

SMPTE ALMANAC



By Michael Dolan

In this column we provide interesting historical briefs from the Journal articles of days past. The purpose of this column is primarily entertainment, but we hope it will also stimulate your thinking and reflection on the Society's history, how

far we have come in the industry, and (sometimes) how some things never change. This is not meant to be an authoritative reference, and no attempt is made to correct any past errors or omissions of the Journal. We simply hope you enjoy the material.

25 Years Ago in the Journal

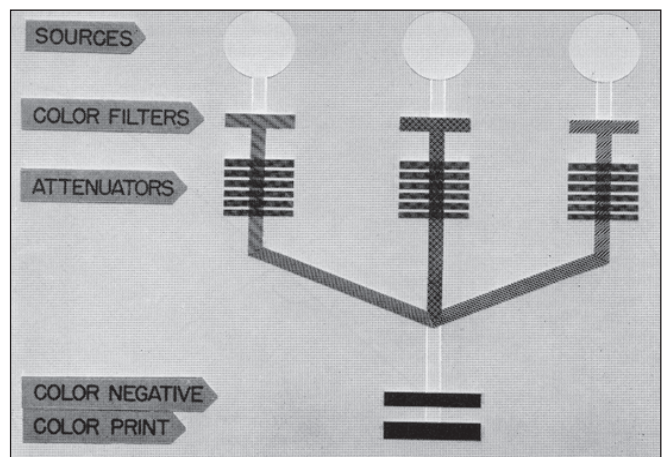
The September 1981 *Journal* published in "A New Loudness Indicator for Use in Broadcasting" by Bronwyn L. Jones and Emil L. Torick: "New psychoacoustic studies have been carried out, resulting in the design of an improved Loudness Indicator. The new Indicator utilizes principles similar to the CBS Laboratories Loudness Level Monitor developed in 1967, but also includes certain modifications which improve its accuracy and readability...In CBS validation tests comparing the Monitor with the volume indicator (VU meter) and the standard Sound Level Meter with A, B, and C weightings, the device showed significant promise as an instrument for monitoring the loudness of broadcast program levels. Broadcaster interest, however, seemed to be focused more on the control of levels than on monitoring them; as a result, the Loudness Level Monitor never achieved widespread adoption. Instead, the findings which led to the development of the Monitor were incorporated into the design of an Automatic Loudness Controller, which was successfully marketed, and is still in use at CBS and many other facilities today. Because of the continuing complaints from the public about loudness, and especially about loud commercials on televisions, the Federal Communications Commission (FCC) initiated its own study. It reported on a series of measurements on the loudness of commercial material, and concluded that the problem of "excessively loud" commercials still exists in television broadcasting."

50 Years Ago in the Journal

The September 1956 *Journal* reported in "Calibration of Color Motion-Picture Printers" by Jack E. Pinney and William R. Weller: "The information obtained from a printer calibration is essential to any usable method for the color timing of motion pictures. Without a knowledge of the relative log E shifts caused either by changing printer apertures and color compensating filters in subtractive printing, or by attenuating the red, green, and blue light in additive printing, accurate color timing is almost impossible. The fine corrections necessary to achieve a balanced print may be unobtainable because of nonlinearity of the printer scale, unwanted absorption of the color-compensating filters, or variance of

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the filters from their nominal values due to fading, mislabeling, or interface reflection losses...Intensity timing is usually accomplished by adding the same amount of attenuation for each color. Color correction is accomplished by varying the relative intensity of the light for each of the three colors. There are two general methods of printer calibration, which immediately suggest themselves, photoelectric and photographic. Photoelectric calibration can be done more rapidly but requires a photocell probe unit such as the light meter...Since printer meters are not in widespread use, a photographic calibration procedure will be described which may be used by anyone who has a color densitometer."



Additive printer schematic.

75 Years Ago in the Journal

The September 1931 *Journal* reported in "The Camera of Tomorrow" by Ira B. Hoke: "Since the advent of sound it has been evident to cameramen that something must eventually be done to provide modern photographic apparatus in order to cope economically with the radical changes brought about in studio production...Clumsy and cumbersome boxes have been built for shielding from the microphone the noisy cameras and motors, instead of directing that effort toward the perfection of mechanically silent equipment...At least two camera manufacturers have carried on extensive camera and motor silencing experiments on their own initiative to such an extent that they will be able to within a few short months to begin wholesale production of suitable equipment. There is, however, one discouraging factor which they all face; that is, a standard motor...Last March the Academy of Motion Picture Arts and Sciences sent out a questionnaire to first-cameramen engaged in production. Of the sixty questionnaires returned, 91 per cent advocated strong efforts toward the development of cameras which will require neither blimps nor covers."