

Announcing a Brand New Book From SMPTE

# Digital Video—Volume 2

*Digital Video—Volume 2* is a brand new book published by SMPTE. It's a perfect complement to SMPTE's earlier book, *Digital Video*, a book that has had phenomenal success in the broadcast industry.

Where *Digital Video* laid down the basics of digital video (that book's purpose was mostly tutorial with emphasis on what digital television is and how it works), this new book picks up where the first one left off and provides an in-depth review of the latest information in this exciting field.

## New Developments

Many significant advancements have been made in digital video technology in the past two years. For example, experimental digital video recorders have been demonstrated, new graphics possibilities have been opened up using digital equipment, the Teletext system for broadcasting is now in operation in Europe, and digitally modulated optical laser systems are now being used experimentally instead of conventional microwave ENG systems. The era of digital video is almost upon us. And this book tells you where the state of the art is to-

day, and what to expect in the future. It is brimming with information of urgency to the broadcaster of today . . . and tomorrow.

The table of contents shows what this new book contains. There are chapters touching virtually every corner of digital technology, with special attention to digital effects, computer animation and digital video recording.

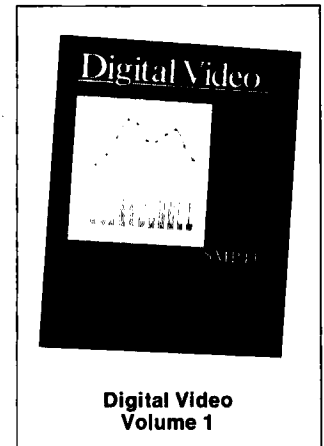
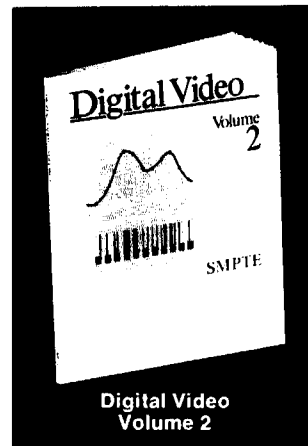
The material for this new book comes from the digital video papers that were presented at SMPTE's 120th Conference in New York, November 1, 1978, and most papers on digital television that were presented at the SMPTE's 13th Annual Television Conference in San Francisco, February 3, 1979.

The impact of digital video is being felt more and more in television broadcasting. This trend will continue as digital technology becomes more refined. SMPTE's new book brings you the latest and most up-to-date information on digital video by the leading experts in the field.

**160 pages**                      **8½ x 11**                      **softbound**  
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## Contents, Digital Video—Volume 2

- The ANTOPE Broadcast Teletext System, Yves Guinet, CCETT (TV & Telecommunications Research Center), Rennes, France
- Optical Television Link Employing a Digitally Modulated Laser, A. A. Goldberg, S. Juchnowycz and J. Rossi, CBS Technology Center, Stamford, Conn.
- A Monolithic Video A/D Converter, Willard K. Bucklen, TRW LSI Products, Redondo Beach, Calif.
- Digital Processing in the DPS-1, John Lowry and Richard Kupnick, Digital Video Systems, Toronto, Ont., Canada
- Panel Discussion Transcription: The Near-Term Future for Digital Television, The panel is comprised of authors of participating papers and representatives of the SMPTE Study Group on Digital Television and of the Working Group on Digital Video.
- The Expanding World of Digital Video Effects, Richard Taylor, Quantel, Ltd., Newbury, Berkshire, England
- The Use of the Computer in Animation Production, Edwin Catmull and Alexander Schure, New York Institute of Technology, Old Westbury, N.Y.
- Some Experiments in Television Graphics and Animation Using a Digital Image Memory, Richard G. Shoup, Xerox Palo Alto Research Center, Palo Alto, Calif.
- Color Graphics and Animation by Mini-Computer, Noboru Asamizuya and Tatuo Futai, Sony Corp., Tokyo, Japan
- The Mosaic Keyer, Shigeru Jumonji, NHK (Japan Broadcasting Corp.), Tokyo, Japan
- Low Bit-Rate System for Digital Coding of the Television Signal, P. Rainger and P. A. Ratliff, British Broadcasting Corp., London, England
- Separate Components Digital Video Recording Is Needed and Possible, Dominique Nasse, CCETT, Rennes, France
- Digital Video Recording — A Progress Report, Maurice Lemoine and Joachim Diermann, Ampex Corp., Redwood City, Calif.
- Digital Video Recording — What Will It Do for the Broadcaster?, Edward Herlihy, Golden West Broadcasters (KTLA), Los Angeles, Calif.
- Panel Discussion Transcription: Digital Video Recording, Moderator: Donald V. West, Broadcasting magazine; Peter Rainger, British Broadcasting Corp.; Charles Ginsburg, Chairman of SMPTE Working Group on Digital TV; Dominique Nasse, CCETT; Joachim Diermann, Ampex Corp.; Edward Herlihy, Golden West Broadcasters; K. Blair Benson, Video Corp. of America; Arch Luther, RCA Corp.; Marcel Auclair, Canadian Broadcasting Corp.



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## Digital Video—Volume 1

Published in 1977, this book is the landmark volume on the subject with 19 chapters, a glossary and a bibliography. If you do not have a copy, order yours now. It's a book no broadcaster should be without.

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The evening concluded with the showing of a tape produced by 3M Company entitled *Video Encounters — Overview of Usage of Video at 3M for Training and Education* — Eric Address (Secretary-Treasurer), E. J. Stewart, Inc., 388 Reed Rd., Broomall, PA 19008.

**Dallas/Fort Worth, 6 February** — The meeting was held at Studio Seven in Dallas with an attendance of 37 members and guests. Past Chairman Paul Brown opened the program by showing a videotape of the Western Union microwave earth station facility at Cedar Hill, Texas. He and a representative from Western Union briefly described this station and its role in receiving transmissions via the Westar II Satellite.

Next on the program was E. L. Peterson of AT&T whose presentation entitled "Getting From Point A to Point B" provided information on the facilities and the services provided by AT&T Long Lines Co. Peterson's group serves 84 television stations from Mobile, Ala., to Phoenix, Ariz. He described the complexities and challenges of transmitting sports and other programming around the country. Looking at the future, he listed areas where the Bell System is transmitting programming via fiber optics.

Sam Stafos of AV-7 then gave a very entertaining presentation entitled "Transferring Multi-Image to Motion Picture." His "Murphy's Laws" of audiovisual were a big hit as he touched on common experiences of most of the audience. He demonstrated the

culmination of five years of research in transferring multi-image programs to 16-mm film. His approach involves photographing aerial images from several interlocked laser-aligned optical printers. He demonstrated a variety of special effects and concluded by impressing the audience with the showing of a 16-mm print made from an 18-projector slide show.

A lively discussion period followed both presentations, extending into a post-meeting social time and an informal tour of Studio 7. — John C. Norris (Secretary-Treasurer), Eastman Kodak Co., 6300 Cedar Springs, Dallas, TX 75235.


**Toronto, 12 February** — The meeting was held on the King of Kensington studio set at VTR Productions, Ltd., in Toronto with an attendance of 148 members and guests. Jerry Zaludek and Sid Dodd, both of VTR Productions, who described the firm's newly installed Squeezoom video effects system. First shown as a videotape showing the use of Squeezoom in the firm's commercial work followed by a videotape technical paper in which Dodd described the Squeezoom's basic circuitry, microprocessor control, control panels, and operation. He noted that the SMPTE's two volumes on *Digital Video* described most of the technology used in the Squeezoom. The presentations were followed by a question-and-answer session with questions ranging from queries on specific circuit details through maintenance requirements to charges for its use. The audience toured the facilities and tried the Squeezoom controls until 11 p.m. — Andrew Kuflik, (Secretary-Treasurer), Ryerson Polytechnical Institute, 50 Gould St., Toronto, Ont., Can. M5B 1E8.

**Rochester, 13 February** — This was a joint meeting of the Rochester Section and the RIT Student Chapter held in the RIT Photography Building. The speakers, John Johnston and Jeffrey Pollock, both of Eastman Kodak, gave a presentation, illustrated by slides, on "How to Start Your Own Filmmaking Business." Following the presentation, a four-man panel of working film producers answered questions from the audience. Members of the panel had all developed their own filmmaking businesses and were thus in a position to discuss their own experiences. The panel covered early phases of film production, locating clients, writing proposals, preparing a budget, and securing a contract. — K. Gerald Evans (Secretary-Treasurer), WHEC Inc., 191 East Ave., Rochester, NY 14604.

**New York, 13 February** — It was standing room only at the United Engineering Center where some 160 members and guests gathered for an evening of film talk with just a dash of television.

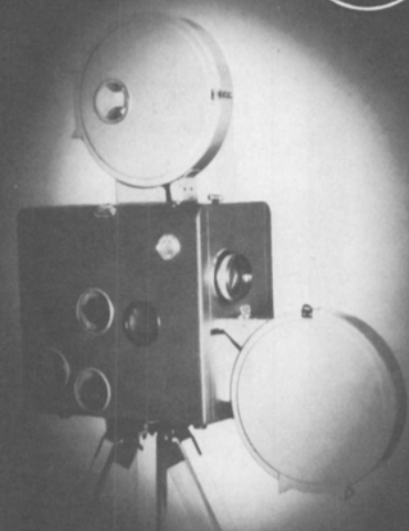
The first presentation was given by Richard Schreiber of Arriflex Corp. who demonstrated Arri's new Image Stabilizing System. The device uses a gyro system, developed by British Aerospace, which is mounted on mirrors and placed in front of either a film or television camera. Schreiber demonstrated the system using an Arriflex camera with a television camera attachment, so that everyone in the audience could see through the lens. The system can eliminate most camera vibration and short term gyrations. Schreiber then showed a 16-mm movie showing film shot by a camera

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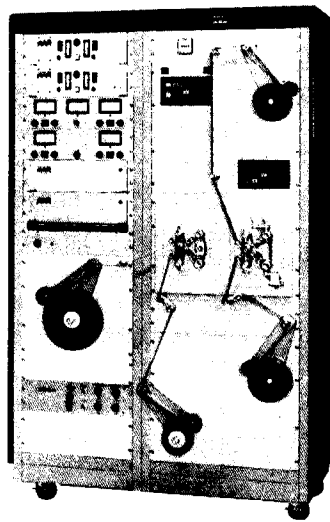
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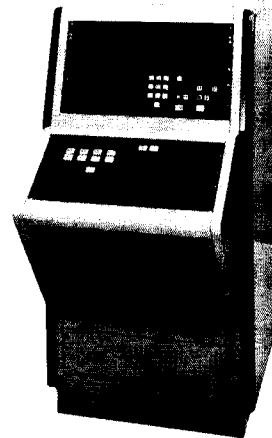


# Magnetic and Optical Sound Systems

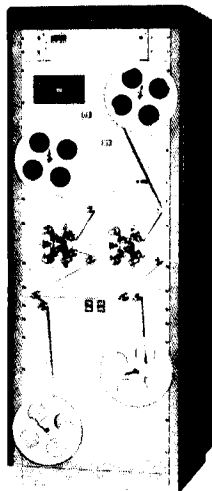
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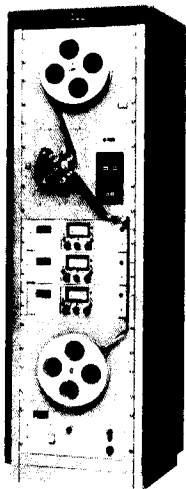
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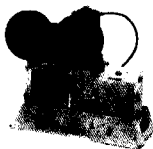
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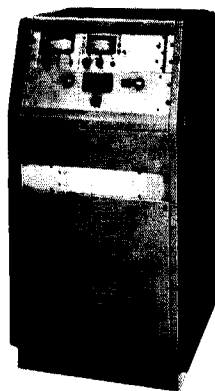
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G.T.C. Film-und Fernseh—Studiotechnik GmbH,  
207 Ahrensburg, Rosenweg 7a, West Germany

mounted on a camera operator, a car, a speed-boat, and a horse. It was a convincing demonstration of another new and interesting piece of equipment to help improve the technical quality of film and television production.

The second presentation was a panel of notables who discussed the future of 16-mm film. The consensus was that there is a future for 16-mm film production both for television and features. This naturally brought smiles of relief from the members of Eastman Kodak who were present. There were many questions from the audience which seemed to appreciate an opportunity to discuss 16-mm film production with a group of experts from the industry.

After the formal presentation Arriflex allowed the audience to fondle the equipment and many questions were answered. Arriflex also provided the hospitality. — Richard Marcus (Reporter), Rombex Productions Corp., 245 W. 55 St., New York, NY 10019.

**San Francisco, 19 February** — The meeting was held at the Eastman Kodak Co. facilities with an attendance of more than 100 members and guests who braved the rains to hear SMPTE President Robert Smith give his excellent report on "The Motion Picture and Television Technology in the People's Republic of China." Following Smith's report the audience was treated to a 15-minute whistling exhibition by Jason Serinus, the voice of Charlie Brown's Woodstock. — Joseph A. Semmelmayr (Secretary-Treasurer), Eastman Kodak Co., P.O. Box 3145, San Francisco, CA 94119.

# Book Reviews

## Television Broadcasting: Tape Recording Systems (2nd ed)

By Harold E. Ennes. Published (1979) by Howard W. Sams & Co., 4300 W. 62 St., Indianapolis, IN 46268. 528 pp. Illus. Diagrams. 5½ × 8½ in. Price \$18.95.

This updated edition of the book first published in 1973 will find wide use among studio engineers, technicians, and students with a background in solid state electronics. The book's emphasis is on professional videotape recording systems manufactured within the last 10 years. As in the previous edition the systems approach is stressed, although some circuit analysis appears throughout.

Starting with the basic concepts of videotape systems, the author guides the reader through nine chapters of theory profusely complemented with pictures, block diagrams, waveforms, and circuitry for a variety of WTRs, including the recently standardized Type B and Type C helical-scan formats.

Chapter 10 provides the fundamentals of electronic editing and use of time and control

code, while the practical aspects of recording and reproduction are covered in Chapters 11 and 12 where over 120 pages are devoted to the setup, operation, and maintenance of VTRs for optimum performance. The final chapter gives an overview of VTR systems handling cassettes and cartridges.

To reaffirm reader comprehension, a series of review questions are given at the end of each chapter; answers are given in the Appendix.—*Al Conte*

## What is Cinema Verite?

By M. Ali Assari and Doris A. Paul. Published (1979) by The Scarecrow Press, Inc., Metuchen, N.J., and London. 208 pp. Illus. 5¾ × 8¾. Price \$10.50.

*What is Cinema Verite?* presents an intellectual framework for a controversial cinematic genre and is in keeping with many recent

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