotation, and also clean debris from the head. A special binder technology also ensures long-term durability in extreme ENG/EPF environments, as well as demanding and playback modes, such as still-frame and shuttle-frame viewing. The videocassette features a large viewing window design, which per-

SONY

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Job Code: SMP-LM-7704233

Job requires 5+ years' professional exp in the design, operation, testing and maintenance of large scale digital video and audio production and broadcast facilities. Job duties focus on the design of floor plans, equipment rack and patch bay elevations; and signal flow diagrams. Must be computer savvy, have in-depth knowledge of MS Windows and Excel, and have a strong electronics background. AutoCAD, LAN/WAN, ATSC, MPEG-2, AC-3 and video server experience a plus.

Project Managers

Job Code: SMP-DO-7704233

Job duties focus on the management of resources to execute fully-integrated broadcast systems. Must complete projects on time and within budget using your 5+ years' exp in project management in broadcast/production systems.

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www.sony.com/jobs

mits users to easily confirm the remaining tape and winding condition. To ensure low error rate, the videocassette shell and cover feature a static-resistant resin to prevent attraction of dropout-inducing dust and foreign particles.

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Barco Communication Systems, email: info.na.bcs@barco.com

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Hitachi Denshi America, Ltd., 150 Crossways Park Drive, Woodbury, NY 11797, tel: (516) 921-7200, fax: (516) 496-3718

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