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MODEL 135



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of Sound." His interest in the subject began at the age of 16 and continued for many years but he was not able to make much progress until knowledge of amplifiers and loudspeakers became available. In his book (p. 164) he describes several of his experiences that led finally to his successful demonstration of sound motion pictures. He first saw motion pictures projected with the Bioscope in 1897 on Broadway in New York City. His comment was "I was impressed by the technical achievement, but the absence of sound made the show unnatural, and the mute dramatic scenes seemed to me unendurable."—*Glenn E. Matthews*, 55 Stoneham Road, Rochester, N.Y. 14625.



Red Lake Recorder, a new quarterly periodical containing material on high-speed photoinstrumentation equipment, is a publication of Red Lake Laboratories, 2971 Corvin Dr., Kifer Industrial Park, Santa Clara, Calif. 95051. The first issue (Summer 1966, 8pp.) features an article on the application of Hycam equipment to the study of aluminum combustion. It also includes a compilation of technical meetings in the field, covers news of the company and describes a number of recently available accessories and technical advances.

Programmed Basic Electricity Course (272 pp., 4½ × 6½ in.) is available from Theodore Audel & Co., a division of Howard W. Sams & Co., 4300 W. 62 St. Indianapolis, Ind. 46206, at a price of \$4.00. The book covers basic electron theory, direct current circuits, Ohm's law, methods of measurement, power and energy, magnets and magnetism, electromagnets and electromagnetism, generation of alternating current and inductive and capacitive reactance. The content of the book is broken up into 1,000 "frames" of information. Each "frame" is accompanied by a question, advancing in a step-by-step manner to add, in methodical fashion, more information to what has been previously learned.

The Instrument Society of America (ISA) has announced publication of its 31st Recommended Practice, 8.1 Instrument Enclosures for Industrial Environments. Prepared by the ISA Committee on Instrument Enclosures for Industrial Environments, the Recommended Practice is designed to aid in the proper specification and application of instrument enclosures with respect to environmental conditions such as moisture, snow, rain, icing, chemicals, dust, temperature extremes and insects. As a "tentative" Recommended Practice it will undergo an introductory period in industry after which time it will be reaffirmed. The 8-page Recommended Practice is available at a price of \$1.00 for ISA members and \$1.50 for nonmembers from Instrument Society of America, Publications Dept., 530 William Penn Place, Pittsburgh, Pa. 15219.

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35MM

BNC MITCHELL—With 25, 30, 35, 40, 50, 75 & 100mm Baltars, 4—1000 ft. mags, 110 or 220 volt sync motor, Mitchell finder with cams, 2 matte boxes, 7 cases **\$18,500.00**

NC MITCHELL—With 40, 50, 75 & 100mm Baltars, 2—1000 ft. mags, 110 or 220 volt sync motor, Mitchell finder, matte box, 4 cases **\$4,750.00**

STANDARD MITCHELL HI-SPEED—With 40, 50, 75 & 100mm Baltars, 2—1000 ft. mags, 110 volt AC-DC wild motor, Mitchell finder, matte box, 4 cases **\$3,675.00**

STANDARD MITCHELL—With 40, 50, 75, & 100mm Baltars, 2—1000 ft. mags, 110 volt AC-DC wild motor, Mitchell finder, matte box, 4 cases **\$2,850.00**

35MM ARRIFLEX 2-A—With 28, 50 & 75mm Schneider lenses, 2—400 ft. mags, wild DC motor, sunshade, battery case **\$1,950.00**

35MM ECLAIR CAMERETTE—With 3 Kinoptik lenses, 2—400ft. mags, wild DC motor, battery case (no finder) **\$775.00**

16MM

16MM MITCHELL—235° shutter, 15, 20, 25 & 35mm Baltars, 2—400 ft. mags, 110V AC-DC wild or 110V AC sync motor, Mitchell finder, matte box, cases **\$3,975.00**
with blimp & follow-focus: **\$4,800.00**

16MM MAURER—With 2—400 ft. mags, 110 volt sync motor, Maurer finder, sunshade, case **\$885.00**

16MM ARRIFLEX "S"—With 16, 25 & 50mm Schneider lenses, 400 ft. mag and torque motor, wild DC motor, matte box, battery, case **\$2,175.00**

16MM ECLAIR NPR (NOISELESS)—With 400 ft. mag, 12 volt constant speed sync motor, built-in sync signal, battery, case, (no lens) **\$3,280.00**
with 12-120mm Angenieux zoom lens: **\$3,840.00**

16MM SUPER 1200 AURICON WITH GALVO—With 3 lenses, 3—1200 ft. mags, 110 volt sync motor, sunshade, NR amplifier (optical sound) "S" Galvo, mike, headset, cases **\$2,390.00**

16MM PRO 600 AURICON WITH GALVO—With 3 lenses, 2—600 ft. mags, 110 volt sync motor, sunshade, NR Amplifier (optical sound) mike, headset, cases **\$1,780.00**

ACCESSORIES

	UNIT PRICE
16mm zoom lenses: 17-70mm	\$ 142.00
16mm zoom lenses: 17-85mm	209.00
35mm zoom lenses: 35-140mm	945.00
35mm zoom lenses: 38-154mm—Arri mount	880.00
35mm zoom lenses: 38-154mm—Mitchell mount with finder	1065.00
Baltar lenses—in BNC mounts—all focal lengths from 25mm to 100mm	185.00
16mm Mitchell blimps with follow-focus	885.00
16mm Maurer blimps	185.00
16mm Cine special blimps	130.00
110 volt AC Cine special motors	78.00
12 volt DC Maurer motors	110.00
12 volt DC 35mm Mitchell motors	145.00
12 volt DC 16mm Mitchell motors	175.00
1000 ft. 35mm Standard Mitchell magazines	88.00
200 ft. 35mm Arriflex magazines	44.00
Akely Gyro tripods	545.00
35mm Mitchell friction tripods	350.00
16mm Mitchell friction tripods	275.00
Pro Jr. Gyro tripods	395.00
16mm Arriflex tripods	195.00
4 wheel Fearless dolly	785.00
5 wheel Fearless dolly	985.00
Camart TV dolly	595.00
Camart Platform dolly	250.00
Large Western dolly	100.00
Thomas hydraulic (Sputnik) pedestal	980.00
NCE Crab Hydroolly	2475.00
5 ft. and 10 ft. dolly tracks @ 3.00 per foot	

Eastman Kodak Motion Picture Films is a pocket-size folder intended to provide a ready reference on exposure indexes and other data on both color and black-and-white. The information is presented in simplified chart form and also covers filter factors and data on incident light illumination. Professional motion-picture photographers may obtain copies of the folder without charge from Motion Picture and Education Markets Div., Eastman Kodak Co., Rochester, N.Y. 14650.

Products that generate, detect and measure light are illustrated and described in a compilation of data sheets and application notes available from Edgerton, Germe-

shausen & Grier, Inc., Products Div., 160 Brookline Ave., Boston, Mass. 02215. Light instrumentation products illustrated and described include photodiodes, a radiometer and accessories, a spectroradiometer and a calibrated lamp system.

Electroluminescence, a 20-page review of literature on electroluminescence prepared by the National Bureau of Standards, is available from Clearinghouse, U. S. Department of Commerce, Springfield, Va. 22151 (No. OTR-135) at a price of \$1.00. The review examines government reports (issued since 1962) on intrinsic electroluminescence and carrier injection electroluminescence. The reports examined refer to

investigations of material properties and fabrication techniques, assembly and testing of various electroluminescent screens and display panels, and the use of carrier injection luminescent diodes as light sources. The review notes that there has been an increasing interest in the last few years in the dc carrier injection luminescence provided by direct current. The government has also sponsored a variety of programs in the past three years to develop new electroluminescent phosphor materials and to develop electroluminescent panels and related circuitry.

Anthropometry of Common Working Positions, by M. Alexander and C. E. Clauser of the Aerospace Medical Division, Wright-Patterson AFB, Ohio, is a 31-page handbook containing data useful to equipment designers. It is available from Clearinghouse, U.S. Department of Commerce, Springfield, Va. 22151 (AD-631 457) at a price of \$3.00 (microfiche 75 cents). The handbook gives 26 dimensions of the human body in various working positions (standing, bending, kneeling, squatting, supine and sitting). The dimensions were obtained by photography or direct measurement. The purpose of the study is to provide the human engineer with anthropometric data of various missile worker's positions so that adequate work stations could be designed.

The MCRT-3, a miniature version of the Multi-Channel Rotary Transformer, is illustrated and described in an 8-page leaflet available from S. Himmelstein and Company, 2500 Estes Ave., Elk Grove Village, Ill. 60007. The leaflet gives condensed specifications for the instrument which is a multichannel inductive coupling employed as a replacement for slip rings. The Condensed Specifications contain a general description of the MCRT-3 and general performance characteristics.

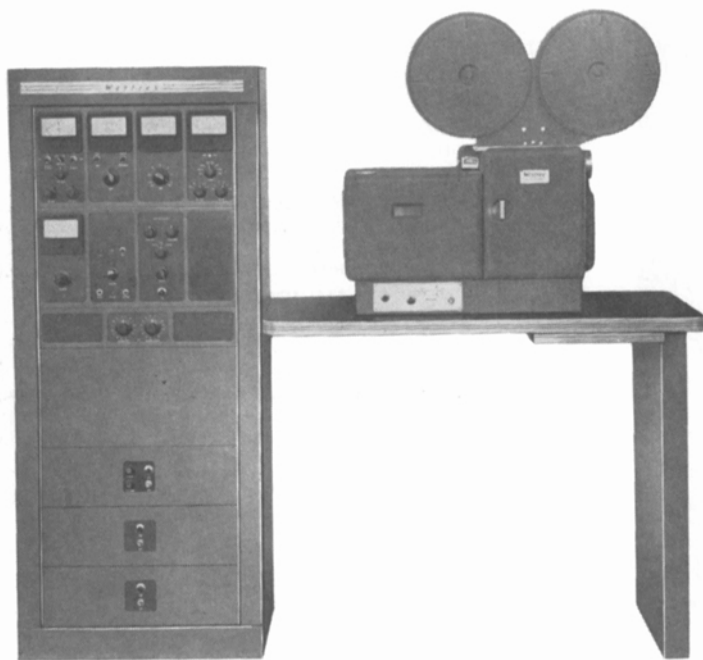
Overhead projectors are described and illustrated in a 4-page folder (CB 186) available from Charles Beseler Company, 219 S. 18 St., East Orange, N.J. Titled *Beseler Projectors for Better Teaching*, the catalog gives descriptions and prices of overhead, opaque and slide projectors. Also available is a brochure entitled *101 Teaching Ideas*.

Itek Microphotography Catalog describing high acuity resolving power targets and test patterns is available from Itek Corp., Photography Dept. (1-652), Lexington, Mass. 02173. A number of advanced techniques for custom applications work are described.

Audio, video and tape products are described in a 6-page illustrated brochure available from Ampex Corp., Mail Stop 7-14, 401 Broadway, Redwood City, Calif. Products described and illustrated include closed-circuit television systems, Videotape recorders, language laboratory equipment, recorder/reproducers and complete video and audio systems.

The Adtrol Model BCD-5 Photorecorder is described in a data sheet available from

First Super-8 Variable - Area Recording System



The Westrex 908-A

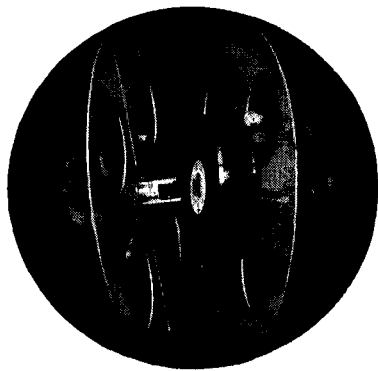
Now you can get superb WESTREX quality sound on Super-8 format film. WESTREX introduces the 908-A Variable-Area Photographic Recording System for use with 16mm film perforated Super-8 in the 1-4 format. It offers the same proven performance (and many of the same components) as the studio-tested Series 900 systems but the transport, modulator, light valve, film-loss equalizer and light-valve equalizer have been redesigned.

And as with all WESTREX equipment you get the assurance of reliability that has earned us industry leadership over the years. For more information on the 908-A, contact us: WESTREX Division, 1136 North Las Palmas Ave., Hollywood, Calif., 90038. HO 6-7795.



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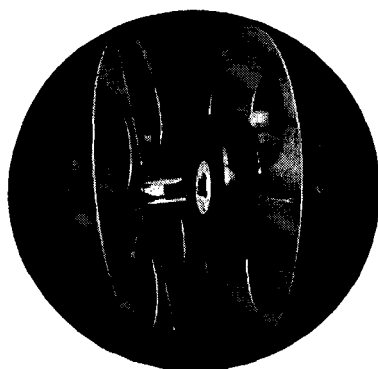


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there are flanges and split reels which

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any way it comes; on reels, on positive cores, on negative cores, or tightwound. They're the new patented MASTEREEL flanges and split reels.

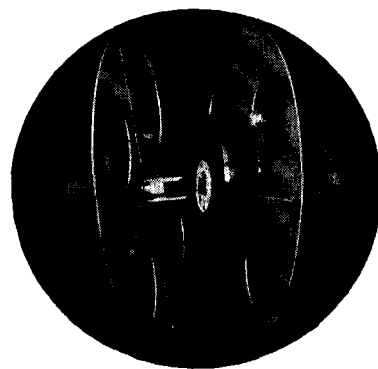


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Traid Corp., 777 Flower St., Glendale, Calif. 91201. The machine is designed to correlate data and events on motion-picture film with any camera. The instrument records five digits of elapsed time and presents data in the form of numerals in a BCD (binary coded decimal) format on each frame.

A new line of laboratory and industrial devices is described in a series of illustrated data sheets available upon request from Glen Southworth, Sales Manager, Colorado Video, Inc., Box 928, Boulder, Colo. 80302. Equipments described and illustrated include a bar graph generator, video analyzer, scan converter, and slow scan TV camera.

Motion Picture Projection Equipment catalog (#41-2145) is available from Bausch & Lomb, Rochester, N.Y. 14602. The 16-page illustrated catalog contains information on 35mm and 16mm projection lenses, CinemaScope projection lenses, and reflectors. The catalog also includes 5 pages of focal length tables.

Synchro Engineering Handbook, a 230-page book dealing with synchros and similar devices used to transmit angular data electrically is available from Muirhead Instruments Inc., Mountainside, N.J. Profusely illustrated, the book treats synchros, resolvers and servomotors from the designers point of view and also evaluates the use of synchros as components. Chapters deal

with basic servo systems, specifications, type approval testing, installation practices, servo system design considerations and typical applications.

A new Arriflex camera, the 16BL, is described in a 10-page illustrated brochure available from Arriflex Corp. of America, 25-20 Brooklyn-Queens Expressway West, Woodside, N.Y. 11377. Features of the new camera include low residual noise level, light weight and compact size, and a special sound conversion system which permits the cameraman to convert from double- to single-system and back again.

Dynalens, an electrooptical lens device for television image-motion compensation, is illustrated and described in Bulletin No. M-060 available from Dynasciences Corp., Township Line Road, Blue Bell, Pa. The bulletin contains diagrams explaining the operation of the device and also shows comparative photographs.

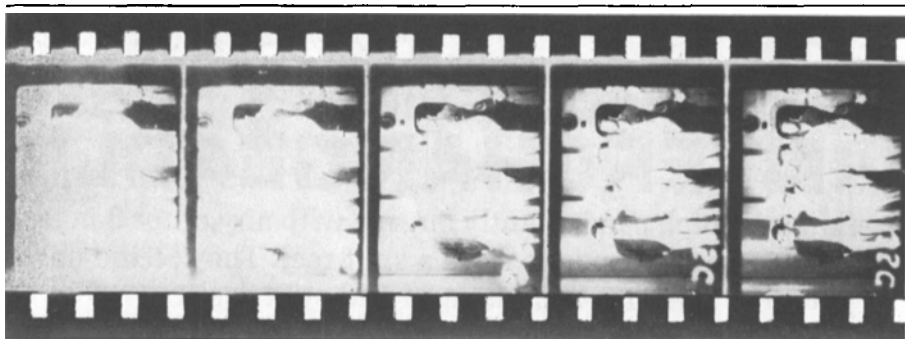
Laboratory service price lists and reference manuals have been combined into one volume available from Bebbell & Bebbell Color Laboratories, 108 W. 24 St., New York, N.Y. 10011. The price lists are printed on one side of the page leaving the other side blank to facilitate making notes. The pages are punched for incorporation into mechanical binders. Each section is indexed with die-cut tabs for quick reference.

Luxtrol light control equipment is illustrated and described in a 4-page brochure available from Superior Electric Co., Bristol, Conn. 06010. Equipments described in the dimmer control product product guide include continuously adjustable transformer types and controlled rectifier and magnetic amplifier solid-state models. Various designs reviewed are mounting-in-walls types, packaged assemblies for small to medium size stage lighting and controls for switchboard applications.

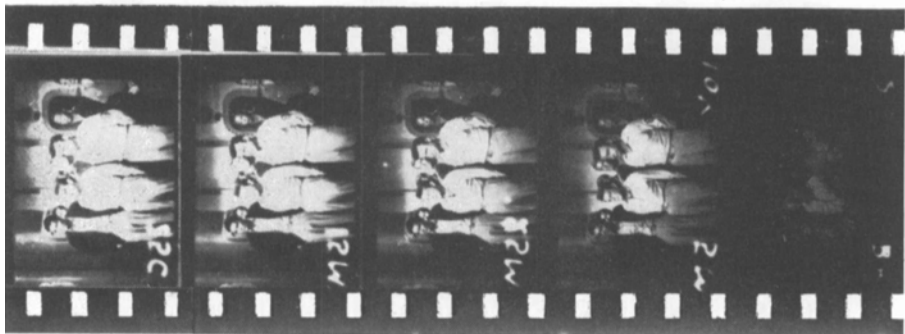
Auri-news, a publication available from Ad. Auriema, Inc., 85 Broad St., New York, N.Y. 10004, contains illustrations and descriptions of products of various companies. The publication also lists various catalogs and other available literature. Products described in the June 1966 issue include ferrite devices, integrated microwave packages, miniature connectors, switches and other devices.

The Planar Filament Quartz Lamp for use in Solarspot spotlamps is illustrated and described in Bulletin 302 available from Mole-Richardson Co., 937 North Sycamore Ave., Hollywood, Calif. 90038. The lamp, first of a series designed and developed by General Electric, can be used in the Mole-Richardson Baby Solarspot without the use of an adapter.

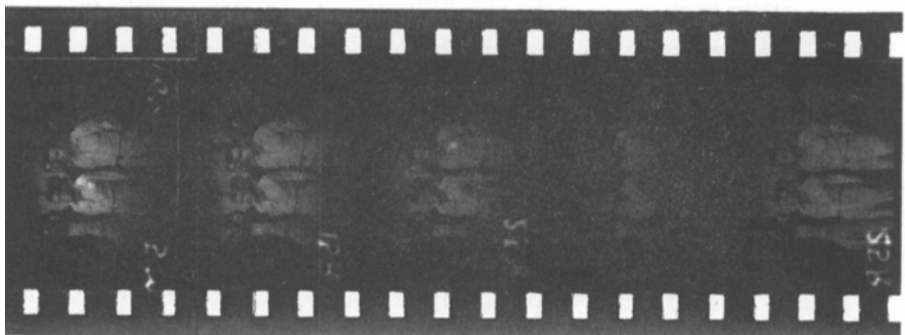
The Big-Eye Tener Solarspot, Type 4241, is described in technical bulletin 301 available from Mole-Richardson Co., 937 N. Sycamore Ave., Hollywood, Calif. 90038. The 10,000-W lamp has a 24-in. Fresnel condenser. It is designed with a back opening for easy access to the globe.



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