

# Highlights

- 404 The Sony PCL HDVS Production Facility** • *H. Tanaka and L. J. Thorpe* • Photo Chemical Laboratory (PCL) was established in 1951, in Tokyo, as a specialized developer of 16mm motion-picture film. In 1964 it was appointed the designated Fuji film-processing laboratory. In 1970 PCL entered into an affiliation with Sony Corp. The company became known as Sony PCL. Long experience in film processing, film transfers, and video production and post-production made Sony PCL eminently suitable to set up the world's first facility specializing in an integrated film and HDTV production and post-production service. Almost immediately Sony PCL was involved in transfer activities servicing the pioneering HDTV program production getting under way in Japan, Europe, and the U.S. The volume of business soon grew to a level that made it necessary to establish a totally new facility, embodying a more complete HDVS system. (HDVS — High-Definition Video System — is a Sony name and logo that refers specifically to the product line developed at Sony.) The new facility was opened in Shinagawa, Tokyo, in 1988. This article describes some of the more interesting technical aspects of this all-component video HDVS installation.



- 416 Vision III Single-Camera Autostereoscopic Methods** • *C. A. Mayhew* • The Vision III™ single-camera autostereoscopic (SCA™) process for texture and depth enhancement has been adapted for use in photographing three-dimensional objects and sets with motion-control systems. Successful tests have been performed on an IMC camera platform driven by Tondreau motion-control software using a 386 PC computer, and on a Mechanical Concepts camera platform controlled by Athena-11 software on a mini-computer. Vision III is an autostereoscopic process that exploits the short-term visual memory used by the human brain in depth perception. Depth information is formatted to produce a natural, true three-dimensional image. Vision III is compatible with standard broadcast television and motion-picture production and requires no modification of display equipment or use of viewing glasses.



- 423 An Integrated Digital Production Suite** • *K. Carson and J. Danielson* • An integrated digital production suite, encompassing paint, video typography, a digital library, perspective transformations, a four-layer digital keyer/mixer, and keyframe control of VTRs, is described. This system is explored from the perspective of how it simplifies transfer of graphic elements through the production process, maintains very high digital video image quality, and assists artists and editors in working together to complete complex special-effects projects.



- 427 Closed Captioning in Real Time** • *M. Okrand* • The line-21 captioning system was developed in the 1970s as a means of delivering hidden subtitles (closed captions) to hearing-impaired television viewers. A more recent development is the ability to generate captions in "real time" during live broadcasts, using experienced court reporters and a computer-aided translation system that converts shorthand code into captions almost instantaneously. More than 70 hours of nationally broadcast programming are captioned weekly with this technology. This article describes the creation and broadcast of captions in real time, including equipment, staffing, and procedures.



- 432 SMPTE Classic Reprint** • Originally published April 1928 • **Motion Picture Directing** • *C. B. DeMille* • A motion picture director in many respects occupies a position analogous to the leader of an orchestra. The leader has to wave a baton in order to get the right tempo. He has to see that the bassoon does not come in while the violin is playing its solo. Likewise a motion picture director has to hold together all the departments, he has to see that they all function on time, and that everything meets on the little set where the camera is going to turn for a few minutes. I will review first the period of preparation to bring about that moment.

