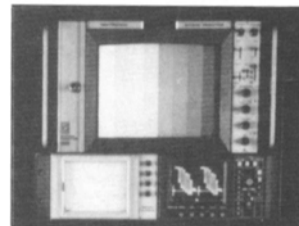
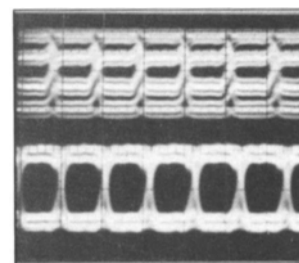


# Highlights

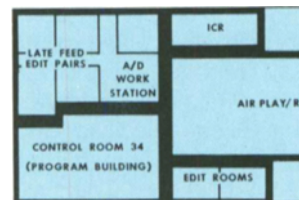
- 4 **The Recordable Laser Videodisc: a Technical Perspective** • *J. Browne* • Prior to the introduction of a recordable laser videodisc (RLV), a LaserVision format was a playback-only system using replicated videodiscs. The lack of inexpensive, fast-turnaround videodiscs inhibited experimentation and limited the applications for which the videodisc could be used. This introductory article examines the construction, recording process, and quality considerations of the RLV. The RLV has the potential to accelerate the growth of the interactive videodisc industry and create new applications such as videodisc-based editing.



- 8 **Adaptive Equalization Techniques for Digital Video Recording Systems** • *S. Mita, M. Izumita, N. Doi, and Y. Eto* • An adaptive automatic equalizer applicable to high-rate data recording systems such as digital VTRs is proposed. This equalizer is constructed on the nonlinear equalization technique called linear cancellation and on probabilistic decoding techniques. Two particular advantages are noted: (1) that equalization with logical error correction is performed and (2) that the variable part of the equalizer can be composed solely of digital circuits. It has been confirmed that sufficient eye-pattern opening can be achieved using this equalizer at an operation speed of 46 Mbits/sec.



- 13 **The CBS Experience with Small-Format Videotape and the Implications for the Future** • *Bernard L. Dickens* • In 1985, CBS introduced a 1/2-in. videotape system in its new Hard News Center. More recently, CBS has evaluated combination camera/recorders for network news gathering. This article reports on the CBS experience with small-format videotape systems and examines the implications of this experience for the ability of present videotape technology to meet current and anticipated broadcast requirements.



- 17 **Television Engineering Research in the BBC, Today and Tomorrow** • *B. Moffat* • Television engineering research in the BBC is intended to ensure that the future engineering needs of the BBC can be met economically and effectively. To that end new broadcasting systems and techniques are innovated and assessed. It is important to strike a balance in this work between current and future requirements, mainly through internal projects, but partly in cooperation with other enterprises. Major examples of relevant work include high-definition television in conjunction with digitally assisted television, bandwidth compression, subscription systems, digital techniques for studios and transmission, and digital stereophony for television.



- 75 **The 129th SMPTE Technical Conference** • Los Angeles • The 129th SMPTE Technical Conference and Equipment Exhibit, held October 31 to November 4, 1987, in Los Angeles, Calif., was a significant event in the industry. A record crowd of more than 17,000 was attracted to the conference and exhibit, which was held in the Los Angeles Convention Center. A total of 148 papers were presented at the technical sessions, on the theme "Imaging and Sound — Today and Tomorrow." Because of the large number of presentations, the technical program began on Saturday and was divided into several concurrent sessions. In addition to the papers presentations, one of the highlights of this conference was the continuous screening of HDTV material on Sunday and Tuesday. The demonstrations, which included material from many corners of the world, were jointly sponsored by the SMPTE and the Motion Picture and Television Society of Japan (MPTEJ). The films, which were originally produced on high-definition television and then transferred to 35 mm film, were impressive in their technical and artistic quality.

