

# SPECIALIZED LABORATORY SERVICES

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Precision B&W Negatives  
Eastman Color Negatives  
Theater Prints in Color  
Low-cost Work Prints

## SUPERSCOPE ANAMORPHIC CONVERSIONS

From 16mm and 35mm  
Originals to

16mm or 35mm Squeezed Masters  
or Fine Grain Internegatives  
IN ANY ASPECT RATIO  
COLOR or B&W

## SPECIAL EFFECTS IN EASTMAN COLOR OR B&W

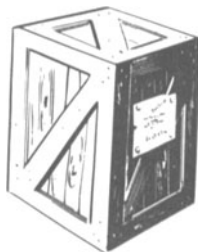
Our new Triple-Head precision printer reproduces the original edge numbers and dissolve cues in the inter-negative

Dissolves, Wipes, Montages,  
Zooms, Reductions, Blow-ups,  
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other SPECIALIZED LABORATORY SERVICES

Write us regarding your film  
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## FILMEFFECTS OF HOLLYWOOD

1153 North Highland Avenue  
Hollywood 38, California  
HOLLYWOOD 9-5808



# new products

(and developments)

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Further information about these items can be obtained direct from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.

## An Adaptable Automatic Exposure Control

By MARK MACINTOSH

[This paper was presented on October 10, 1956, at the Society's Convention at Los Angeles, by the author, Vice-President of the Traid Corp., 17136 Ventura Blvd., Encino, Calif.]

The AUTEX\* is a widely adaptable automatic exposure control that can adjust the aperture setting of practically any lens on any still, motion-picture or TV camera automatically, instantaneously and continuously to maintain the best film exposure during wide ranges of light level changes.

The AUTEX is particularly useful on any camera that is remotely placed so that a human operator cannot adjust the lens aperture for changing light conditions. Another very important application for such an automatic exposure control is on cameras that are to be "panned." When either a hand-held or tripod-mounted camera is being "panned," the photographer

\* Trademark.

can follow a subject from deep shade to bright light, or vice versa, without stopping to change the lens aperture. As the camera follows the subject, the lens aperture is automatically and continuously adjusted to the changing light conditions with an exceptionally fast response rate of approximately five *f*-stops in one second.

The unusual sensitivity of this exposure control system allows full advantage to be taken of high-speed films and lenses using available light techniques.

This automatic exposure control is proving exceptionally useful to newsreel and documentary photographers, commercial motion-picture photographers, press photographers, military photographic instrumentation engineers and in industrial and research applications where motion-picture cameras and remote closed-circuit TV cameras are stationed in dangerous or inaccessible places.

Because of the ease with which it can be attached, this automatic control system may be readily applied to other situations requiring the positioning of a device in response to changes in light level, for example, artificial fill-in lighting might be controlled according to the prevailing natural light.

Here is how the AUTEX works: The cylindrical control head is installed on the face of the camera, adjacent to the lens and parallel to the optical axis (see illustration). The control head contains a photocell, a potentiometer, a slip clutch and a small, powerful drive motor. When the camera is pointed at a scene, the photocell in the control head accepts the same light as the lens. A change in photocell voltage, caused by a change in light level, trips a small relay. A unique transistor-relay circuit, developed especially for this equipment, controls the drive motor. The motor, powered either by a small battery supply or by an external source of direct current, rotates the control head so that the adjustable lens drive tape moves the lens iris ring in the proper direction to correct for the change in light level. A balancing potentiometer in the head "feeds back" the

