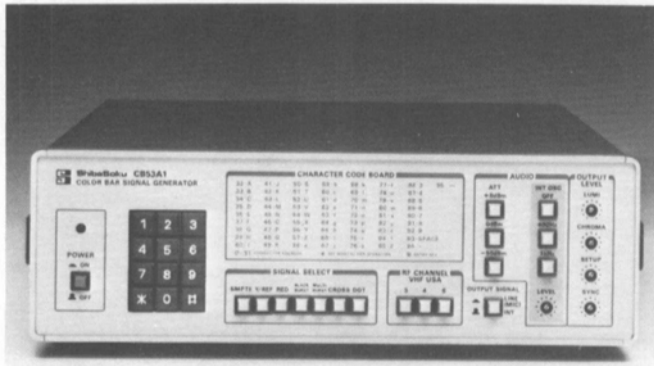


THE TRUE MEASURE OF PERFORMANCE



ASACA/SHIBASOKU CB53A1 Color Bar Signal Generator

The CB5 3A1 combines a color bar generator and character generator in one versatile instrument you can take right into the field for remotes and on-location shooting. It generates SMPTE and Y/REF color bars, plus red bar, black burst, multiburst, cross-hatch and dot signals. Standard NTSC sync signals and the gen-lock function are built-in.

You can insert character information into each signal using a special keyboard with Random Access Memory that retains the signals even if your power is lost. The CB5 3A1 gives you a total of 31 character spaces on 2 lines.

- Black burst output.
- Selectable black or white color background.
- External or internal switching for video and audio signals.
- Output range of +8 dBm ~ -50 dBm for 400 Hz and 1 kHz audio signals.
- RF signal on USA channels 3, 4 and 6.
- AC-DC operation.
- Available in NTSC; PAL B, M, N; and SECAM systems.

Measure your performance with the best.
ASACA/SHIBASOKU CB5 3A1. The color bar signal generator with character.

For complete specifications, write:

ASACA

ASACA/SHIBASOKU CORP. OF AMERICA
12509 Beatrice Street, Los Angeles, California 90066
Sales, Service: (800) 423-6347 • (213) 827-7144

BOOK REPORTS

Broadcast Law and Regulation by John R. Bittner, a book offering a comprehensive review of laws and regulations affecting all aspects of broadcasting, is available from the publishers, Prentice-Hall, Inc., Englewood Cliffs, NJ, at a price of \$21.95. The book (462 pages) provides a chapter on the history and development of broadcasting laws and regulations beginning in 1880, when governmental regulation of communication centered around the telegraph. The second chapter gives a close look at the Federal Communications Commission, including its functions and jurisdiction. The third chapter gives a brief rundown on other government agencies involved in regulatory policy affecting the broadcasting industry, including the Federal Trade Commission and the Office of Technology Assessment.

The book's 12 chapters are grouped in five categories: the Regulatory Framework; Programming and Policy; Broadcast and Cable Operations; Citizens, Self-Regulation, and Legislation; and the Legal System and Legal Research.

The book, intended as a textbook, contains much valuable information for anyone concerned with the broadcasting industry.

Telepay vs. Videodisc: The Exploding Pay-per-view Market, a 280-page report that provides a comprehensive survey of the competition between the pay-TV and home video markets, is available from International Resource Development Inc., 30 High St., Norwalk, CT 06851, at a price of \$985. The report contains 13 sections: Executive Summary; Introduction; Technology State-of-the-Art; Market Structure and Human Factors; Pay TV Today; Pay TV Tomorrow; the Videocassette Market Today and Tomorrow; The Videodisc Market Today and Tomorrow; Market-by-Market Analysis; Marketing; Advertising and Promotion Methods; Competition; Projections; and Recommendations.

The 1982-1983 Audio-Visual Equipment Directory (28th ed.) lists more than 2,000 audiovisual, video, and microcomputer items. The 500-page directory also contains more than 1500 product photographs. Listings give specifications, including price, model, weight, capacity, accessories, and technical details. The 28th edition contains four new sections for video equipment — interactive video systems, videodisc players, videotape edit controllers, and tape cleaning and evaluating equipment. Appendices offer charts for screen size, film and tape running times, a list of industry trade names, a NAVA membership directory, and a glossary of audiovisual/video terms.

Price of the directory, available from the National Audio-Visual Association, 3150



No excuses

In EFP or ENG, getting the shot is everything.²

And, a growing number of networks, major stations and independent producers are consistently getting everything with the Ikegami HL-79. They've become so confident with their HL-79's that the need for a "backup" no longer exists.

The more than 2,000 HL-79's in service today have set new industry standards for low light level performance, well-balanced handling and unprecedented reliability. But Ikegami never rests. Now, the best ENG camera is even better. The improved HL-79D Series features an advanced FET preamp that (depending on your choice of tubes) will deliver a 2 to 3 dB gain in

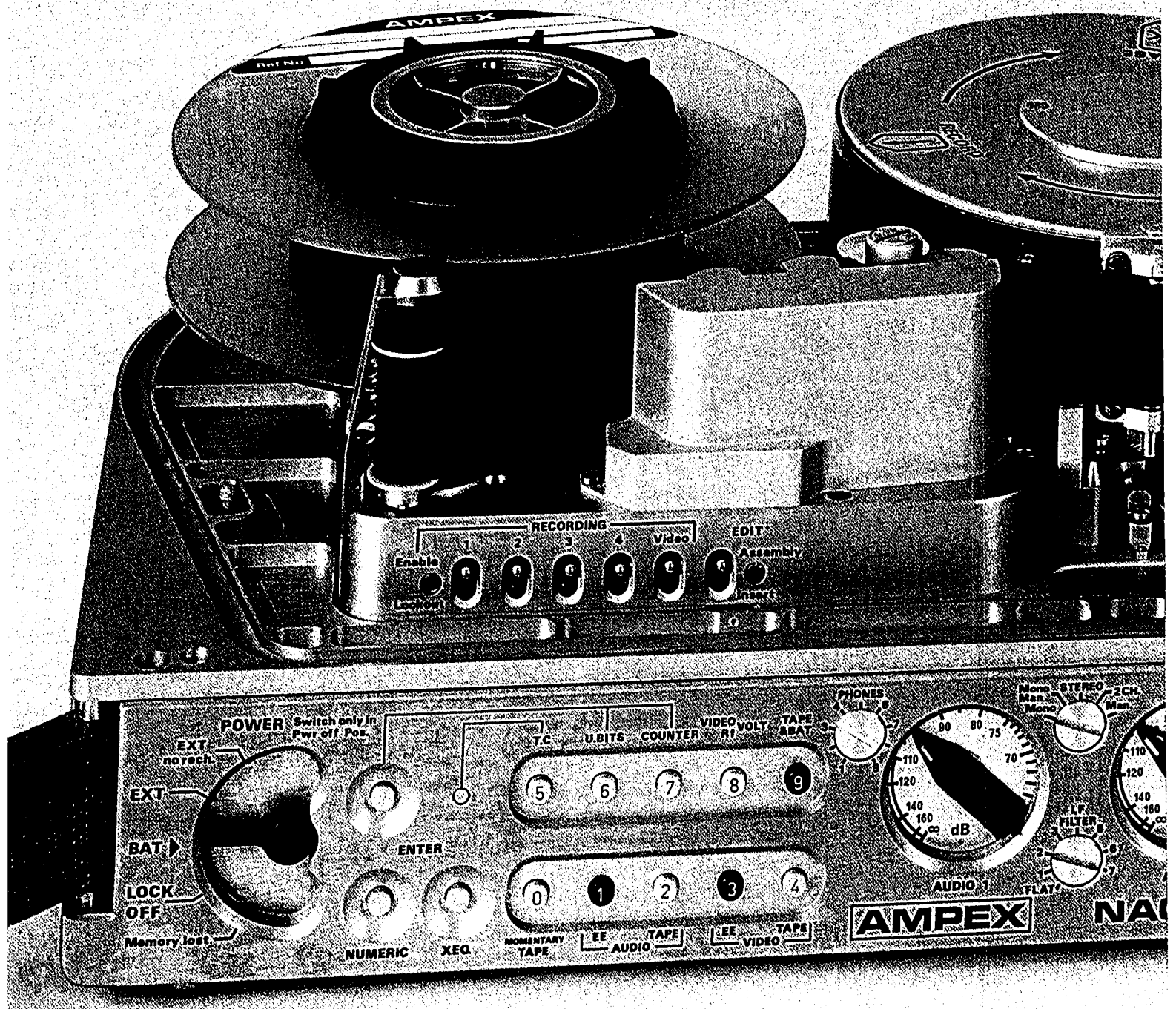
signal-to-noise ratio. The HL-79D Series is available in four new, application-matched configurations that include high resolution diode-gun or low capacitance diode gun tubes.

In EFP and studio production, the new HL-79D will deliver excellent results. In fact, if you don't have an Ikegami studio camera, chances are that the HL-79D will produce a better picture than whatever camera you've got on the floor.

Contact Ikegami and ask for a side-by-side comparison. Then you'll see why an Ikegami HL-79 crew can leave the excuses—and the backup—at the station. **Ikegami**

A NEW PORTABLE "C" VTR THAT WEIGHS JUST 15 POUNDS.

NOT 45.



The revolutionary VPR-5.

We've started a VTR revolution by combining our talents with those of Kudelski SA, an innovator in audio technology, to create the Ampex Nagra VPR-5. At 15 pounds (including 20-min. reels, battery and cover), the VPR-5 is the world's lightest most portable one-inch Type "C" VTR.

VPR-5 is as small as a briefcase, yet it delivers the quality and editing capability demanded from any full performance C-format VTR.

Our VPR-5 measures only 17½" x 8½" x 5½".



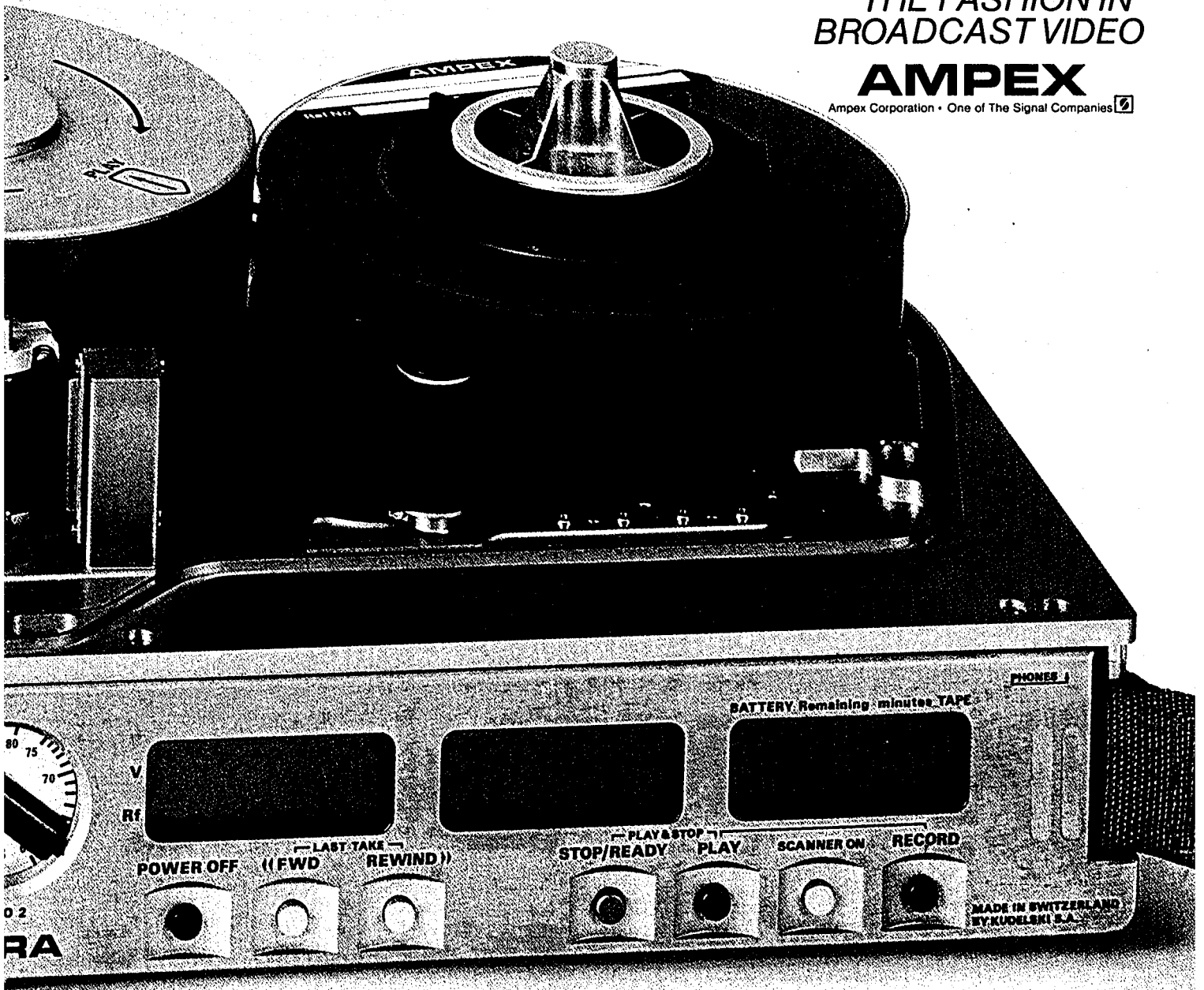
And it features: dual micro-processors, two high-quality audio channels plus a SMPTE/EBU time code channel, dual-cue editing for studio-type control of playback review and other edit-related functions, unique LCD display of VU and PPM levels, an audio confidence playback selector independent of the video, and a rugged aluminum alloy casing.

VPR-5. It's ready to go when you are. For more information, contact Ampex Corporation, Audio-Video Systems Division, 401 Broadway, Redwood City, CA 94063 (415) 367-2011.

**SETTING
THE FASHION IN
BROADCAST VIDEO**

AMPEX

Ampex Corporation • One of The Signal Companies



Spring St., Fairfax, VA 22031, is \$23 per copy, payment with order; \$27 billed; and \$35 to non-NAVA-member firms.

Survey of the Magnetic Media Industry-1982, a report in two volumes covering the entire magnetic media industry, is available from the publishers, Magnetic Media Information Services, 111 East Chestnut St., Suite 21-D, Chicago IL 60611. Each volume is priced at \$595 or as a set, at \$1095. Volume I is devoted to flexible and rigid magnetic media, and Volume II to audio and video magnetic tape products. Volume II contains more than 200 pages of charts, tables, graphs, and text. It also analyzes the audio-video tape industry by product, company production, geographic consumption, and worldwide scope. Market trend projections for all audio-video media products through 1986 are provided.

Microprocessor Data Book, a compilation of information on all currently available microprocessors, including data on memory and other support chips, is available from McGraw-Hill, 1221 Avenue of the Americas, New York, NY 10020, at a price of \$38. The book (264 pages, illustrated) provides summaries of the important characteristics of each chip and comparisons of the various devices. The work focuses on 4-bit, 8-bit, and 16-bit microprocessors, and covers devices from

American, European, and Japanese manufacturers.

The author's intent was to provide a guide enabling the reader to determine quickly the essential qualities, important features, and the strengths and weaknesses of each microprocessor. For each device, the book includes an illustration of the chip and its pin connections, a description of the chip's internal architecture, information on important operating parameters (such as supply voltage and clock frequency), and relevant data about development aids, systems, and software.

Concluding sections of the book provide a directory of microprocessor manufacturers and a glossary of some of the terminology used in the microprocessor field.

The Art and Science of Inventing, 2nd ed., by Gilbert Kivenson, describes the latest methodical techniques adapted from formal scientific processes. The book is available from Van Nostrand Reinhold, 135 W. 50 St., New York, NY 11020, at a price of \$17.95. Instructions are provided on problem solving, experiment, design, testing, interpretation of results, patenting, and marketing.

The author provides tips on how to select the most profitable areas of inventive development, and how to structure a presentation to sufficiently impress those whose

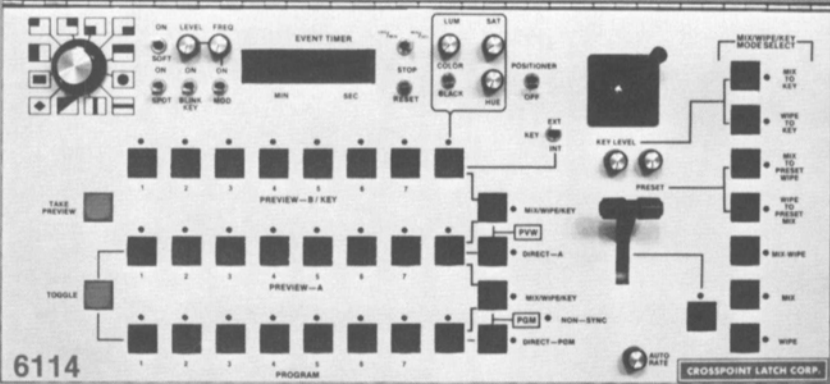
backing is needed. He explains why auxiliary skills such as drafting and model-making are necessary, and he also evaluates psychological factors, especially those related to problem-solving.

The Complete Handbook of Super 8 Filmmaking by R. C. Norris (368 pp., 239 illus.) is available from Tab Books Inc., Blue Ridge Summit, PA 17214, at a price of \$14.95. The paperbound book covers every aspect of Super 8 photography from planning and shooting the film to editing, adding titles, and animation techniques. The technical, rather than the artistic, aspects of filmmaking are stressed to enable filmmakers to take maximum advantage of the camera's potential.

Scotch Videotape Products for the 80's, a 12-page, illustrated catalog describing in detail Scotch helical videotape and videotape accessories is available from Magnetic Audio/Video Products Div., 3M Center, St. Paul, MN 55144. Full descriptions of Color Plus Master Broadcast U-matic 3/4-in videocassettes as well as the U-matic High Energy series are given with information about helical open reel products. In addition, the Sight and Sound series of how-to videotapes, available in VHS, Beta, and U-matic formats, is reviewed in the catalog.

Versatility and Features with the Model 6114

VIDEO PRODUCTION SWITCHER



- Inputs clamped on back porch
- Precision feedback clamps
- Pattern Modulator
- Blink Key
- 12 Patterns
- Very High Stability Circuitry
- No delay lines
- Positioner
- All inputs, composite or non-composite
- Soft Wipe
- Manual/Auto Wipes and Dissolves
- INT/EXT Key

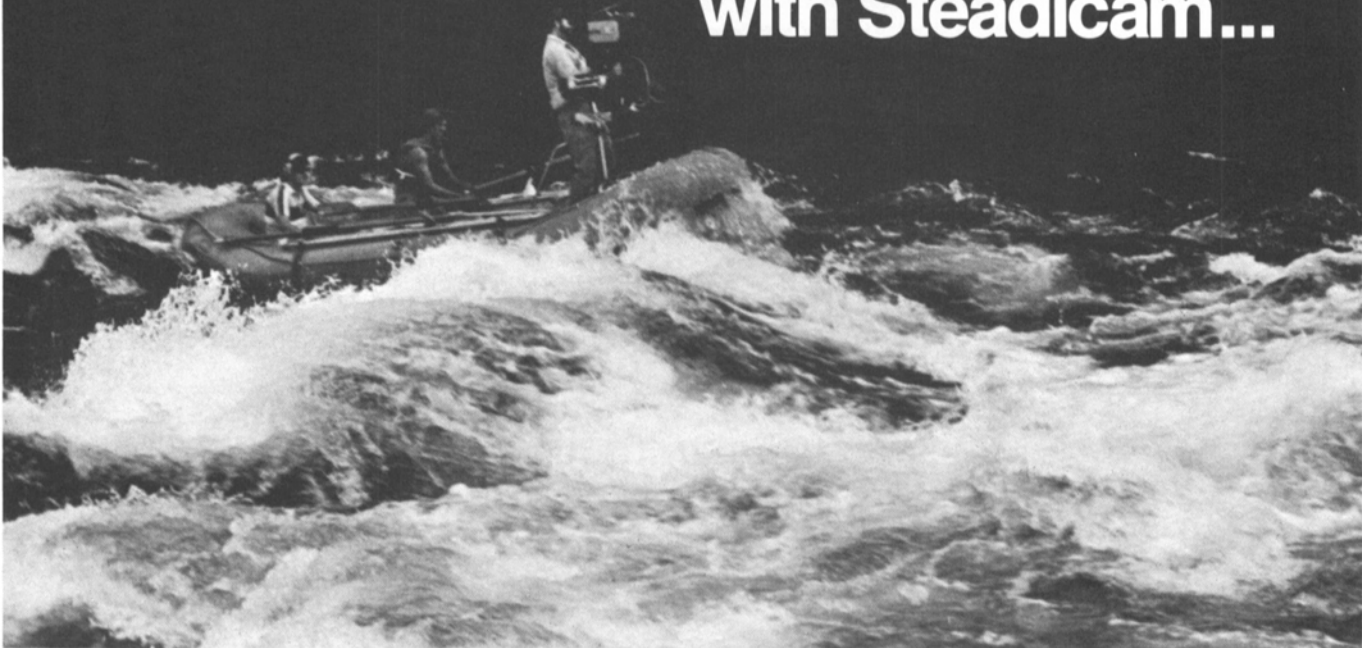
**Price: NTSC \$4,680.
PAL \$5,680.**

- Wipe Key and Mix Key
- Mix-wipe
- 24 minute timer
- Spot-light
- Sync. add. on all inputs
- Blanking Processor

CROSSPOINT LATCH CORP.

95 Progress Street, Union, N.J. 07083
Tel. (201) 688-1510 Telex 181160

Shooting the rapids EFP-style with Steadicam...



Planning ahead with Steadicam, Cinema Products' Oscar-winning video/film camera stabilizing system, pays off in spades. Economically as well as artistically. A good example of such planning is a new sports series for cable TV, "Outside The Arena," produced by Westwood Communications, Inc. (Eugene, Oregon).

The premise for the series is to take well-known sports figures out of their commonly-known element, and to feature them as they are engaged in various interesting activities. The pilot program involved videotaping a famous pro football player kyaking down the McKenzie River in Oregon.

To get the best footage from the camera raft (equipped with a Hitachi SK-91 camera and an HR-100 1-inch portable recorder), Steadicam was mounted on a specially built pole which was welded onto the framework of the raft.

"Even though the raft was forever being tossed every which way but the right direction, Steadicam came through with flying colors," says Steadicam operator Stephen W. Allen of Allen Production Services, Ltd. (Portland, Oregon). "In situations where I had to pay more attention to the water in front of the raft than to the monitor, Steadicam practically kept in frame by itself."

"Steadicam was an integral part of the planning for the production of this segment," says producer Bruce O'Neil.



"Future segments will no doubt place even greater demands on the Steadicam, due to the many and varied locations we plan to use for this series."

The results of the two-day Steadicam shoot on the McKenzie River were spectacular. Says director J. Clayton Lawson: "Steadicam enabled us to capture some of the most exciting moments ever shot on a white water river."

Steadicam, of course, is not restricted to "shooting rapids." On the contrary. It is a most versatile production tool which can be used effectively—even in "normal" shooting circumstances—in a thousand and one dramatic ways.



Steadicam operator Stephen Allen shooting with video camera and Steadicam on the McKenzie River in Oregon.

For further information, please contact:

CINEMA  **PRODUCTS**
CORPORATION

Technology In The Service Of Creativity

2037 Granville Avenue, Los Angeles, California 90025
Telephone: (213) 478-0711 • (213) 477-1971 • Telex: 69-1339

STEDIKAM® is covered under U.S. Patent No. 4,017,168 and under foreign patents abroad.

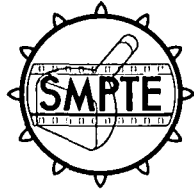


ARE YOU A MEMBER OF SMPTE?

If you are not now regularly receiving the **SMPTE JOURNAL**, participating in the Society's local Section meetings and **Technical Conferences**, or being informed about the technological studies of our industry made by the Society's engineering committees . . .

Join today. Write to...

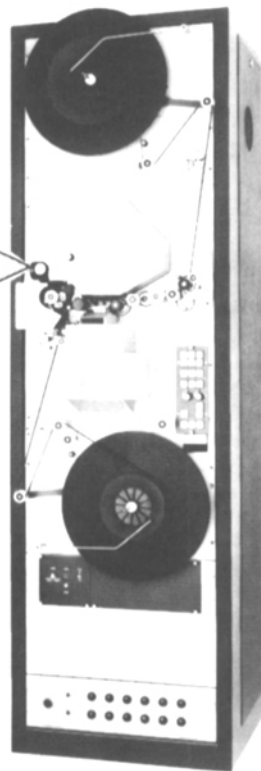
SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS



862 Scarsdale Ave., Scarsdale N. Y. 10583.

Telephone: (914) 472-6606

Continuous motion **PROJECTOR 16 mm**
Optical compensation by rotating mirror unit
Speed 24 or 25 f.p.s., high speed 100 and 750 f.p.s. (without projection) in forward and reverse
Xenon lamp 1000/1600W



COMITOR 16 PS PERFECTONE

One single machine
Two complementary modes of operation

The Formula 1 to the dubbing studio

PERFECTONE PRODUCTS SA 2560 NIDAU SCHWEIZ TEL. 032 51 12 12 TX 34383 Perbi CH

A DIGITAL EFFECTS SYSTEM SO ADVANCED, EVEN WE DON'T KNOW ALL IT CAN DO.

Maybe we'd better explain.

We do know the limits of our new E-FLEX DVE® system.

It's just that those limits are so theoretical, they have almost no impact on what E-FLEX can do in the studio.

And what it can do in the studio is virtually limitless.

To start with, E-FLEX has some of the most sophisticated effects ever offered in a digital video system. Like a new, two-channel reciprocal function. Our mosaic and posterization effects. Multi-move, so you can put up to 16 copies of a moving image on the same screen. And a trajectory function that lets you control the movement of an image along a curved path.

But E-FLEX is so advanced, you can also combine our "basic" effects in new,

unheard-of ways. And this is where the theoretical limits come in. There are so many possible combinations, no one will ever know what they all look like.

That makes E-FLEX the most potent creative video tool ever. Every time you turn it on, you can create an effect no one has ever dreamed of. And when you've got what you want, you can store it permanently on a bubble memory cartridge that never wears out.

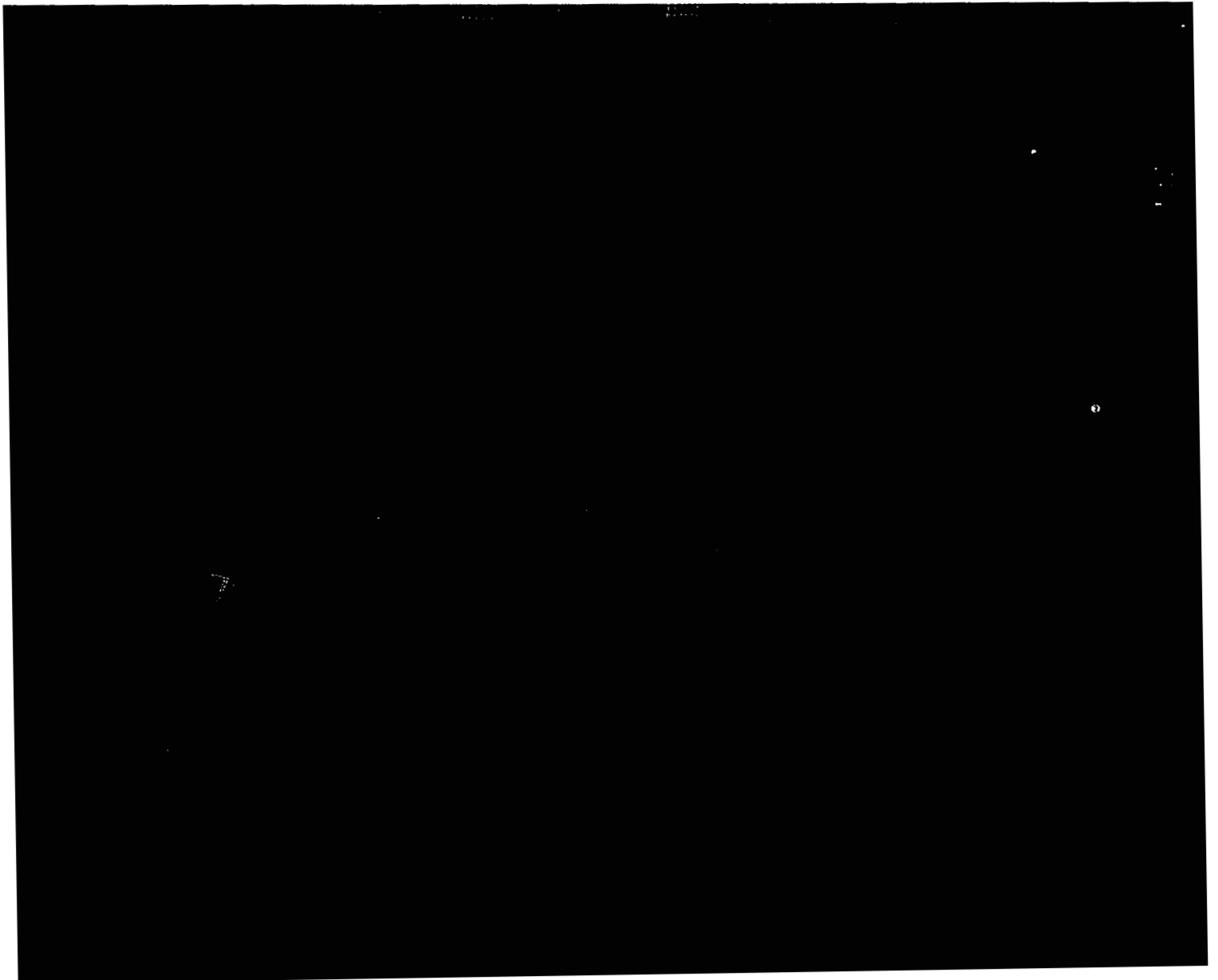
Yet while E-FLEX's capabilities may approach infinity, the price doesn't. It'll fit comfortably into your studio budget.

And that's all the more reason to call for a demonstration tape today. Because once you've seen a little of what E-FLEX can do, nothing will stop you from discovering the rest on your own.

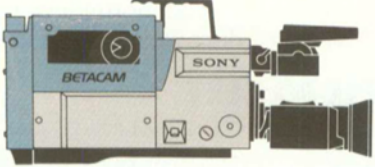
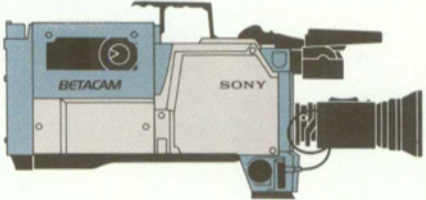
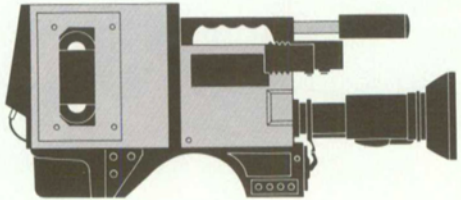
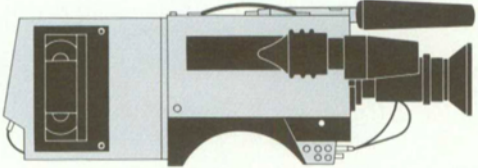
NEC

IMAGINE WHAT WE'LL DO NEXT

NEC America, Inc. Broadcast Equipment Division, 130 Martin Lane, Elk Grove Village, IL 60007. Call toll-free 1-800-323-6656. In Illinois, 312-640-3792.



VERY VITAL FOR PRUDENT

Cameras Drawn In Scale	Weight In Pounds*	Length In Inches†
One Tube 	17.8	14.9
Three Tube 	21.9	17.1
Three Tube 	24.7	17.5
Three Tube 	27.6	21.5

*Includes camera, lens, viewfinder, recorder, battery. †Lens excluded. **Camera, lens, battery, battery charger, recorder, playback unit.

Logic dictates that before you invest in a camera and 1/2" recorder system you should shop around. Carefully comparing such criteria as size, weight, image-making capability and price.

So we arranged a little shopping guide based on specifications from our competitors' 1982 brochures and our own. The results are quite revealing.

For news-gathering, the Sony Betacam™ one-tube with 400 resolution lines has striking advantages over the

Sony and U-matic are registered trademarks and Betacam is a trademark of the Sony Corp. Dolby is a registered trademark of Dolby Labs.

alternatives. While for field production the Sony Betacam three-tube with 650 resolution lines and 58dB signal-to-noise is superior to them all.

Of course, both Betacams have still more advantages that have not been included in the chart.

Physical advantages like the removal of troublesome cables from the viewfinder, lens, mic to camera and camera to recorder.

Technical advantages like a recording format with both

STATISTICS CAMERAMEN.

Power Consumption In Watts*	Signal To Noise Camera dB	Signal To Noise Recorder dB	Price**
22	54	Lum Chrom 48/50	\$38,500
31	58	Lum Chrom 48/50	\$51,500
27	58	Lum Chrom 47/48	\$62,000+
40	55	Lum Chrom 47/48	\$70,000+

timebase corrector, carrying case. Based on estimated suggested manufacturer's retail price. All figures based on Saticon Tubes.

a chrominance bandwidth and signal-to-noise performance greater than the competitions'; wideband chrominance components with no crosstalk or other artifacts; built-in Dolby® C noise reduction for high-quality audio; and most important, the playback unit has built-in TBC (an option on the competitions' units) providing full broadcast-quality output.

Betacam also offers major financial advantages beyond those shown. Namely, sparing you from having to

©1982 Sony Corp. of America, 9 W. 57th St., New York, NY 10019.

invest in a whole new editing suite. It interfaces perfectly with the Sony U-matic® and one-inch suites you use now.

Betacam was planned as the logical progression of the total Sony Broadcast system. To find out just how logical, contact your Sony representative in New York/New Jersey at (201) 368-5085; in Chicago at (312) 860-7800; in Los Angeles at (213) 841-8711; in Atlanta at (404) 451-7671; or in Dallas at (214) 659-3600.

SONY
Broadcast