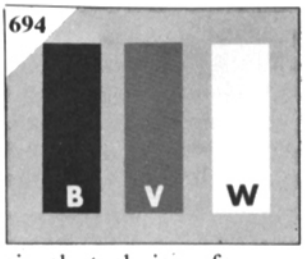
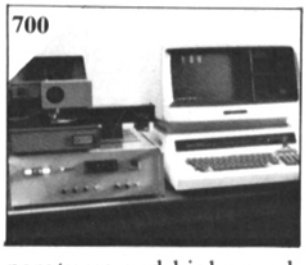
HIGHLIGHTS



Dynamic Luminance Reproduction of Film by TV

Robert C. Lovick

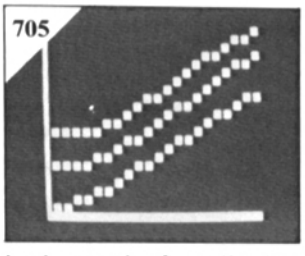
A series of test targets has been prepared and evaluated to demonstrate a simple technique for assessment of luminance reproduction of films by television. The film image was prepared from matte white, gray, and black targets of known reflectances on three different backgrounds. Measurement of the resulting television monitor luminances yields overall transfer characteristics for low-, medium-, and high-key scenes.



Quality Control of Processing and Printing

T. Ishiguro, S. Naito, K. Matsuo, S. Saeki

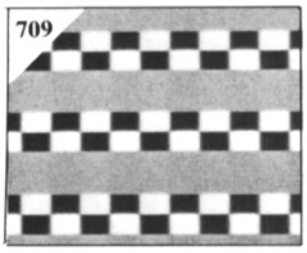
The present developing processes are performed under high temperatures and high speeds, and the processing capacities of present printers and developing equipment have greatly increased. To cope with these new types of processing equipment, the acceleration of the quality control process has become necessary.



Quality Control in an Australian Laboratory

Dominic Case, Tom Nurse

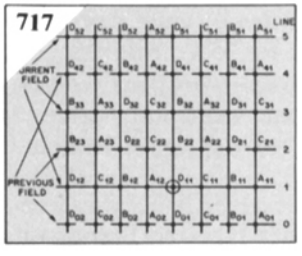
Recent development in minicomputers has brought computer assistance within the reach of smaller laboratories. To benefit, a laboratory's operations must be organized in a systematic manner. At Colorfilm, a TRS-80 minicomputer interfaced with a Brumicro densitometer is used to derive results from sensitometric data. The computed parameters are of greater value than fully drawn curves. Print quality control is maintained using the laboratory's own "chinagirl."



Automatic Set-up System for the BCC-20

Heinz Griesshaber

The BCC-20 Digicam System, a portable self-contained camera designed to meet studio performance specifications, employs a microprocessor in the camera head to control the Spatial Error Corrector memories. The system is complemented by the addition of the Automatic Set-up Unit. This unit allows one to set up eight cameras fully and automatically.



Composite Television Coding: Subsampling and Interpolation

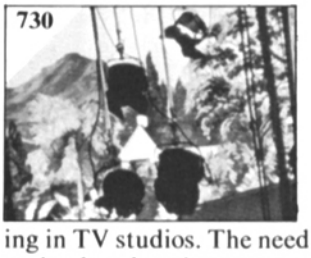
R. C. Brainard, A. N. Netravali, D. E. Pearson

In a continuing study of predictive coding of composite NTSC television signals sampled at four times color subcarrier frequency (14.3 MHz), we describe results of subsampling and interpolation. Our ultimate goal is to demonstrate a coding system for a transmission rate of 45 Mbits/sec with full broadcast quality. Adaptive Differential Pulse Code Modulation (DPCM) with Variable Word-Length Coding is used to reduce the bit rate for the channel. But this requires a buffer to smooth the data output.

Computer Graphics at Independent Television News

Chris Long

Computer graphics have been used since 1974 at Independent Television News (ITN). ITN provides national and international news for the commercial channel of British television. In 1980 a new graphics generator, VT80, developed and built by ITN, was introduced. It is now used regularly in daily bulletins and special programs covering special events such as elections.



Studio Lighting Suspension Systems

Steve Futers

This paper discusses recent developments in rigging equipment for lighting in TV studios. The need for such development is examined and early systems are described to show their relationship to modern equipment and its origins. A comparison is made between single point telescopic systems and barrel hoists. Finally, a description of the design and function is given of the latest grid, telescope, and barrel hoist.