

**A NEW DIMENSION IN LIGHTING**

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the  
**QUARTZ-KING**  
**1000** PROFESSIONAL



MORE LIGHT AT YOUR COMMAND FOR  
TV, COMMERCIAL AND CINE PHOTOGRAPHY

Newest light in the recently announced Quartz-King line, the 1000 produces more than **860 foot-candles of smooth even light** at 10 feet! Utilizing the Sylvania "DXN" 1000-watt 3400°K quartz-iodine lamp, in a reflector of a brilliant new design, the Quartz-King 1000 produces a **round pattern of light**, perfectly smooth, without hot spots, without banding, and without filament pattern. Never before has so much usable light been available in a housing as compact and as light as the 1000!

The Quartz-King 1000 operates directly from standard 110/120 volt outlets. Intensity is maintained because the quartz-lamp will not discolor or dim during its entire life, and the reflector will never tarnish.

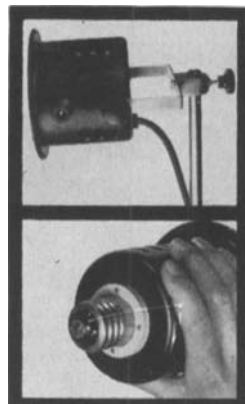
The Quartz-King 1000 is available in two basic models; Universal Yoke and Integral Mogul Screw Base, with either medium or wide flood reflectors.

**WITH UNIVERSAL YOKE**  
LQK/10MY Medium Flood  
LQK/10WY Wide Flood

Specially designed yoke permits mounting on 5/8" dia. light stands, horizontal or vertical bars. 1/4-20 thread for tripod mounting. 240° vertical tilt. Adjustable for horizontal or vertical lamp orientation. Supplied with 10 ft. 3-wire heavy duty safety-grounded cable with in-the-line switch and 3-to-2 prong adapter.

**WITH INTEGRAL MOGUL SCREW BASE**  
LQK/10MM Medium Flood  
LQK/10WM Wide Flood

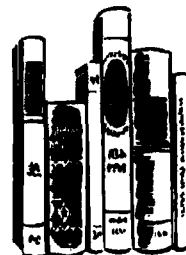
Allows use of QUARTZ-KING in any lamp or housing designed for mogul base lamps. Supplied with adapter for medium screw base sockets.



WRITE FOR  
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**books  
reviewed**

**Modern Dictionary of Electronics**

Compiled by Rudolf F. Graf. Published (1961) by Howard W. Sams & Co., Inc., 1720 E. 38 St., Indianapolis 6, Ind. 370 pp. incl. index, illus., diagrams. Price \$6.95.

Of the many dictionaries of electronics which have appeared in recent years, this dictionary has the advantage that it is designed primarily for technicians. Thus, many of the definitions are couched in simple, easy-to-understand terms, although in some cases they are not completely definitive from an engineering viewpoint.

The dictionary covers, with few exceptions, all of the terms in use in the present-day field of electronics. One such exception concerns the inclusion of *Fortran*, one of the many computer "languages." To be consistent, other computer languages such as *Cobol*, *Algol*, etc., should also have been included. A second exception is, again in the computer field, no listing of the *NAND* (for *Not AND*) gate, although the *OR*, *NOR*, *AND*, and *NOT* gates are listed.

In a book defining more than 10,000 terms, however, a few such omissions are inevitable, and do not detract from its utility.

For most engineers in the various fields of electronics, the definitions listed will be already well-known; however, for many specialists and for those in fields other than electronics, the dictionary will fill the need for a reference to enable the user to glean the gist of technical reports and papers in any area of electronics.—*Harvey W. Mertz*, Cherry Hill, N.J.

**Electronic Equipment Design and Construction**

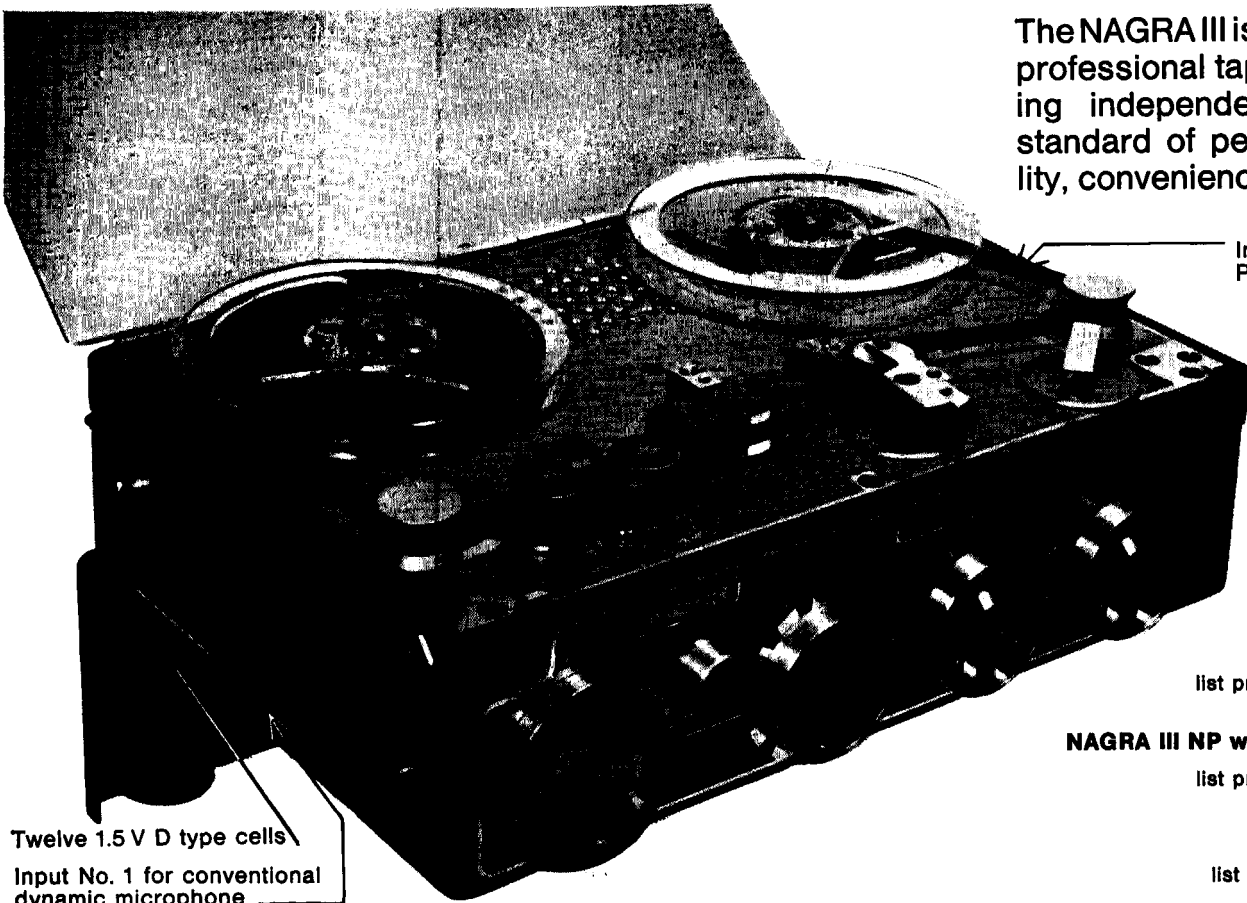
By Geoffrey W. A. Dummer, Cleo Brunetti and Low K. Lee. Published (1961) by McGraw-Hill Book Company, Inc., 330 W. 42 St., New York 36. 241 pp. incl. index, illus., diagrams, tables. 6 by 9 in. Price \$8.50.

The increasing importance of environmental constraints on equipment design is attested by the vast sums currently being spent in building and operating a wide variety of facilities especially designed for environmental testing. The largest, best-known, and most expensive of these facilities have been built for simulating the space environment, in keeping with the present attention given to space vehicles. However, environmental constraints are also important in the design of earth-based and airborne equipment. This book is a generally successful attempt to bring together data and experience from many

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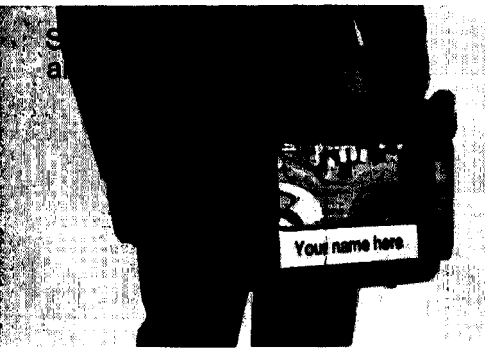
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Pilot sync pulse input

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**NAGRA III NP with pilot sync pulse head:**  
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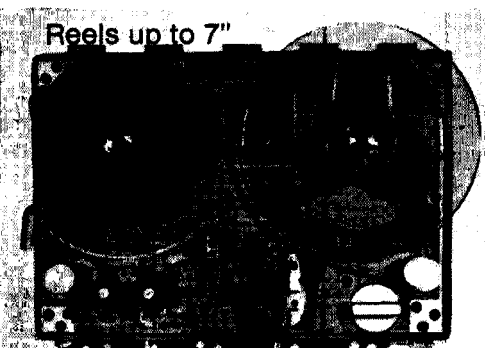
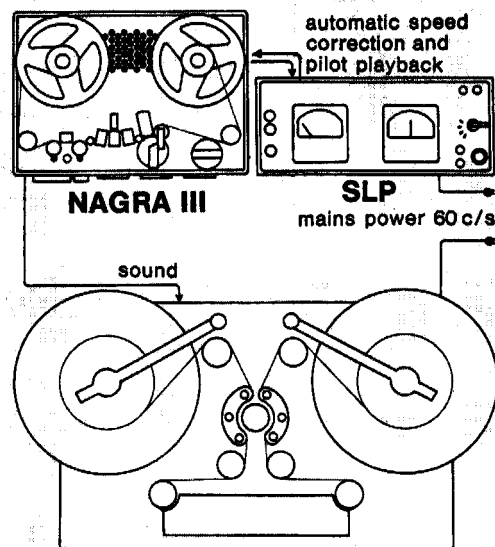
**SLP SYNCHRONIZER**  
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## Performance

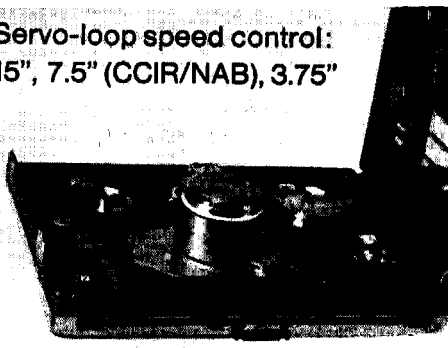
- $30 \div 16.000 \pm 1.5$  DB
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- Micro imp.: 50-200 Ohms

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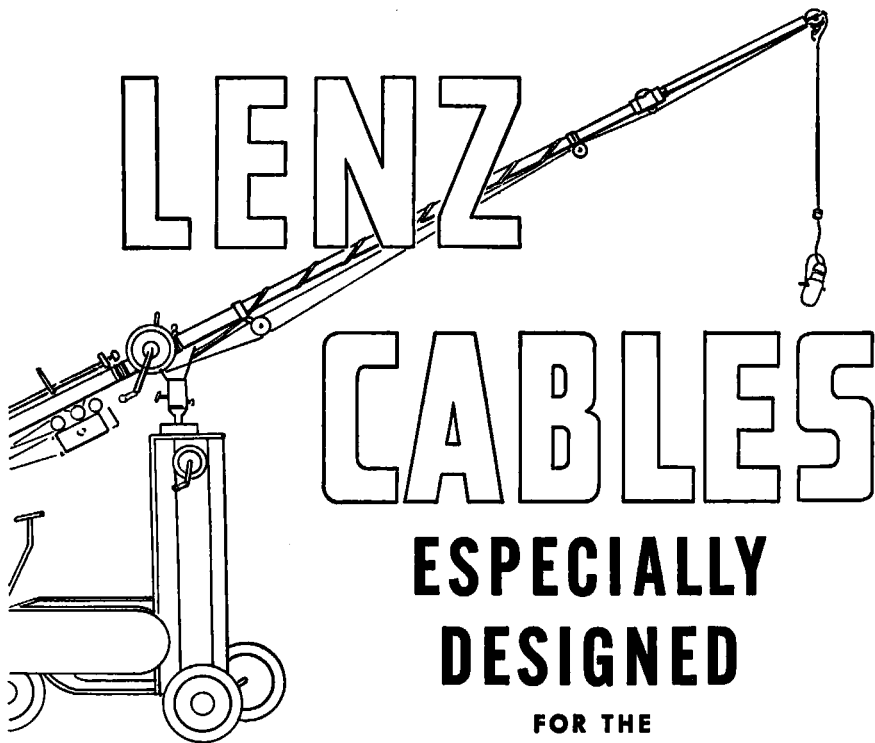
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sources to assist the equipment design engineer in the early stages of design.

The book includes discussions of the effects of climate (i.e., temperature, pressure, humidity, wind, etc.), mechanical environment (i.e., vibration, shock, g-loading, etc.), thermal environment (i.e., heat generated by the equipment itself), nuclear radiation, and electrical noise.

Many other factors, such as reliability, ease of manufacture, and available space, also exert a profound influence on equipment design. Thus, chapters in the book are devoted to various manufacturing techniques, to the layout and placement of components, to modular circuitry, and to automatic techniques. Finally, the author touches on the interrelationship between the equipment and its human operators.

The material is clear, factual, and well presented. Although it is slanted especially toward electronic equipment, the principles and factual data are equally applicable to almost any type of equipment, including optical devices and mechanical devices. The illustrations showing environmental extremes are particularly graphic. Perhaps the best of these is a photograph of a crated teleprinter being unloaded from a truck by merely pushing it off to fall to the ground. While such handling is extreme, and should not occur, it does happen.

Coverage of such a wide variety of design factors inevitably leaves gaps. One such gap here is the lack of discussion of the space environment. For example, neither the temperature gradients nor the pressures in the space environment are considered, and the discussion of vibration does not include that experienced during a launching.

With this exception, the book is a good reference which should be very useful to equipment design engineers, and should be of more than passing interest to operators and technicians.—*Harvey Mertz*, Cherry Hill, N.J.

### Books, Booklets and Brochures

**Recommended methods for the preparation and processing of 16mm and 35mm motion-picture film** are explained graphically in a set of 12 Producers Bulletins published by General Film Laboratories, 1546 N. Argyle Ave., Hollywood 28. The Bulletins include four editing charts and eight flow charts showing processing methods. Subjects of the editing charts are: "Methods of Marking Workprints to Indicate Effects," "Preparation of Eastmancolor Negatives for 35mm and 16mm A&B Roll Printing," "Preparation of 16mm Reversal A&B Rolls" and "Preparation of 16mm Printing Leaders."

The eight flow charts show the various steps used in processing 16mm and 35mm negatives, both color and black-and-white; the handling of 16mm color or black-and-white reversal originals; and the use of the 35/32 method for producing 16mm positive prints from black-and-white or color film. The bulletins are available without charge to motion-picture producers as long as the supply lasts.