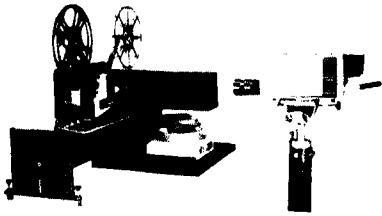


A FILM CHAIN WITHOUT A DEDICATED CAMERA



MOBILE MULTIPLEXER!

Save the high cost of an extra color camera. Studio camera adapts to film chain use in seconds.

Use standard TV zoom lens.

Input: Two 35mm slide projectors in dissolve mode plus 16mm or Super-8.

Screen used for previewing is easily removed for conventional field lens operation.

Mobile Multiplexer saves studio space. At \$1100.

out performs units at twice the price!

Send in your 10 minute, 3/4" video-cassette. We'll transfer our demonstration tape describing the MM onto it and return it, postpaid.

BUHL OPTICAL
1009 Beech Avenue
Pittsburgh, Pa. 15233
Phone: 412 321 0076



Memo to Members:

Have You Signed Up A New Member Lately?



As one who has chosen to belong to SMPTE, you are aware of the benefits of SMPTE membership. Among these benefits are the prestige of being associated with the world's premier professional organization in the fields of motion pictures and television, the monthly *SMPTE Journal*, the local section meetings, and the annual conferences and equipment exhibits. If you know someone who meets SMPTE's requirements, you can offer to sponsor him or her for membership. This is the best way to help strengthen the Society and point someone toward increased professional growth. Applications are available from SMPTE Membership Dept., 862 Scarsdale Ave., Scarsdale, NY 10583.

50 years ago in the Journal

Arthur S. Newman, "Camera Mechanism, Ancient and Modern," May 1930

In the first days of the industry the progress of the moving picture was much handicapped by the want of accurately perforated film; nevertheless the pictures, unsteady and flickering, were, on their introduction, so much of a surprise to the public, that the production of pictures of any kind was considered of more importance than the production of good pictures. Money could be made quickly by those in the know, and much more attention was paid to the money-making side of the business than to the technical problems involved in the improvement of the product. . . . We, in this country [England], have suffered badly in consequence. Neglect of the technical side was the direct cause of a great portion of the trade going away from this country. . . .

I will predict that the moving picture camera of the future will be one in which the film runs free during its moving period, is held by a fixed pilot pin during its stationary period, and that its intermittent movement, of whatever design, will be characterized by the fact that it contains neither cams nor slides, but is driven solely by pin joints, the bearings of which can be easily made adjustable, to compensate for wear. Gate friction will be extremely light or non-existent, and film will be guided only on its edges during its period of movement.

P. E. Truesdale, "Sound Films for Surgical Instruction," May 1930

Discussion

Mr. Samuels: A short time ago I noticed an interesting human reaction which might interest Dr. Truesdale. We recently took pictures in the operating room of a double congenital dislocation of the hip, and during the operation a large incision was necessary. The camera man took all the pictures in the course of six or eight hours almost continuously and felt no effects. However, when the film was shown on the screen in the theater he paled, became ill, and was forced to retire. Contradictory as it may seem, the screen image of the operation had a greater physical effect upon the observer than the operation itself.

S. S. A. Watkins and C. H. Fetter, "Western Electric Recording System," May 1930

Sounds are recorded on film by exposing film running at a speed of 90 feet per minute to light variations which are linear with respect to sounds originating in the studio. The electrical energy is delivered from the main amplifier to a device in the film recording machine known as the light valve. This light valve consists of two duraluminum ribbons spaced 2 mils apart which lie in a powerful magnetic field. When current flows through these ribbons they open and close in accordance with the current flowing through them. A source of illumination is provided and the image of the aperture of the ribbon is focused on the film through an optical system having a two-to-one reduction. The normal slit image on the film will therefore be 1 mil in width.

25 years ago

Charles R. Daily, "Progress Committee Report," May 1955

For television film reproduction, it appears that the long-used iconoscope is on the way to rapid obsolescence with the development of two different but nevertheless effective approaches to the problem of film reproduction. One approach is based on the use of the vidicon tube and intermittent projectors, and the other approach employs the flying-spot scanner and continuous-motion projectors. Rapid progress has taken place in the adoption of the vidicon tube for both monochrome and color television film reproduction. Monochrome vidicon film cameras and associated equipment became commercially available during 1954 and found enthusiastic acceptance in many television stations.

The Philco and Dumont flying-spot scanners, first announced in 1953, have in 1954 undergone modifications to improve their performance, particularly as applied to color film reproduction for color television. The Eastman Kodak Co. announced development of a unique compensator consisting of two rotating and tilting mirrors. This projector mechanism will be incorporated into a flying-spot scanner being developed by the General Electric Co.