HIGHLIGHTS

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Test Motion Pictures for Subjective Evaluation of Bit-Rate Reduction Coding

H. Murakami, T. Shimizu, and H. Yamamoto

This article presents a set of test motion pictures for subjective evaluation of bit-rate reduction coding, such as interfield or interframe coding, which eliminates both spatial and temporal redundancy. The pictures cover the full range of still-to-violent motion, camera panning or zooming, and scene changes, under various conditions of brightness, contrast, texture, and coloring. Pictures utilizing some digital video effects are also included.

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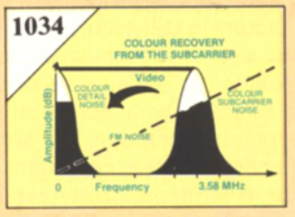

B-MAC: An Optimum Format for Satellite Television Transmission

J. D. Lowry

This article decribes the B-MAC transmission format recently developed for direct broadcast by satellite (DBS) that meets both technical and commercial needs. The custom integrated circuits (ICs) necessary for decoding in this system are expected to be commercially available in the early part of 1985. Requirements beyond satellite transmission include capability of distribution on cable for single-family homes, through satellite master antenna TV systems for multiple dwellings, and via UHF terrestrial broadcast.

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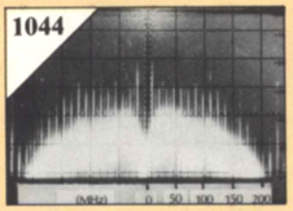

Serial Interface Within the Digital Studio

R. Boyer, J.-L. Grimaldi, J. Oyaux, and J. Vallee

As digital equipment is used increasingly in the video studio, the need for an effective means of interconnecting digital devices becomes more apparent. This article discusses the desired characteristics of such an interface, including selection of the coding to be used. A serializer and deserializer designed for an experimental digital studio developed by Thomson-CSF are described.

1047

A Flicker-Free Field-Sequential Stereoscopic Video System

L. Lipton and L. Meyer

This article describes the StereoDimensional™ stereoscopic video system which uses modified standard video equipment and electronic interfaces to produce a true three-dimensional image. The resultant video signal is compatible with existing broadcasting, editing, and recording protocols. A time-multiplexing technique produces alternate left and right subfields. The image is observed by using an individual selection device.

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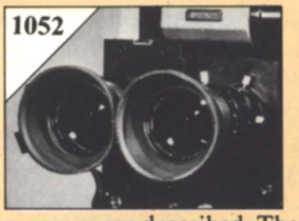

New Aspects and Experiences in Stereoscopic Television

R. Sand

The development of a stereoscopic television system and a demonstration program are described. The system, created by Institut fuer Rundfunktechnik (IRT), Munich, uses two ENG cameras mounted on a special support and two synchronized 1-in. Type-B VTRs. The viewer wears polarized glasses to separate the two stereoscopic pictures, but in the future, a lenticular raster system could make viewing without glasses possible.

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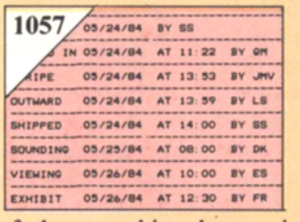

Computerized Tracing of Magnetically Striped Theatrical Release Prints

J. Mosely

A method has been developed for keeping track of the large number of reels of photographic release prints that pass through many processes and locations before being sent to the theater for exhibition. Until recently, 70mm releases comprised a small, manageable number of reels, but in the last two years, releases of up to 3000 reels have become common. Financial and security risks now require better monitoring and accountability along the way.

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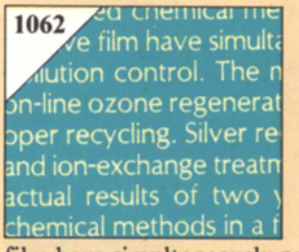

Advanced Chemical Methods Improve Film Processing and Control Pollution

B. C. Barbo

Advanced chemical methods for wet processing of both negative and positive film have simultaneously produced improved film processing and pollution control. The methods include closed-loop fix desilvering with on-line ozone regeneration of the bleach, and ion-exchange color developer recycling. Silver recovery is further enhanced by electrolytic tailing and ion-exchange treatment of the wash waters.