News

Matsushita to Supply Broadcast Equipment at 2000 Olympic Games

Matsushita Electric Industrial Co., Ltd., Osaka, Japan, signed a contract with the Sydney Organizing Committee for the Olympic Games (SOCOG) to become the official host broadcast equipment supplier for the 27th Summer Olympics to be held in Sydney, Australia in the year 2000.

The contract was signed through the Sydney Olympic Broadcasting Organization (SOBO), which was established by SOCOG to provide coverage to nearly 200 international and radio broadcasters. As host broadcast equipment supplier, Matsushita will deliver Panasonic digital broadcast cameras and VCRs, professional audio equipment, and television monitors to SOBO. Matsushita and other leading manufacturers will also provide SOBO with broadcast equipment, systems design, installation, and maintenance.

Mashpee Members Aid Car Crash Victims

The Society recognizes the heroic efforts of Mashpee Student Chapter members Steve Purcell, Mike Cook, and Paul Trask. The three, on their way to Boy Scout survival training, were instrumental in the rescue of a man and women involved in a car crash in Yarmouth, Mass.

New Products

Camera Equipment

Kata USA introduced the **Camera Glove,** a padded 1/8 in. thick jacket designed to shield camcorders from a busy shoot. The glove is constructed of a rugged three layer material developed by the company. The innermost layer draws humidity from the camera surface, while the middle layer is made of closed-cell foam for insulation and protection. Other features include an elasticized opening to accommodate lenses of various diameters, and a window on the side panel permitting cassette replacement.

The **CamPole video camera system** from Innovision Optics, Inc., is designed to extend the camera operator's reach. The system consists of a miniature 3-chip CCD video camera integrated into a watertight housing, manipulated by quiet servo motors, and mounted on a series of interlocking carbon fiber tubes. Systems are available in either a body-mount version called the CamPole SL, or a longer tripod-mount version called the CamPole XL. The tubing mounts together with a bayonet system and can be custom configured to specific shooting situations. The 22-lb SL model extends to 15.5 in., and the 11-lb XL model extends to 22 in.

Filters

Schneider Optics has introduced a series of **mild diffusion filters** that soften a scene without significantly affecting contrast, creating flare, or making subjects look out of focus. The filters create effects comparable to softening filters used in the early days of Hollywood, but with consistency. The softening effects are achieved through a series of evenly-spaced concentric circles right in the glass. A standard set of filters includes strengths of 1/4, 1/3, 1/2, 1, and 2, each with its own circular pattern. The stronger diffusions contain tighter circular patterns, while the more subtle diffusions have circular patterns further apart. These filters are available for professional television and motion picture cameras in square, rectangular, and round sizes.

Microphones

JBL Professionals has announced the **EON M Series microphones** which include the M100S, M80S, and MS60S.

The M100S features a neodymium magnet system for extremely high output and high SPL handling with minimum distortion. A dual density type diaphragm is used to provide an extended and extremely flat frequency response, which significantly reduces feedback without coloring and acoustic signal. The unit has a frequency range of 60 Hz to 18 KHz and its sensitivity at 1000 Hz is -72 dB (+/-3 dB). At 1000 Hz, the microphone's impedance is 250 ohms.

The JBL M80S also includes a neodymium magnet system and features a frequency range of 70 Hz to 16 KHz. The product's sensitivity at 100 0Hz is -72 dB (+/-3 dB), and its impedance at 1000 Hz is 600 ohms.

The M60S, designed for less critical applications, offers a frequency range of 70 Hz to 15 KHz, a sensivity of -74 dB at 1000 Hz, and impedance of 500 ohms at 1000 Hz.

Monitor System

The **PS-3 personal studio powered monitoring system** from Fostex Corp. of America is self-contained and consists of a 5 1/4-in. bass reflex sub-woofer and two satellite speakers containing a 3-in. midrange driver and 1-in. tweeter. The ported bass reflex design of the sub-woofer delivers punchy bass response, and the two-way design of the satellite speakers yields maximum efficiency of the mid-range and high-frequency drivers. Stereo line level signals from a mix feed a 15-W amplifier for the sub-woofer and a high-pass filter feeds two dedicated 5-W amplifiers for the stereo satellite speakers. The speaker system is magnetically shielded for use in proximity to video and computer monitors. Optional accessories for the PS-3 include fixed and swivel mic stand adapters and wall brackets for the satellite speakers.

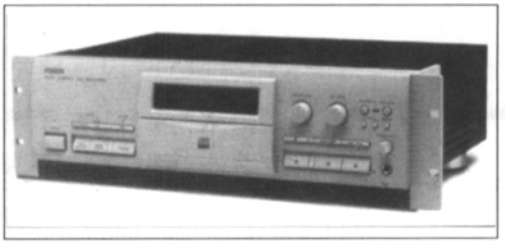
Multiplexer

The **WDM Model 381 passive, single-mode, wavelength division multiplexer** from Telebyte Technology Inc., provides the ability to mix any two full-duplex signals on a single fiber-optic cable. This product allows combining and separating individual wavelengths. It also allows the data carrying capacity of a fiber pair to be doubled. The multiplexer is completely protocol-and-speed independent and permits both analog and digital applications to be transmitted simultaneously on the same fiber. The Model 381 can merge data, voice, video, or any other electrical signals together on a single fiber. The unit is housed in a small tabletop box and is available with a choice of connectors which include, SST, SC, or FC.

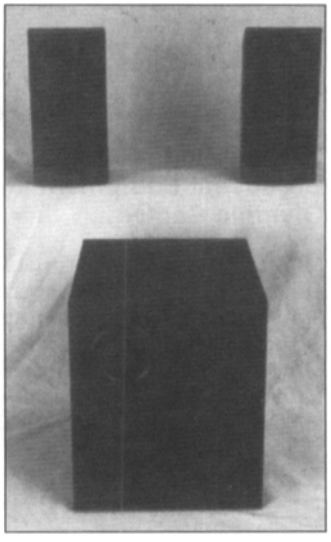
Patchbay

The **DP-8 digital audio patchbay** from Fostex Corp. of America offers six optical I/Os, which can accommodate Alesis Adat and related systems. The patchbay also includes two I/Os (S/P DIF). Inside the DP-8, each input signal is wave reshaped at a sampling frequency up to

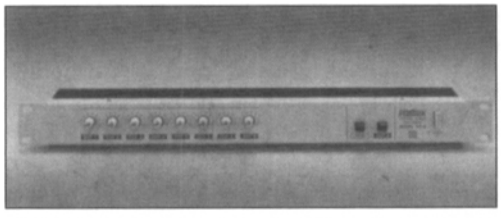
The COP-2 balanced optical converter from Fostex Corp.



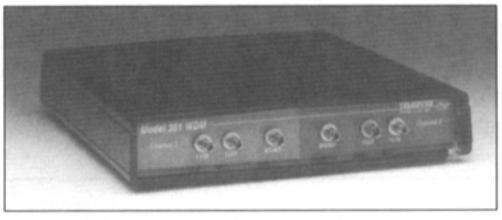
Fostex Corp.'s CR200 CD-R recorder.



The PS-3 monitoring system from Fostex Corp.



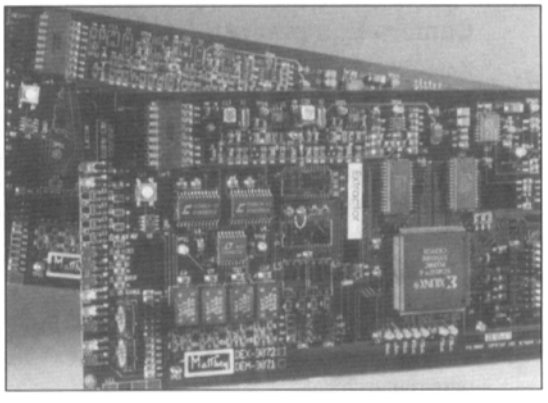
The DP-8 digital audio patchbay from Fostex Corp.



The WDM Model 381 multiplexer from Telebyte Technology Inc.

Innovision Optics, Inc.'s CamPole video camera system.

Kata USA's Camera Glove.



The Dem-3071 embedder and DEX-3072 extractor from Matthey Electronics.

48-KHz output to each channel. Thus, any S/P DIF signal can be converted from optical to coaxial or from coaxial to optical. The patchbay is fitted with a convenient front-panel optical I/O for fast temporary patches.

Projectors

Digital Projection Inc., has announced the **Power 2v, a 2500-ANSI lumen projection system** that integrates proprietary signal processing, illumination, and optical technology. Features of the system include nonpixelated, film-like images, factory preconverged image modulators, and luminance uniformity greater than 90%. The projector uses a powerful xenon arc lamp to maximize light output in order to produce crisp images and accepts PAL, SECAM, NTSC, VGA, SVGA, MAC, and DVD sources up to 800 x 600 resolution.

Recorder

Fostex Corp. of America has introduced the **CR200 CD-R recorder.** The CR200 records for both professional and consumer CD applications and takes masters from virtually any audio source including hard disks, cassettes, minidisks, and DAT. Features of the recorder include three digital synchro recording modes, allowing it to be armed and synchronously started from a master DAT player equipped with an S/P DIF connector. The CR200 also offers a digital fader function which permits precise crossfades during recording; selectable digital copying codes via rear panel DIP switches; and an 8-pin parallel port and wireless, infrared remote control. Other features include AES/EBU inputs, XLR balanced +4 dBu inputs, and RCA -10 dBv unbalanced I/Os. This product will also convert any digital input signal ranging from 32 KHz to 48 KHz into the CD standard 44.1 KHz.

Signal Processing Equipment

The Nexus 32 is a 32 x 32 **serial digital router** from Matthey Electronics is housed in a compact 2-RU frame capable of handling up to 32 sources and destinations. The modular design is expandable in any combination of 4 inputs or 4 outputs. All the standard digital components or digital composite serial signals can be mixed in the same frame. The hot-pluggable power supplies are dual redundant capable. Redundant control cards are available along with a separate control interface via a standard PC.

Leitch Inc., is offering a **new family of routers** with up to 64 inputs and outputs. These products allow users to mix analog and digital formats in the same frame and, on the serial digital version, to feed-in coax or fiber. These modular routers feature hot-swappable power and logic cards, as well as backward compatibility with all Leitch products. All versions expand from 32 x 32 to 64 x 64 in a 4-RU frame and to 128 x 64 in a 6-RU frame.

The **BC-1015 1:5 video distribution amplifier** from Kramer Electronics, Ltd., features a video bandwidth that exceeds 300 MHz, a signal-to-noise ratio that exceeds 73 dB, differential gain of 0.2%, and a differential phase of 0.15°. These specifications allow the distribution

amplifier to accept most SDI and analog signals. The product also has the industry's most flexible four-way video output processing providing AC or DC coupled outputs as well as sync tip and black level two-way clamping. The 1:5 distribution amplifier can split a single input source into five identical outputs without signal degradation and comes in a slim 1-U, 19-in. enclosure that has four front panel switches.

Fostex Corp. of America has introduced the **COP-2 balanced optical converter,** which enables users to significantly extend the lengths their digital signal travels while maintaining the quality of that signal. The COP-2 can convert signals from optical to balanced XLR for extended connections between ADAT optical-compatible systems. Mode 2 converts S/P DIF optical signals to a balanced XLR-type signal for extended connections between S/P DIF optical-compatible systems. Users can chain various types of recording systems together via the COP-2's conversion capabilities. Also, signal distribution between studios can be extended through the use of this product.

Leitch Inc., has announced the availability of the **ADC-6801 A/D converter** which provides a high-quality 10-bit signal path and conversion from 525 and 625-line analog component signals to 525 and 625-line serial digital signals. The digital glue

module features automatic calibration, line-standard switching, built-in color bars for alignment, and 2x oversampling supports RGB, SMPTE/EBU, Betacam, and MII inputs.

The **DEM-3071 embedder and DEX-3072 extractor** from Matthey Electronics have been developed to simplify broadcasting applications by embedding or extracting 20-bit AES/EBU digital audio signals within the SDI video path.

The DEM-3071 digital audio embedder is used to return the modified audio back into the video datastream or for transmission of both digital audio and video signals down a single line over distances. The 3071 is capable of embedding two AES/EBU stereo pairs.

The DEX-3072 can extract up to two AES/EBU digital stereo pairs from 270 Mbit/sec video datastreams containing embedded audio. In addition, an external AES11 audio reference option allows the user to synchronize the audio output of the 3072 with either the incoming video datastream or a separate AES11 audio reference.

The **ENC-6801 digital encoder** from Leitch Inc., supports 4:2:2 serial digital inputs and NTSC and PAL-B standards with automatic selection for 525-line NTSC and 625-line PAL. The encoder has 10-bit overall accuracy and achieves output stability through 2x oversampling, 12-bit internal digital processing, and jitter removal. The outputs offer video pre-equalization and variable timing with a built-in 5-line buffer.

The **DES-6801 decoder,** also from Leitch, transforms noisy satellite signals into synchronized 4:2:2 signals. The decoder has a hot switch feature allowing it to hold the last frame of good video during a switch. Other features include analog genlock, a full-frame synchronizer, full-bandwidth Vits handling capability, and infinitely variable H and V phasing. The product's 3-line adaptive comb filter decoder converts either NTSC or PAL video signals into high-quality component video. In auto mode, NTSC and PAL reference inputs can be present simultaneously, and the decoder/synchronizer will switch automatically to the appropriate standard.

The **CCD-3101 decoder** from Matthey Electronics offers three-line adaptive comb filter decoding with 10-bit internal processing. Composite analog signals are converted from NTSC/PAL directly into serial digital component 4:2:2 format. The product also features four serial D-1 outputs for better distribution.

Software

The **CPC-DVD subtitling and closed-captioning software** from the Computer Prompting and Captioning Co. (CPC), helps producers take advantage of the vast subtitling and captioning capabilities of the DVD format. The company's new software allows for multiple-language subtitling that is fast and easy. Once subtitles are synchronized with the dialogue and formatted for one language, a simple translation into additional languages is almost all that is needed to do the subtitling in other languages. This cuts down on the time and costs associated with subtitling in multiple languages.

The Superview 500 from RGB Spectrum is an **advanced display input system** that combines up to ten computer screens and/or video signals on a single monitor or projector. Input signals may be NTSC, PAL, S-Video, FLIR, or any computer signal up to 1280 x 1024 pixels, and are shown as pixels on the main screen. The SuperView 500 is an external standalone peripheral. It connects between the host computer and display, and combines the multiple signals downstream of the computer, imposing no burden on the host CPU.

For further information regarding the new products and developments listed in this section, contact the companies directly at the addresses listed below:

Computer Prompting and Captioning Co., 1010 Rockville Pike #306, Rockville MD 20852, tel: (301) 738-8487, fax: (301) 738-8488, e-mail: captions@cpc-usa.com, Internet: http://www.cpu-usa.com/captions

Digital Projection, Inc., 55 Chastain Rd., Ste. 115, Kennesaw, GA 30144, tel: (770) 420-1350, fax: (770) 420-1360

Fostex Corp. of America, 15431 Blackburn Ave., Norwalk, CA 90650, tel: (310) 921-1112, fax: (310) 802-1964, e-mail: info@fostex.com, Internet: http://www.fostex.com

Innovision Optics, Inc., 1438 9th St., Santa Monica, CA 90401, tel: (310) 394-5510, fax: (310) 395-2941, Internet: http:/www.inovisionoptics.com

JBL Professionals, 8500 Balboa Blvd, Northridge, CA 91329, tel: (818) 894-8850, fax: (818) 830-7802, Internet: http//:www.jblpro.com

KATA USA, 2755 Alamo St., Ste. 103, Simi Valley, CA 93065, tel: (805) 520-4725, fax: (805) 520-7342, e-mail: katausa@aol.com

Kramer Electronics, Ltd., 350 Main Rd., Montville NJ, 07045, tel: (888) 303-5600, e-mail: kramer-el@netvision.net.il

Leitch Inc., 920 Corporate Lane, Chesapeake, VA 23320-3641, tel: (800) 231-9673, fax: (757) 548-4088, Internet: http://www.leitch.com

Matthey Electronics, Burslem Stoke-on-Trent, ST6 3AT England, tel: +44 1782 524918, fax: +44 1782 524977, e-mail: sales@matthey.demon.co.uk

RGB Spectrum, 950 Marina Village Pkwy, Alameda, CA 94501, tel: (510) 814-7000, fax: (510) 814-7026, Internet: http://www.rgb.com

Schneider Optics, Inc., 285 Oser Ave., Hauppauge, NY 11788, tel: (516) 761-5000, fax: (516) 761-5090, e-mail: info@schneideroptics.com, Internet: http://www.schneideroptics.com

Telebyte Technology, Inc., 270 Pulaski Rd., Greenlawn, NY 11740-1616, tel: (516) 423-3232, fax: (516) 385-8184, e-mail: sales@telebyteusa.com, Internet: http://www.telebyteusa.com

Errata

Re: "Are Movies too Loud" by Ioan Allen, January 1998, p. 30.

The equation printed on p. 32 was typeset incorrectly. The corrected version appears below:

$$Leq=10\log(1/T\int_0^T(^{p(t)}/_{P0})^2dt)$$

Captions for Figures 6 and 7 (p. 34) have been expanded as follows:

Figure 6. Comparison of Leq with peak levels—the greater the slope, the greater the bass content.

Figure 7. Comparison of Leq with peak levels—the greater the slope, the greater the "dynamic range."

Referring to the section What Can Be Done? which begins on p. 35, the last sentence should read: "But as a first step toward sanity, it would seem desirable that pressure be brought to bear on those in charge of mixing trailers and commercials, **where a significant lowering of Leq would have several benefits:**

- The fader in the theatre would not be lowered specifically for the trailers and/or the commercials. This would leave the feature playing at the calibration level, avoiding the frequent dialogue unintelligibility in features resulting from lowered fader settings.
- There would be a substantially reduced risk of hearing damage to mixers' hearing.
- There would also be a chance of re-establishing calibrated levels between mix rooms and playback theatres and, in due course, this could lead to a more careful analysis of the levels of the feature film itself.

Re: "Report on the 139th SMPTE Technical Conference and Exhibit," February 1998, p. 123.

Thomson Broadcast, Inc., was inadvertently omitted from the List of Exhibitors.