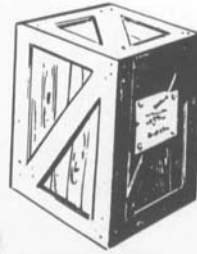


achieved by the use of diffraction or line gratings built into the camera as an integral part and at a short distance from the focal plane. For reproduction a similar optical system was used in reversed order.

Color Research Corporation was recently reorganized as Grimson Color, Inc. Mr. Grimson had been a member of this Society since 1940 and was also a member of the Optical Society of America, The Society of Applied Spectroscopy, The American Institute of Physics and the New York Academy of Sciences.

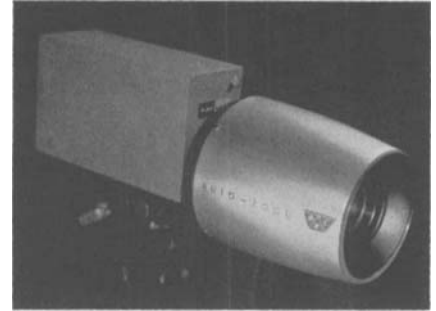


## new products

(and developments)

.....  
 Further information about these items can be obtained direct from the addresses given. As in

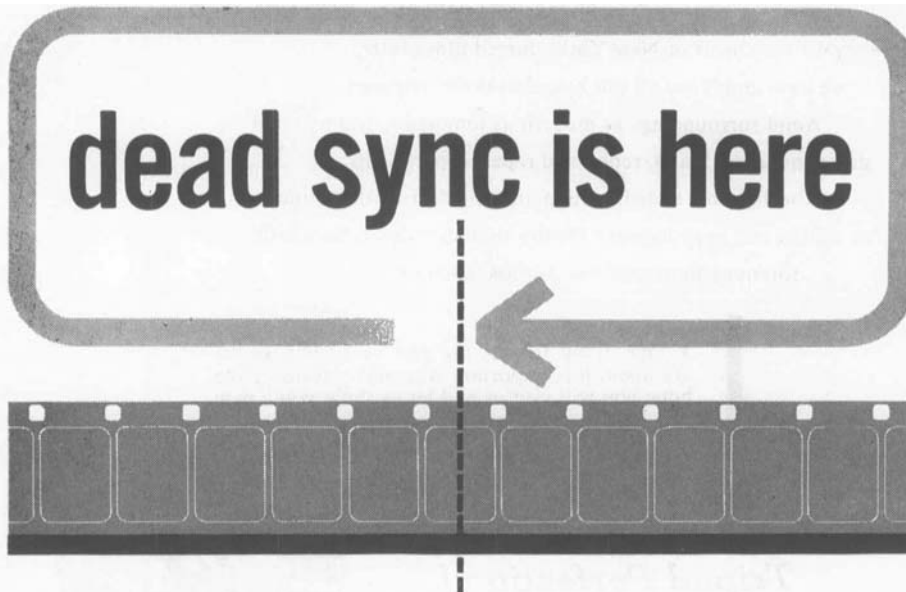
the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.



The Auto-Zoom Model TV 16 is a new variable focal length lens especially designed for commercial and industrial television cameras using the vidicon-type tube. It is a product of the Perkin-Elmer Corp., Norwalk, Conn. The focal length is variable from 30mm to 150mm, a ratio of 5 to 1, and the lens can focus on any object from 6 ft to infinity. The lens system is moved from one end to the other of its focal length by motor-drive controls. Lens speed varies from  $f/2.7$  at the short focal length and halfway through the range, to  $f/4.7$  at the long focal length. Constant aperture is automatically held during the zoom range for any setting from  $f/4.7$  to  $f/11$ . Zooming and focusing operations can be done remotely through the motorized drives. Motorized control of the iris setting may also be obtained as an extra price feature. The Auto-Zoom is adaptable to any conventional small-tube television camera. It weighs 4.5 lb and measures  $8\frac{1}{2}$  in. long  $\times$   $6\frac{1}{2}$  in. in diameter.



The Servotherm UV-IR Photometer Model 1370, designed to counteract meter errors due to temperature changes, blanket film speed ratings, fixed field of view and low sensitivity, is a portable instrument for measuring radiation in selected spectral bands corresponding to various specific film types and covering a range of  $0.3 \mu$  to  $3.0 \mu$  (UV, visible and IR). Since film response and correction filters are internally duplicated, direct stop and shutter speed



### Single-system dead sync . . .

can now be attained in your editing rooms by means of magnetic sound single-system camera conversions

Sync point shifting rerecorders and dead sync picture sound editors—using the new magnetic gap center orbital head mount—you can adjust azimuth, tangency and head track lateral contact independently and without disturbing head track contact

**Available for inspection at the New York Convention.**

The E.D.L. Company offers services in the design and fabrication of magnetic recorders, video recorders, special purpose printers and light sources—and high production film process machines for all color and black-and-white processes. Specialists in the design and construction of high temperature spray processing machines.

# THE E. D. L. COMPANY

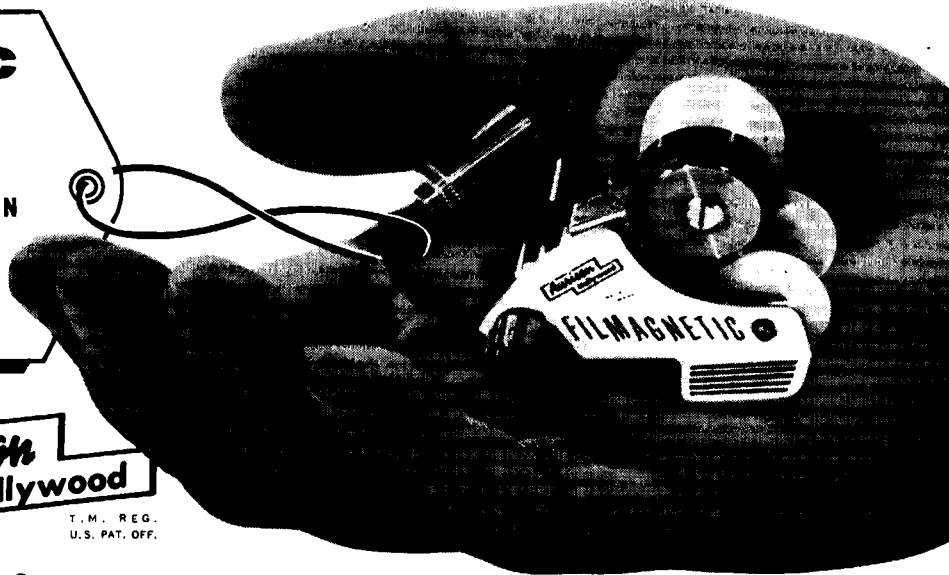
5929 EAST DUNES HIGHWAY, GARY, IND.

**FILMAGNETIC**

TRADE MARK

AN *Optional* FEATURE

AVAILABLE FOR FACTORY INSTALLATION  
ON ALL NEW OR EXISTING AURICON  
OPTICAL SOUND-ON-FILM CAMERAS



**Auricon Hollywood**

T. M. REG.  
U. S. PAT. OFF.

*Presenting*

**AURICON  
FILMAGNETIC**

TRADE MARK

Auricon proudly presents "Filmagnetic" High-Fidelity sound-on-film Recording, for lip-synchronized Talking Pictures and Music of Quality, on 16 mm black and white or color film pre-stripped for magnetic sound before it is exposed to light. "Filmagnetic" sound and optical picture are recorded Single-System on the same film at the same time! The "Filmagnetic" Unit, installed at the Factory in any Auricon Camera, can be temporarily removed without the use of tools, thus providing a choice of High-Fidelity Optical or Magnetic sound-tracks. Your pre-stripped film with magnetic sound lip-synchronized to your picture, passes through the normal picture-development and is played back on any 16 mm Magnetic Sound Projector, including the Ampro, B&H, RCA, and others.

"Filmagnetic" Outfit complete... \$870.00

PLEASE MAIL COUPON BELOW FOR FREE INFORMATION...



(FILMAGNETIC PATENTS PENDING)

"Filmagnetic" Twin-Head Camera Recording Unit, with Record and Instant-Monitor Magnetic Heads, which automatically open for easy threading... complete with Model MA-10 Amplifier, \$870.00 installed on any new Auricon Camera at the Factory. Small extra installation charge on existing Auricon Cameras.

"Filmagnetic" 3 Input Amplifier, Model MA-10, with High-Fidelity Microphone, complete Cables and Batteries, in a Cowhide-Leather Carrying Case. Super-portable, weighs only 7 pounds, carries easily with shoulder-strap during operation!



"FILMAGNETIC" SOUND FOR COLOR OR BLACK & WHITE



**Auricon Hollywood**

16 MM SOUND-ON-FILM SINCE 1931

AURICON Division  
BERNDT-BACH, INC.  
6946 Romaine Street  
Hollywood 38, California

- Please send me free information on "Filmagnetic" equipment for Auricon Cameras.
- Without obligation, please send me cost of installing "Filmagnetic" on my Auricon Model..... Camera.

Authorized Distributor by  
**Graybar**  
WHOLESALE IN PRINCIPAL CITIES

NAME..... TITLE.....  
FIRM.....  
STREET.....  
CITY..... ZONE..... STATE.....

**GUARANTEE**

All Auricon Equipment is sold with a 30 day money-back guarantee. You must be satisfied!

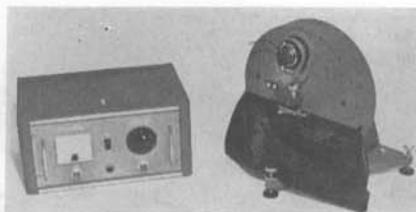
**THE  
Auricon  
Hollywood  
LINE**

**CINE-VOICE**  
\$695.00

**AURICON PRO-400**  
\$1497.00

**SUPER 1200**  
\$4632.15

readings eliminate scale changes, tables and computations. Selective fields of view (7° to 50°) permit distant measurement of the entire picture or specific highlights. Self-powered, the UV-IR Photometer is "transistorized." Operating at any altitude, it is said to be independent of ambient temperature variations, and may be mounted on either tripod or hand grip. The shutter speed scale ranges from 1/1600 to 1 sec. The *f*-stop scale ranges from *f*/1.5 to *f*/64. Radiation intensity range is 30,000 to 1 (in two stages); ambient temperature range is -20 C to 40 C. Further information may be obtained from the manufacturer: Servo Corp. of America, 20-20 Jericho Turnpike, New Hyde Park, L.I., N.Y. (W. K. Schoonmaker, Fieldstone 7-2810).



A new high-speed rotating drum camera, Model 224, has been developed by Beckman & Whitley, Inc., 945 E. San Carlos Ave., San Carlos, Calif. A general-purpose research camera, it offers the range of high writing speeds from 4 to 400 ft of film/sec. Accessories available permit its use as a streak camera, or, using a pulsed-light source, as a framing camera. Used in con-

junction with the Beckman & Whitley Model 189 Framing Camera, it provides a greatly extended total framing time but retains the short exposure time of the latter.

The drum of 50-in. circumference carries film on its inside cylindrical surface. A turret-mounted 45° first-surface mirror orients the optical axis perpendicular to the plane of the drum. When driven by its electric motor at speed up to 6,000 rpm, the camera provides 10 msec of writing time on the 35mm X 50-in. film.

In operation, the drum is brought up to constant speed, and an electrically operated capping shutter is opened when it is desired to make the exposure. The shutter remains open during one complete revolution of the drum. Electrical contacts, synchronized with the operation of the shutter blades, are provided to actuate short-duration events through secondary electrical circuits.

The control unit provides all the necessary controls for safe operation of the camera. This includes a continuously variable voltage regulating system which handles input to the 1-hp 115-v 60-cycle motor. A contact-type voltmeter on the panel indicates the regulating voltage and limits the drum to its maximum speed of 6,000 rpm. An electronic tachometer is also available for accurate display of drum speeds.

The camera can be rotated through 360°. A bore-site focusing eyepiece is included and a film-changing bag is available for daylight loading and unloading of film.

## EVERYTHING

FOR MOTION PICTURE PRODUCTION FROM ONE DEPENDABLE RESOURCE

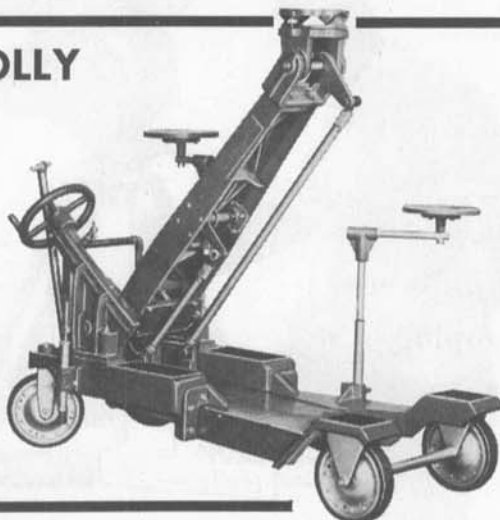


### CAMART DUAL SOUND READER

For single and double system . . . hi-fi lip-sync sound . . . permits you to hear sound with any silent picture viewer. \$195.00. Magnetic models also available.

### TV CAMERA DOLLY MODEL III

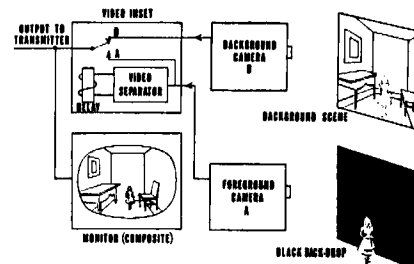
Boom arm type. Smooth, mechanical geared operation raises your motion picture or television camera from two feet to almost seven feet high. Weighs only 350 lbs. \$1825.00



DON'T FAIL TO VISIT US AT BOOTH NO. 23, 79TH SMPTE CONVENTION

the **CAMERA MART** inc.

1845 BROADWAY (at 60th St.)  
NEW YORK 23, N. Y.  
Circle 6-0930 • Cable: Cameramat



Color Video Inset was developed by the National Broadcasting Company to facilitate small studios' production of spectacles and of special effects. It was developed by the NBC Engineering Dept. under the supervision of the late Robert E. Shelby, Vice-President and Chief Engineer.

The color video inset, which permits the image from one camera to be set into the image from another to form a single picture, was first used in the Maurice Evans production of *Alice in Wonderland*, on October 23. In one scene, Alice seemed to shrink in size while she was on-camera. This was accomplished by reducing her image as picked up by the foreground camera, while leaving the scene from the background camera unchanged. In another scene, an image of a troupe of dancing oysters was inserted in the Walrus-and-Carpenter sequence.

An advantage of the system is that it permits the foreground of the picture to be controlled independently of the background. As shown in the diagram, one camera scans a background scene, and the other scans the inset object, which must be placed against a black backdrop. An electronic mixing device automatically records a silhouette of the inset object, then cuts a correspondingly shaped hole in the background and makes the insert. The process

# NEW

# DU ART JET-SPRAY\*

## DEVELOPING PROCESS

**REVOLUTIONARY** new picture quality for 16 & 35mm—Remarkable superior definition, no directional effects, minimum clumping with fine grain structure that's immediately apparent to the naked eye. As close to crystal-clear as a photograph can be. Let us show you the difference . . . you'll be amazed. DU ART JET\* SPRAY developing will be available in the Spring on contract or job basis.

**Call, Write or Wire:**

### **DU ART FILM LABS., INC.**

245 W. 55th St., N. Y. 19, N. Y.  
Plaza 7-4580

*\* The most modern achievement in fil'n processing.*

requires precise control in production work as well as in electronic timing, which must be accurate to one-tenth of a micro-second.

The effect of the inset, unlike that of the television superimposition, is to present a solid picture, without overlapping. In this respect, the color inset is similar to the matting process in film which requires complex lighting and processing work. Thus the inset will permit the instantaneous use of live camera effects which formerly were possible only with the use of processed film.

NBC is now working on a further extension of the inset principle, using three cameras to produce an inset within an inset. The color video inset, like the black-and-white video inset, has been produced by

the Development Group of the NBC Engineering Dept., which interprets and adapts RCA's laboratory research to the broadcasting uses of NBC.

**Reid H. Ray Film Industries Inc.**, 2269 Ford Parkway, Saint Paul 1, Minn., has issued a 20-page booklet giving a very concise description in pictures and few words of the 45-year old firm's complete motion-picture production organization. It shows some of the firm's 110 employees on locations throughout the nation or at work in these departments under one roof: script, animation, sales, service, screening, studio stage, sound, stills, processing laboratory, and editing. This booklet is well planned and well printed.



**PrograMaster** is a new crawl and special effects machine for continuous-travel TV program credits, commercials and films for use in open and closed television circuits. Remote electronic control produces a steady travel of film with adjustable speeds that can be varied even while film is in motion. The unit can be operated in either vertical or horizontal positions. The horizontal position is recommended for use in producing animation by passing murals behind scale models at a constant or a variable rate of speed. The system uses a direct, nonphotographic printing method to produce messages in line, halftone, shaded or color process.

Superimposition may be achieved without "bleed through" by the combined use of a single camera and the PrograMaster. The camera shoots a picture direct, while the message or other image, on transparent film, is simultaneously passed through. Designed for use in TV stations, film studios and agencies using closed circuit TV, the equipment is made by PrograMaster Co., 1 Waterman Ave., East Providence, R.I.

Audio-visual materials and services are readily obtainable in most localities of U.S. and Canada, according to a new "NAVA Membership List and Trade Directory" recently published by the National Audio-Visual Assn. The 24-page directory is issued to aid all who make arrangements for audio-visual presentations, projections service, rental or purchase of equipment, tape recordings of meetings, rental of 16mm films, and other audio-visual aids for conferences, sales meetings, exhibitions, schools, religious groups and others who make meetings appeal to both eye and ear.

The directory lists dealers by geographical location, with each dealer-listing coded to show where a user can rent or buy some 15 types of audio-visual equipment. Single copies of the directory are available free to users; address: National Audio-Visual Assn., 2540 Eastwood Ave., Evanston, Ill.

**Bronoptics Co.**, optical engineers, under the management of S. Davis Bronson, is now located at 4838 Van Nuys Blvd., Sherman Oaks, Calif. Bronoptics also represents the Ferson Optical Co., Inc., for consultation, setup, maintenance and testing. The facilities of Bronoptics Co. include: engineering, research, development and production of lenses, mirrors, prisms and other optical engineering needs.

Visit **S. O. S.**

**SMPTÉ  
CONVENTION  
Booths 19 and 20**

# See the very latest in Motion Picture and TV Production Equipment

*including New S.O.S. Developments*

S.O.S., the "One-Stop Source" is celebrating its 30th anniversary... carries practically every conceivable need in Motion Picture & TV production equipment—an enormous stock, more varied and more complete than any in the industry. Listed are a few of the items that will be shown at the SMPTE Convention.

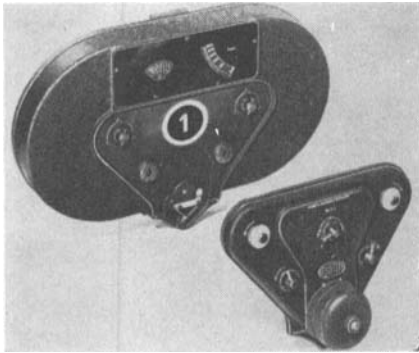
- Bridgamatic Film Processing Machines
- Moy Film Edge Numbering Machines
- S.O.S. Tittler & Special Effects Kit
- S.O.S. Action Viewer & Ediola
- S.O.S. Body-Brace Camera Pod
- Tel-Animaprint Hot Press Title Machine
- Tel-Animastand Animation Stand
- Link "In-an-Outer" Mike Boom
- Garnelites (Lighting Equipment)
- Acme Animation
- Auricon Cameras, Recorders
- Blue Seal 35mm Recorders
- ColorTran Lights
- Kinevox Sync Recorders
- Mole-Richardson Lights
- S.O.S. Junior Tripods
- Vistarama Wide Scope Lenses
- Worrall Tripod Gearheads



"The Dept. Store of the Motion Picture Industry"

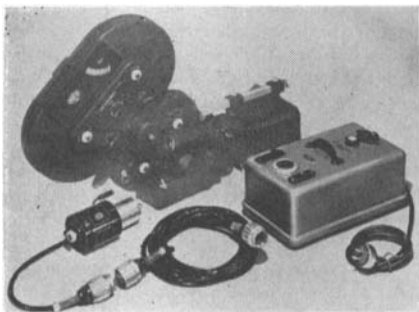
**S. O. S. CINEMA SUPPLY CORP.**

Dept. TE, 602 WEST 52nd ST., NEW YORK 19, N. Y.—Phone: PL 7-0440  
Western Branch, 6331 Holly'd Blvd., Holly'd 28, Calif.—Phone: HO 7-9202



Three new accessories for the Arri 16 are a 400-ft film magazine, a synchronous motor, and an animation motor.

The 400-ft film magazine is of a very compact, single-compartment displacement type. It accommodates 400-ft dark-room loads (on cores) and 200-ft daylight spools. No belts are employed. A detachable torque motor, which interchanges for use with several magazines, drives the take-up through a gear transmission with the correct tension regardless of the amount of film on the take-up spindle. The torque motor operates on 6-8 v d-c and obtains its energy from the power supply used to operate the camera. Electrical contact is made automatically as the magazine is attached to the camera. The torque motor has a forward-reverse switch, corresponding to the forward-reverse feature of the Arri camera. Each magazine has a footage counter and is numbered for easy identification.



The synchronous motor is easily interchangeable with the variable-speed motor, supplied as standard equipment with the Arriflex. The light and compact synchronous motor can be used on the camera for hand-held shooting. The motor has its own 110-v, 60-cycle a-c supply. Output to the camera motor is 42 v, 60-cycle a-c, and to the torque motor on the magazine (when used) 8 v d-c.

The animation motor features  $\frac{1}{4}$ -sec exposures for either single-frame or continuous shooting at 60 frames/min. A built-on frame counter registers up to 4 digits. The animation motor can be used manually or with either foot-switch, relay or intervalometer. The unit operates on 100 v, 60 cycles, but can be converted to other voltages and frequencies on special order.

These accessories will be exhibited at the SMPTE Convention, April 30-May 4. Further information can be obtained from Kling Photo Corp., 257 Fourth Ave., New York; or 7303 Melrose Ave., Hollywood.

FOR THOSE  
WHO CAN  
AFFORD

THE FINEST

*Quality...*


in the East it's...

**MOVIELAB**

- ROUND-THE-CLOCK SERVICES
- NEGATIVE DEVELOPING
- FIRST PRINT DEPARTMENT
- ULTRA VIOLET AND FLASH PATCH PRINTING
- 16MM AND 35MM RELEASE PRINTING
- KODACHROME PRINTING
- 63 EDITING ROOMS
- SPECIAL TV SERVICES
- For Color it's

*Rainbowlab Inc.*

**MOVIELAB FILM LABORATORIES, INC.**  
619 West 54th Street, New York 19, N. Y. JUdson 6-0360

**ONLY**  **GIVES YOU THE**  
**Variable D\***

**666**  
**CARDIOID DYNAMIC**  
**for TV and BC**



**OUTPERFORMS ALL OTHERS**

Combines ruggedness of single dynamic element with new acoustic principle. Eliminates pick-up of ambient noise, unwanted reverberation and equipment rumble. Uniformly smooth response 40 to 15,000 cps, laboratory controlled. Highest front-to-back discrimination. Virtually no proximity effect. Output -55 db. E-V Acoustalloy diaphragm. Blast filter. Detachable clamp-on swivel stand coupler. Weighs only 11 oz. 7½" x 1¾". TV gray. 20' cable. 50 ohms. Readily changed to 150 or 250 ohms.



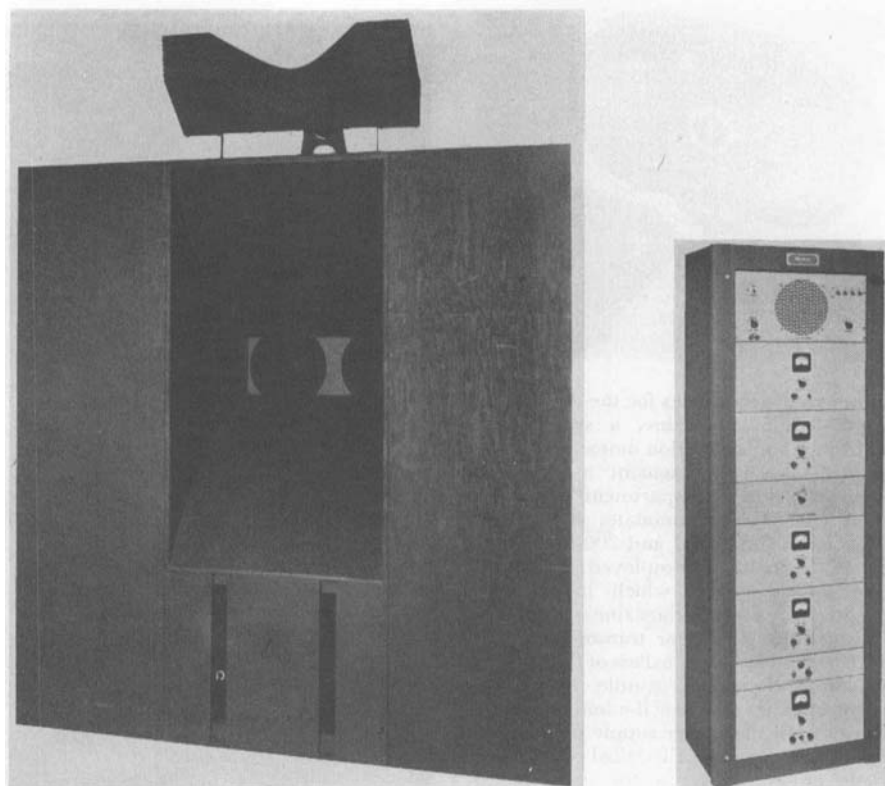
- Model 666 Microphone. List \$245**
- Model 366 Boom Mount. List \$40**
- Model 300 Stand Coupler. List \$10**
- Model 420 Desk Stand. List \$20**

Normal Trade Discount Applies

\*E-V Pat. Pend.

Write for Catalog No. 120

**Electro-Voice®**  
**BUCHANAN, MICHIGAN**



Westrex Corporation, New York, and its subsidiary companies with offices in 40 countries, have just announced to motion-picture exhibitors a complete new line of sound-reproducing equipments to meet the requirements of the recent technical developments.

The Westrex single-channel systems utilize the new major components of the multichannel systems and are designed to permit improving the sound in theaters not yet ready to convert to stereophonic sound. These single-channel systems can be expanded into multichannel systems.

The multichannel systems are composed of the following main units:

The Westrex R10 stereophonic reproducer operates with any modern projector to reproduce magnetic soundtracks. It has two impedance drums. An adjustable idler roller is provided to match the length of film path for different makes of projectors. A large 32-tooth sprocket controls the film on both sides of the magnetic head. A 4-track magnetic reproducer head is mounted on a separate plate which may be removed and replaced with a head assembly of fewer tracks if required.

The Westrex R6 photographic sound reproducer features the special timing belts which are used in high-quality studio recording systems. These belts do not slip or stretch and are noiseless in operation. The R6 has been designed with a longer optical path and an equilight diffuser to assure the best reproduction from either variable-area or density soundtracks.

The 51B multichannel magnetic pre-amplifier cabinet is wall mounted and contains up to four preamplifiers, control amplifier, low-pass filter, change-over and muting relays for multichannel magnetic reproduction.

The 52A multichannel control cabinet is wall mounted and contains the control equipment for single and multichannel as

well as nonsynchronous and emergency operation. A three-gang volume control is provided for the backstage channels and a single control for the auditorium surround channel.

The Westrex multichannel floor cabinets house up to four 27-type 60-w power amplifiers with their associated power supplies. These cabinets have self-contained monitoring, nonsynchronous, and switching facilities. The Westrex switching includes facilities which enable the projectionist to test each channel independently and in the event of failure in one channel to operate through the other two channels behind the screen or, if desired, through the center single channel.

The Westrex 27-type 60-w power amplifier with its new circuits and specially wound coils has been designed to deliver more output with less distortion and with the use of less current with standard vacuum tubes than with any previous 60-w amplifier. Tubes used in this amplifier are obtainable from ordinary commercial sources.

The 48A single-channel control cabinet is small in size and may be wall mounted.

The Westrex 49-type transmission cabinet for the single photographic system has all controls specially mounted and designed for easy access.

The Westrex type 16 loudspeaker assembly with associated high- and low-frequency units, baffles, and dividing networks was designed for increased efficiency and smoother performance to meet current and future exacting requirements of the multi- or single-channel sound. The Westrex sound systems feature the acoustic lens high-frequency horn. This acoustic lens assures an even distribution of sound throughout an auditorium with an absolute minimum of interference patterns. The high-frequency horns are available for either 50° or 80° horizontal coverage.

*a complete*  
**27-lb. sound system!**



*Magnasync X-400 Recorder*

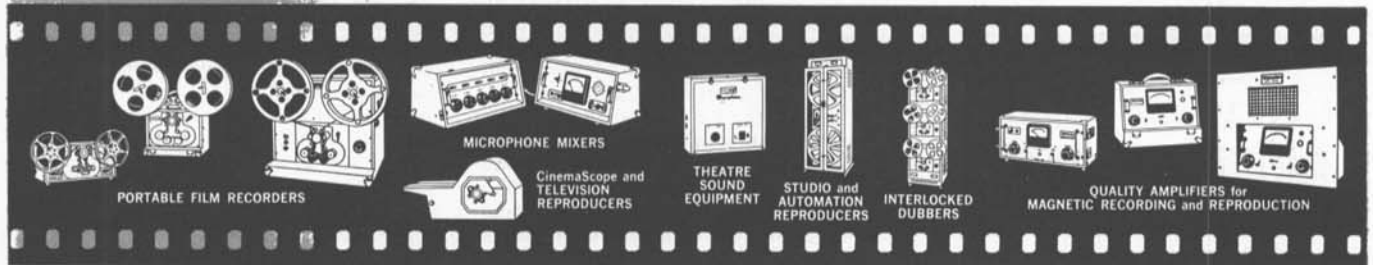
Producer Net Price **\$895.00**  
 F.O.B. North Hollywood, Calif.

**FEATURING...**

- High gain "long-shot" microphone channel.
- Dialog equalization for "speech-music" selection.
- Self-contained playback system for "film-direct" monitor.
- Famous Magnasync "Synkinetic" precision film transport.
- High speed rewind, sync speed reverse and fast forward.
- Convenient arrangement for "sync marking."
- Footage counter, extended capacity arms, "quick-detach" mount for special motors, projector cable interlocks and many other compatible accessories to help increase production efficiency.
- Unconditionally guaranteed specifications.

*send for complete specifications and delivery schedule.*

**INTERNATIONAL LEADERS IN THE DESIGN AND MANUFACTURE OF QUALITY MAGNETIC FILM RECORDING DEVICES**



**MAGNASYNC MANUFACTURING CO., Ltd., 5546 Satsuma Ave., North Hollywood 2, California**



**DEALERS**

NEW YORK—Camera Equipment Co., 1600 Broadway, New York 19. JUdson 6-1420. Cable Address CINEQUIP.  
 CHICAGO—Zenith Cinema Service, Inc., 3252 Foster Ave., Chicago 25, Ill. IRving 8-2104.

SAN FRANCISCO—Brooks Camera Co., 45 Kearney St., San Francisco, Calif. EXbrook 2-7348.  
 CANADA—Alex L. Clark, Ltd., 3745 Bloor St., Toronto 18, Ontario. BElmont 1-3303.

Audio Instrument Co., Inc.  
133 West 14th St.,  
New York 11, N. Y.

S-3

I want dependable precision and versatility at reasonable cost. Send me your Free 1956 Catalog.

Name .....  
Title .....  
Firm .....  
Type of Business .....  
Address .....  
City ..... Zone ..... State .....



**"DU MONT specifies AIC Reverberation Units for its new Tele-Center," says Robert F. Bigwood, Manager of the Tele-Center's General Engineering Dept.**

Model 42A Reverberation Unit simulates reverberation of a room of any size, using a magnetic tape loop system with SEVEN HEADS. Switching heads produces various special effects as well as natural reverberation.

The unit features built-in variable equalization for special effects; continuously adjustable reverberation time; and no pressure pads—resulting in better tape motion and reduced head wear. Size is 17½ × 19". Price is \$1375.00.

You can rely on  
**AIC IM METERS**



Used by leading manufacturers of quality audio equipment such as Bogen, Brociner, Fairchild, Langevin, S. B. Marantz, RCA Victor, Radio Craftsmen, Webster-Chicago, Webster-Electric, etc. From NET \$325.00.

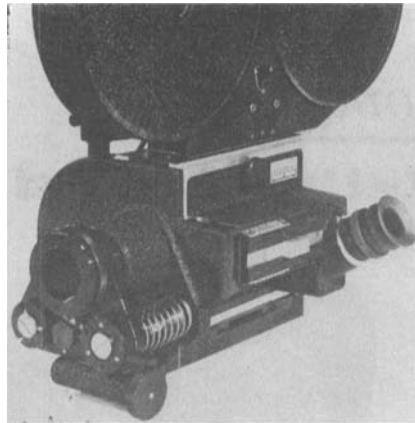
NEW WAY to test  
**AMPLIFIER TRANSIENTS**

Do it faster, easier, more accurately with

**AIC #63 TONE-BURST SET**

See our **BOOTH 28** at **SPRING CONFERENCE**.  
Fill in and **MAIL COUPON**.

**Audio** INSTRUMENT COMPANY  
Dept. 5, 133 WEST 14th ST. NEW YORK 11, N. Y.



**A new John Oxberry-designed process camera**, a combination of 35mm and 16mm, for animation and optical printer work, is being marketed by The Animation Equipment Corp., 38 Hudson St., New Rochelle, N. Y.

Conversion from one size to the other is effected in five minutes by changing the lens, shuttle, sprocket assembly and magazine. Use of one camera for both film sizes circumvents critical realigning required when two cameras are employed on an animation stand or optical printer. The camera may be bought for use with only one size of film, and accessories acquired later for the other size.

The camera has a shuttle-type movement with fixed pilot-pin registration. It has a rack-over mechanism for animation work. A socket drive accommodates portable and stationary stop-motion motors.

A hand dissolve mechanism on the front of the camera has a linear scale calibrated in 16 frames and 24 frames for cross dissolve (DX). The shutter may be set and locked at a designated opening such as ¼ shutter, ½ shutter, etc. Shutter opening is 170°. An automatic dissolve is operated through a dial selector on the side of the camera and has a range from 8 to 80 frames. A two-position switch controls and indicates shutter position as to DX-in or DX-out.

The front of the animation camera takes 35mm or 16mm Oxberry lens mounts. There are two available: one for hand-focusing is calibrated in feet and inches; the other is for automatic follow focus.

On the rack-over camera for 35mm film, a 47mm focal-length lens is used. A 25mm focal-length lens is employed for 16mm film. On the rack-over camera, the shortest back focus of any lens cannot exceed ¼ in.

Two rack-over systems are provided on the Oxberry camera. One is operated by a lever which activates a no-shock movement that aligns the viewfinder directly over the lens. The other rack-over is controlled by an indexing knob which accurately shifts the camera to the correct location for sound on left or right and for exact center for film strip. The reason for this is that the camera goes forward for live action direction in work with puppets and miniatures, whereas it operates in reverse for animation.

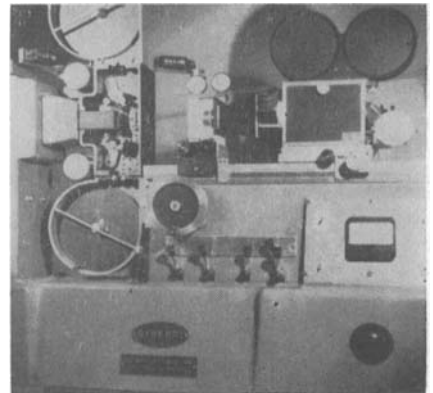
The rack-over viewfinder with ground glass focusing is mounted on the hinged-door side of the camera. The eyepiece faces the operator when the camera is on the animation stand. A new optical system rectifies the subject so the image is erected and copy may be read from left to right.

The superimposure viewing device facili-

tates composing and focusing. It has a reticle plate and two registration pins which are identical with those of the shuttle. This permits a frame to be located precisely on a designated section of the animated or projected image in conjunction with cross-haired ground glass. The image plane of the film when racked-over is the same as the film plane in the shuttle. When a light is placed in the eyepiece, the image may be projected onto the compound. A thumb slide shifts the viewfinder up and down changing the magnification for 16mm work.

An outstanding feature of the new camera involves the 35mm-16mm reticle design. All reticles are mounted in ground steel dove-tail plates having super-fine ground glass precisely mounted and aligned to match the film registration pins. All Oxberry reticles are interchangeable and are available on clear glass for projection of light. The reticle gauge plate may be used as a visual gauge for viewing alignment and for center or squareness of developed negative stock. By holding the reticle gauge over any light source, a film that is mounted on pins may be checked visually.

For optical printer installations, the Oxberry camera is essentially the same except that it is not the rack-over type. The superimposure device is mounted in front of the shuttle for reflex viewing.



**One of the great difficulties**, created by the still-growing use of 16mm in addition to 35mm film has been the need for intermediate dupe-negatives, for the production of dissolves, fades, wipes, superimposures and other optical effects. This problem has been solved by C and G Film Effects of 1600 Broadway, New York 19, which now has in use a new optical printer which in one fast operation produces all kinds of opticals from 16mm, 35mm or mixed originals, to give the producer either 16mm or 35mm optical dupes. The system eliminates the intermediate duping which was needed in the past to bring 16mm originals up to 35mm for optical printing, before reducing the resulting effect to 16mm again.

The new printer, supplied by Animation Equipment Corp., also has controls which make it possible to slow down or speed up action by an automatically controlled print-skip-print or print-freeze-print attachment. This too operates in both 16mm and 35mm and among other uses, makes it possible to transform footage shot at silent speed to a new negative, usable with sound. So far as is known, this is the first optical effects printer of its kind, and initial test runs have been beyond original expectations.



- 1 Take-up reels
- 2 Feed reels
- 3 Splicing elevator (40 seconds capacity)
- 4 Exhaust fan motor (1800 cfm)
- 5 Feed bottles with bottom screw vents
- 6 Drying air thermometer
- 7 Micrometer stripe adjustments
- 8 Binocular microscope
- 9 Sapphire shoes beneath precision stripping heads
- 10 Splicing block
- 11 Air heaters
- 12 295' leader
- 13 High temperature drying chamber (4 minutes)
- 14 Removable partition facilitates threading
- 15 Low temperature drying chamber (2 minutes)
- 16 Sliding glass doors

How the New 16-mm Magna-Striper applies Soundcraft Magnetic Oxide in three widths for three different purposes.

**25-Mil. MAGNA-STRIPE** for double-perforated silent film

**50-Mil. MAGNA-STRIPE** for both magnetic and photographic sound

**100-Mil. MAGNA-STRIPE** for all-magnetic-sound track



**NOW!** "Oscar" Winning **SOUNDCRAFT Magna-Striper®**  
Available in New 16-mm Model!

SEE THE REEVES SOUNDCRAFT  
MAGNA-STRIPER IN ACTION

Booth #16  
SMPTE Convention  
April 29th — May 4th

For Every Sound Reason

**REEVES**  
**SOUNDCRAFT**  
**CORP.** DAB

10 East 52nd St., New York 22, N. Y.