

The 1972-73 Audio-Visual Equipment Directory (18th ed.) is available from the National Audio-Visual Assn., 3150 Spring St., Fairfax, VA 22030, at a price of \$9.25 (\$8.25 if payment accompanies order). The directory has been completely revised and more than 500 manufacturers of audio-visual equipments are listed. Photographs, specifications and prices of more than 1,500 current models are listed. Uniform listings include pictures for each entry to allow for easy comparison of all equipment items. The directory also provides sources for hundreds of special accessories and devices and useful tables of film and tape running times and screen sizes. A reference article on planning audiovisual presentations is included. The new edition includes greatly expanded sections on cassette recorders, video equipment, sound and silent filmstrip viewers and projectors, sound slide projectors, programers and dissolve control systems. The directory contains 470 pages and measures 8½ by 11 in.

MultiMedia Reviews Index, an index to reviews of films, filmstrips, records, tapes and other media forms in some 100 publications, is available from Pierian Press, Box 1808, Ann Arbor, MI 48106, at a price of \$19.50. The *Index* lists and evaluates some 7,500 film reviews, of which 60% are educational films; 900 filmstrip reviews; 2,000 record and tape reviews; and 200 miscellaneous media reviews.

The Proceedings of the Inter-Society Color Council's 1971 Williamsburg Conference on the Optimum Reproduction of Color is available from Information Services, Graphic Arts Research Center, Rochester Institute of Technology, P. O. Box 3409, Rochester, NY 14614, at \$12.00. The *Proceedings*, a 236-page softcover book, contains 12 papers on the complex problems of color reproduction in television, photography and the graphic arts. A bibliography includes 113 references. While the book is primarily oriented toward the research scientist, some papers contain information of a less technical nature and will appeal to those concerned with the day-to-day production of color reproductions.

The Professional Make-Up Artist, a bi-monthly newsletter published by The Research Council of Make-Up Artists, Inc., 52 New Spaulding St., Lowell, MA 01851, notes that two new colors — pink and plum — have been added to the Gena line of lipgloss and three new bright colors — blue, green and violet — have been added to the line of Genacolor Lashes. The newsletter warns against highly advertised nonprofessional types of creams and lotions, for example, "wrinkle removers" based on blood protein material.

The American National Standards Institute Catalog for 1972 is available from ANSI, 1430 Broadway, New York, NY 10018. The catalog contains a complete listing of ANSI Standards in 24 categories ranging from Acoustics to Wood Industry. The catalog also lists Recommendations from ISO, IEC, COPANT and CEE.

Three General Electric lighting reference publications have been revised and re-issued by the company's Lamp Marketing Dept. *Quartzline and Incandescent List* (SS-1) catalogs the lamps most frequently used in lighting theater stages, television and motion-picture production and professional still photography. *Fixture Relamping Guide* (SS-3) lists more than 1,200 lighting fixtures made by 29 firms. In addition to the maker's catalog or model number, each listing describes the unit, recommends maximum allowable wattage and tells where suitable lamps for the unit are listed in publication SS-1. *ANSI Cross-Reference List* matches the ANSI code with the equivalent GE lamp or replacement. Single copies are available upon request to Inquiry Bureau, Dept SS, General Electric, Nela Park, Cleveland, OH 44112.

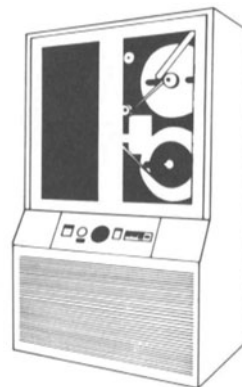
The Swiss Rebikoff Color Temperature Meter is described and illustrated in a leaflet available from Karl Heitz, Inc., 979 Third Ave., New York, NY 10022. The Rebikoff meter uses an electric bridge with two photoelectric cells covered by filters, one sensitive to red, the other to blue. An optical potentiometer restores the balance between red and blue by a microammeter which is a very sensitive coil. By adjusting this coil, the needle can be balanced in the middle between the red and blue areas and the dial then gives a direct reading in degrees Kelvin.

Multi-Film filters for light control in the ultraviolet, visible and infrared regions of the spectrum are described in the Multi-Film Catalog, a folder containing some 20 descriptive sheets, available from Bausch & Lomb, Vacuum Coating Div., 10 Champeney Terrace, Rochester, NY 14602. Eight classes of filters are covered: color filters; dichroic or color separating filters; heat control filters; neutral beam dividers; first surface mirrors; spectral transmission interference filters; spectral multilayer filters; and special purpose filters. Descriptive data and graphs are included. The Vacuum Coating Div. of Bausch & Lomb produces vacuum-deposited multilayer thin films for the control of the ultraviolet, visible and infrared spectra. The carrier to receive the vacuum-deposited multilayer thin films is usually of the so-called glass type; however, plastics and metallics can be used as the carrier in suitable applications.

Display storage tubes (DST) are described and illustrated in a 52-page booklet (SA-213) available from Electronic Tube Div., Westinghouse Electric Corp., P.O. Box 284, Elmira, NY 14902. The booklet includes background technical information on display storage tube operation and theory, applications data, and a catalog of Westinghouse DST types and special tube design services.

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Photographic instruments for highway photologging and traffic engineering are illustrated and described in a 4-page brochure available from Instrumentation Marketing Corp., 820 S. Mariposa St., Burbank, CA 91506. Super 8, 16 and 35mm equipments are described, including time-lapse systems and a 35mm photologging system with horizontal data display.

RTI film inspection and film cleaning equipments are illustrated and described in a 16-page catalog available from Research Technology Inc., 3525 W. Peterson Ave., Chicago, IL 60645. The catalog includes descriptions of editing equipment, cleaning solutions, and inspection machines for both large and small film libraries.

Technical data on Gevachrome Original Daylight HS film type 6.15 is presented in an 8-page booklet available from Agfa-Gevaert N.V., B-2510 Mortsel, Belgium. The information includes standard values derived from a large number of measurements of film samples taken from different batches and processed according to the methods applied in the factory.

Time and motion study equipments are illustrated and described in Catalog No. 172 available from Lafayette Instrument Co., P.O. Box 1279, 52 By-Pass, Lafayette, IN 47902. The equipments include super-8 and 16mm camera drive systems, motion analysis projector systems, electronic

counters, stop clocks and watches and a number of accessory time study devices.

Self-pulsing industrial cameras are described in a 2-page illustrated bulletin (C-971) available from Flight Research, a Geotel Company, P.O. Box 1-F, Richmond, VA 23201. The cameras are used for such operations as process timing/flow studies, quality control records, oscilloscope recording and pollution emission evaluations. The cameras are available in 16 or 35mm formats with pulse rates ranging from 1/s to 1/h.

The Photo-Sonics 35mm-4M camera is described and illustrated in a 4-page brochure available from Instrumentation Marketing Corp., 820 S. Mariposa St., Burbank, CA 91506. The camera can operate at speeds from 16 to 180 frames/s. Daylight loading magazines of 200-, 400- and 1000-ft can be changed in a few seconds.

The Photo-Sonics 16mm-1P intermittent pin-registered magazine is described and illustrated in an 8-page brochure available from Instrumentation Marketing Corp., 820 S. Mariposa St., Burbank, CA 91506. The brochure describes in detail the components of the camera.

Joyce stage lifting equipments are described and illustrated in a 4-page bulletin available from Joyce-Cridland Co., 2027 E. First St., Dayton, OH 45403. The stage

lifts can provide an extension of the main stage when the lift is up or, at a slightly lower level, form a two-step stage.

Microphone and circuitry products are described and illustrated in the 20-page Professional Products Catalog (No. AL312B) available from Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204. The catalog includes technical specifications and discussions of microphone types and microphone selection.

Professional motion-picture equipment is listed in a pocket-size, 40-page illustrated rental catalog available from Calvin Cinequip, Inc., 215 W. Pershing Rd., Kansas City, MO 64108. Sixteen-mm motion-picture cameras, lenses, tripods, lights, tape recorders, projectors and numerous accessories are listed, these being available on a daily or weekly rental basis or on long-term lease. The catalog includes a 9-page section of miscellaneous information such as an incident light illumination chart, filter factors, lens diopter listings, 8, 16 and 35mm film/footage conversion charts, etc.

Motion-picture cameras and other equipments are listed together with the rental prices in a 24-page illustrated catalog available from Image Devices Inc., 811 N.W. 111 St., Miami, FL 33138. Equipments described include 16 and 35mm cameras, lens accessories, grip equipment, sound-recording equipment, motion-picture projectors, slide projectors and others. Image Devices also makes available editing rooms, for which prices are listed.

A new Professional Motion Picture Equipment Catalog is available from Alan Gordon Enterprises Inc., 5362 N. Ca-huenga Blvd., North Hollywood, CA 91601. The 112-page catalog lists more than 3000 items for the professional filmmaker, plus some 300 photographs. An easy-to-read index covers such items as cameras, lenses, editors, printers, accessories, laboratory equipment, animation equipment, housings, lights, power supplies, sound, and many more.

NTIS Publications

The publications listed below are presently available from National Technical Information Service (NTIS), Springfield, VA 22151. Unless otherwise noted each report is \$3.00 (microfiche 95 cents).

For the convenience of the reader, titles and brief descriptions of the publications have been grouped under three categories.

Communications

AD-711 272, *A High-Speed Television Recording System With Slow and Stop Motion Replay*, A. Wilson, 26 pp. Describes a system that records rapid movements occurring at unpredictable times. The picture signal is recorded on magnetic tape which enables instant replay of information at real time or slower rates.

N71-14753, *Extraterrestrial Civilizations: Problems of Interstellar Communication*, S. A. Kaplan (ed.) (USSR 1969, translated from Russian For NASA and National Science Foundation, 1971.) Discusses the astrophysical aspect of the

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stack will adapt to any standard exhaust system. All internal electrical components are easily replaceable. Bulb is inserted through the top of the lamphouse without disturbing alignment. A trouble-free igniter gives instantaneous ignition.

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search for signals from extraterrestrial civilizations, effect of the space medium on propagation of radio signals, possibility of radio communication with extraterrestrial civilizations, methods of message decoding, rates of development of civilizations and their forecasting, and some general topics of the problem of extraterrestrial civilizations.

PB-200 000, *Problems of Communication in Large Cities*, W. T. Knox, 38 pp. Communication channels must accommodate the pluralism of human interests found in our cities. Despite diversity, ubiquity, high quality and inexpensiveness of communication techniques, communication is still a problem. Only in the case of certain telecommunication devices—the telephone, telegraph and cable TV—has the city asserted its right to regulate the development and exploitation of communication technologies. Better communication can be obtained if a pluralistic communication system can be devised.

PB-200 317, *Communications Technology for Urban Improvement*, 234 pp. Telecommunications better applied in such fields as health care, education, transportation and crime prevention can make cities more livable and reduce the need for high-density urban living in the future, according to the Panel on Urban Communications of the National Academy of Engineering Committee on Telecommunications. The Panel recommends that cities and the federal government cooperatively launch some 18 pilot projects that would include a telemedicine system linking doctors in a central hospital location with physician assistants in satellite clinics; 24-hour television surveillance of high crime areas to protect city dwellers from street crime and a combined television-acoustical surveillance system to deter crime in urban housing projects and public institutions; call boxes at bus stops providing instantaneous scheduling and route information and an automated transfer area where people can quickly and conveniently transfer from private automobiles to mass-transit vehicles; use of two-way cable TV for education, including computer-assisted instruction; and a municipal command center that coordinates incoming information from police and fire departments, utilities and other city services and serves as a command center during emergencies such as storms, major fires, riots and earthquakes. To implement such services, the Panel visualizes four basic communications networks—a telephone network that transmits pictures and written materials as well as sound; a network based on existing cable TV systems that can distribute a wide range of information to homes and offices; a broadband network of two-way television channels interconnecting major public institutions and large commercial enterprises; and a city sensing network that can collect data on weather, pollution, traffic, vehicle location and status of power supplies.

PB 201 407, *Teleconsultation: A New Health Information Exchange System*, K. T. Bird, et al., 62 pp. Develops circuitry and support systems for teleconsultation, a simultaneous health information exchange between widely separated health professionals. The report identifies pro-

fessional linkages needed to make teleconsultation an accepted part of health delivery systems.

AD-735 006, *Low-Light-Level Devices: A Designers' Manual*, L. M. Biberman, et al., 516 pp. Discusses effects of image quality on operator performance, low-light-level performance of visual systems, image-intensifier tube structures and television camera tube performance and data. Low-light-level camera tubes are compared. (Paperbound \$7.75, microfiche 95 cents.)

Optics

N71-12776, *Holographic Instrumentation Applications*, B. Ragent and R. M. Brown (eds.), 249 pp. Papers presented at conference held Jan. 13-14, 1970, at Moffett Field, Calif.

AD-717 702, *Holographic Applications in Shadowgraph, Schlieren and Interferometry Analysis of Heat Transfer and Fluid Flow Test Subjects*, A. G. Havener, 42 pp.

AEC-TR-7166, *Laser Applications for High-Speed Investigations of Fast Processes*, G. V. Sklizkov (translated from Russian), 33 pp. Discusses advantages of lasers as light sources and analyzes specific features of their application to high-speed photography in scientific research.

AD-709 764, *Aerodynamic Holography*, J. D. Trolinger and J. E. O'Hare, 100 pp. Summarizes work in holography at Arnold

Engineering Development Center, Arnold Air Force Station, Tenn. The report includes basic and applied research with emphasis on applications of holography to aerodynamic testing.

Printing, Graphic Arts, Photography

AD-712 100, *Infrared Photography*, Defense Documentation Center, Alexandria, Va., 107 pp. DDC bibliography (with abstracts) containing references on infrared photography and infrared films. Topic areas covered include: aerial surveying, planetary and lunar research, high-speed recording with gallium arsenide light-emitting diodes, thermal mapping and technology of infrared radiation.

PB-192 702, *Variability in the Automatic Processing of Medical X-Ray Film*, J. P. Ferguson and W. W. Schadt, 44 pp. Determines the amount of variation in film development with regard to film base fog, speed and contrast when equally exposed films are developed in different automatic processors. The amount of variation in film development with time for individual processors is also determined.

AD-707 509, *Image Transformations of Satellite Cloud Photography*, R. L. Peters, 93 pp. Investigates effects and limits of (1) variation of luminance levels in both linear and nonlinear fashion and (2) varying image resolution.

LA-4380, *Schlieren Photography: A Bibliography*, J. Furnish (comp.). 4 pp.

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