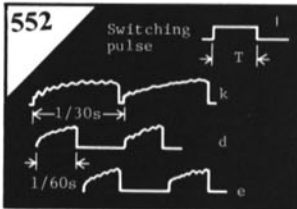


The Use of EBU/IRT and SMPTE Code for Film Editing

W.-R. Otto

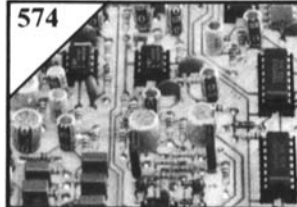
This article compares the EBU/IRT 4-bit code in Europe and the SMPTE time code, both technically and operationally. It describes how the SMPTE code can be used in film editing and the problems which can arise, due to the structure of the SMPTE code, in real-time applications. Some methods to overcome these problems are discussed.



Masking of Chrominance Pattern Movement and its Application to Color TV Signal Transmission

H. Sakata

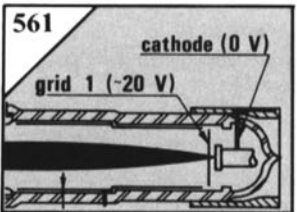
This article reports on the results of psychophysical experiments indicating that when the human color-viewing mechanism reacts to a moving pattern, the color image is characterized by the masking effect of the luminance component on the chrominance component. Patterns with lower variations in color saturation are more likely to be masked, and yellow and blue are more likely to be masked than red and green.



Manual and Automated Control of Multi-Channel Theater Control Systems

L. A. McCroskey

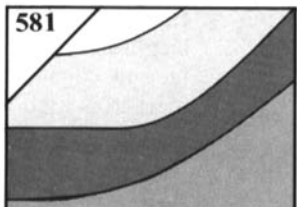
This article describes the TAC-86 Theater Audio Controller, designed to alleviate the numerous problems in the sound playback system in film and multi-media theaters. Such routine functions as source and equalization or processing selection, volume control, channel assignment, and public address functions are involved. A TAC-86 system usually consists of up to eight Channel Fader Input/Output (CFI/O) cards, Sub-Bass (CFI/O) card, a Public Access (CFI/O) card, a matrix card (MX), a Microphone Preamplifier (MICPRE) card, and a System Logic (SYSLOG) card.



Modern Trends in Color Broadcasting Camera Systems

J. van den Berg and N. V. Rao

Recent developments in broadcast camera tube design have led to improvements in camera performance. This article compares two new camera tube systems that have recently become available for professional television cameras. The first is the 13mm 80XQ Plumbicon™ which is a CF (complementary field) system based on electrostatic focusing with an accelerating lens followed by magnetic deflection. An 18mm version of the CF Plumbicon is also discussed.



Printing System Evaluation

D. Q. Humphreys, R. C. Sehlin, and P. J. Mutter

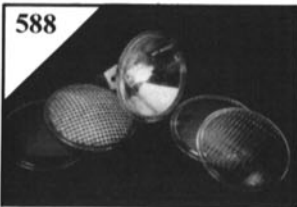
The Printing Systems Evaluation (PSE) compares printer operations in terms of printer lights. The system relies on standard industrial practice, incorporating such parameters as lamp type, trims and tapes, filters, shutter angle, aperture, and film-transport speed. PSE can improve the efficiency of both additive and subtractive printers, and can also be used by printer and film manufacturers to design better equipment and new films.



Digital Signal Processing System for Automatic Dialogue Post-Synchronization

P. J. Bloom and G. D. Marshall

A digital signal processing system, Wordfit, has been developed to eliminate the time-consuming and repetitive nature of film and video dialogue post-synchronization. The system computes the relative timing differences between the studio dialogue and the original guide-track recording, and removes these differences by automatically editing a digitally stored version of the studio dialogue.



The Care and Handling of Sylvania Brite Arc™ and Brite Beam™ Lamps

D. A. Richardson and W. C. Gungle

Sylvania Brite Arc™ and Brite Beam™ lamps are being used widely in the television and motion-picture industries. This article explains the proper handling of these lamps and how they should be used, including installation, positioning, startup, dimming, safeguards, and visual signs preceding failure. This step-by-step guide will enable the user to better understand the proper operation of these lamps to achieve trouble-free performance.