

# Book Reviews

## 7th International Broadcasting Convention, IEE Conference Publication 166

Published September 1978 by the Institution of Electrical Engineers, Station House, Nightingale Road, Hitchin, Herts. SG5 1RJ England. 82 papers, 344 pages, 297 × 210 mm, soft cover. Price in the UK £15.00, elsewhere £18.00.

The 7th International Broadcasting Convention was held at Wembley Conference Centre, London from 25–29 September 1978. Now available are the published proceedings of that convention — No. 166 in the IEE Conference Publication Series. Major topics include microprocessors and microcomputers in broadcasting, point-to-point transmission and video signal origination and processing. Other fields of discussion varied from transmitters and transponders, video and audio recording and storage to transmitting antennas and satellites in broadcasting. Stereo and quadrasonic sound systems and teletext broadcasting systems were also covered.

It should be noted that this International

Broadcasting Convention was sponsored by no less than six prestigious organizations: the Institution of Electrical Engineers; the Electronics Engineering Association; the Institute of Electrical and Electronics Engineers; the Institution of Electronics and Radio Engineers; the Royal Television Society; and the Society of Motion Picture and Television Engineers. — *David Howell*

## Illustrated Dictionary of Microcomputer Terminology

By Michael Hordeski. Published (1978) by Tab Books, Blue Ridge Summit, PA 17214. 322 pp. Illus. 5½ × 8½ in. Hardbound. Price \$12.95.

A major problem with any new and revolutionary technology is the nomenclature. In a fast-moving explosive field such as microcomputers, terms and concepts develop with the technology and the field soon has its own unique language.

This book was written, according to the author, to reflect the current usage of all terms

related to the microcomputer industry. Both hardware and software terms are included, with particular emphasis on software concepts. The concepts are the forces that will shape the products of tomorrow. Hardware and manufacturing concepts are discussed in all cases where they are important to the developers and users of microcomputer systems. (The words "microcomputer" and "microprocessor" take up seven full pages.) This dictionary draws heavily upon the current literature from industry periodicals, product manuals, and conference presentations.

The flaws in this book are minor. Some of the pictorial illustrations are of poor quality, though most of the line drawings are excellent and useful. Some of the definitions are a bit too concise and some of the terms chosen are more applicable to the big machines — COBOL and ALGOL for example — while the dictionary did not quite manage to be up-to-date enough to include the programming language known as PASCAL. Still, these are minor points that one would hope would be taken care of in a second edition (since the field is changing so fast).

Many managers, technicians and engineers are finding that their responsibilities have increased and that they must now know how to cope with the new microprocessor/microcomputer tools at their disposal. Since this book contains clear, concise, encyclopedic definitions of nearly 4000 computer terms, buzz words and jargon, it really belongs on the shelf with the management books or operation manuals. — *D. H.*

## RCA's all-new PM-85SL Dual Sprocketed Reproducer: quality and economy are only the beginning.

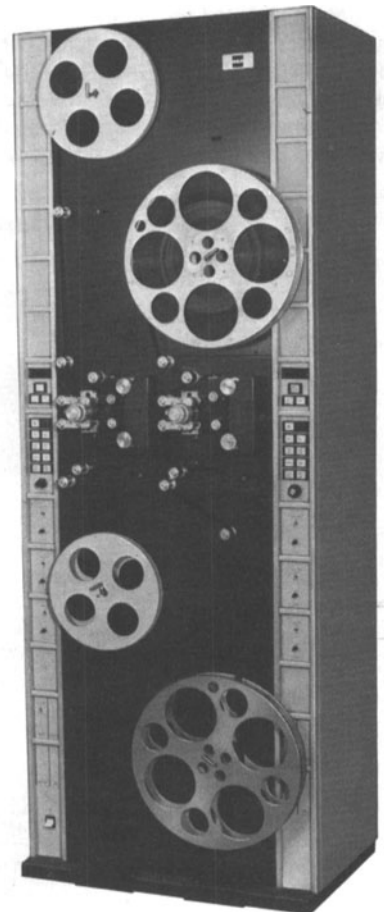
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## With the Dolby system, the sound can match the picture.

A great deal is happening these days to improve the quality of television audio. New distribution methods such as diplexing, new post-production techniques for laying down sound-tracks without having to re-record them repeatedly on VTRs, the reality of stereo TV audio in some countries — these factors and more are combining with the growing audience sensitivity to good sound to put a new emphasis on television sound quality.



Dolby noise reduction can improve the audio performance of virtually any VTR.

However, a major bottleneck remains: noise. The better the rest of the studio and distribution chain becomes, the more the noise from the audio tracks of VTRs limits the ultimate fidelity of television sound. The audio signal-to-noise ratio of 2" quad machines is typically worse than 50 dB, while the specs for the new generation 1" machines are typically 52-56 dB. That kind of performance is not as good as many consumer audio tape recorders, and unless improved, may always keep television sound in second place to the high fidelity color picture.

Dolby noise reduction is the proven way to break the noise bottleneck, here and now. It provides 10 dB of noise reduction (rising to 15 dB at higher frequencies), without audible degradation of the original signal. It reduces hiss, hum, rumble, the effects of multiple-generation re-recording — *all* noise not part of the original signal. It reduces print-through, even years later. It can reduce distortion by permitting the use of lower record levels. And Dolby noise reduction is the key to taking full advantage of the wider frequency range now increasingly being provided in the rest of the TV audio chain.

Dolby noise reduction is the proven way to break the noise bottleneck, here and now. It provides 10 dB of noise reduction (rising to 15 dB at

Since its introduction 13 years ago, Dolby noise reduction has become universally accepted for quality audio tape recording, both professional and consumer. It is also regularly used to improve the audio quality of VTRs in several European countries. Just ask any professional audio recording engineer about the benefits of the Dolby system, or contact us for full technical information. Let us help you in your efforts to provide television sound which matches the television picture.

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## Digital Interfacing With an Analog World

By Joseph J. Carr. Published (1978) by Tab Books, Blue Ridge Summit, PA 17214. 406 pp. Illus. 5½ × 8½ in. Hardbound. Price \$12.95.

According to the introduction, this book is designed to fill an apparent gap in the literature of the computer hobbyist (and professional, for that matter). There are numerous books on computers and how they work and on microcomputers and microprocessors. There are also numerous books on BASIC programming and even a dozen or so compendiums of BASIC programs useful to certain segments of the market. The business or scientific number-cruncher type of user may find, indeed, that there are too many such books to choose from intelligently. But for the user who views the microcomputer as a bit of hardware to be applied and who views software as either a simple set of instructions to make the machine go, or more importantly a valid substitute for hardware, little has been written in book form. This book presents information, almost in handbook style, for those users of microcomputers who want to design a device or system with a microcomputer at its heart.

Six of the book's nineteen chapters are devoted to units and devices that function at or near the interface between the microcomputer and the real world: transducers, operational amplifiers, analog function modules and small dc motors. Other chapters cover signal processing circuits, digital codes, basics of data conversion, D/A and A/D converters (de-

scribing real products), some data converter applications, analog and digital multiplexing, data acquisition systems, readout and display devices, serial data transmission, tape recorders and data loggers, and telephone dialer circuits. The author says he will be pleased if readers borrow these ideas and improve on them. This is a valuable addition to microcomputer literature. — *D. H.*

## The Film Industries, 2nd ed.

By Michael F. Mayer. Published (1978) by Hastings House Publishers, New York, NY 10016. 230 + viii pp. 6 × 9 in. Price \$11.50 (\$5.95 softbound).

The author, Michael Mayer, a scion of the famous motion-picture family, has recently updated and enhanced this compendium of information useful to the filmmaker, producer, and anyone at all involved with the financing, handling, or distribution of motion pictures.

First published in July, 1973, this book deals specifically, and from first-hand experience on the author's part, with problems of film production, distribution, exhibition, and content. Mayer is a legally trained and knowledgeable observer as well as having been over the years deeply committed to "the movies" as a producer, attorney for Kingsley International Pictures, executive director of IFIDA, and teacher at The New School of a course on industry practices. His treatment of specifically current problems of print piracy, film financing, the new copyright law, the selection of titles and its effect on box-office, will appeal to the general reader as well as to one

who is directly concerned about the legal implications of these matters.

Mayer's book is replete with examples illustrating the problems encountered in the production and release of all kinds of films, from major features to nontheatrical and documentary types, and he proposes, in a clear and meaningful way, prospective answers to these problems in an expanding marketplace.

To those of us, whether filmmaker, editor, producer, laboratory manager, motion-picture technician or engineer — whoever is interested in the state of our industry today and where we are going, we enthusiastically recommend this book as a highly readable and factual presentation of current problems and future trends of moviemaking and release.

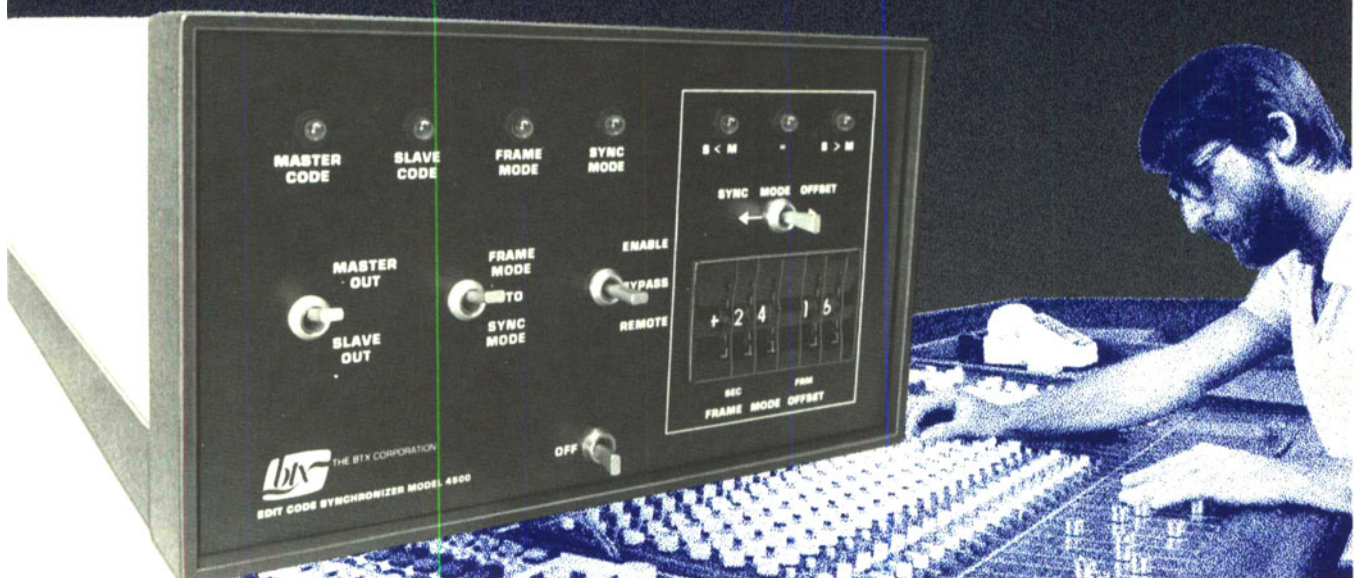
— *Calvin M. Hotchkiss*, Eastman Kodak Co., 1133 Avenue of the Americas, New York, NY 10036.

### Deadline for News Releases

Releases and other material intended for use in any of the columns of the *Journal*, especially for the Meetings Calendar and the Forthcoming Professional Meetings column, must arrive at SMPTE Headquarters at least six weeks before the month of the issue in which it is to appear. For example, announcements for the June issue must arrive no later than 15 April. We regret that when information arrives too late it cannot be used. — *Edit.*

## btx presents 15-track TV audio

The btx 4500 SMPTE interlocking system expands your video production capacity to include outboard multi-track audio recorders. Any recorder of any speed or format with or without servo capstan drive may be precisely locked to any VTR to enhance your TV audio production flexibility. Now you can sweeten, overdub, rerecord, edit and recombine to a time base accuracy within 50 microseconds of absolute mechanical lock. The btx 4500 synchronizer is an economical, ultra-reliable micro-processor-based system using standard SMPTE time code. For complete information, call: The btx Corporation, 438 Boston Post Road Weston, Massachusetts 02193 (617) 891-1239



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