



Underwriters Laboratories Inc.®

A not-for-profit organization dedicated to public safety
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March 18, 1996

Revision pages for

Standard for

Amateur Movie Lights

UL 1230, Fourth Edition

Attached to this transmittal notice is a reprinted title page for the fourth edition of UL 1230.

Attention is directed to the note on the title page of this standard outlining the procedure to be followed to retain the approved text of ANSI/UL 1230-1996.

Revised and/or additional pages may be issued from time to time.

With the inclusion of the accompanying material, the standard consists of pages dated as shown in the following checklist:

Page	Date
1	December 20, 1994 (Reprinted March 18, 1996)
2 – 25, SA1 – 9, A1	December 20, 1994

DECEMBER 20, 1994
(Title Page Reprinted: March 18, 1996)



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UL 1230

Standard for

Amateur Movie Lights

First Edition – January, 1975
Second Edition – September, 1985
Third Edition – June, 1988

Fourth Edition

December 20, 1994

Approval as an American National Standard (ANSI) covers the numbered paragraphs on pages dated December 20, 1994. These pages should not be discarded when revised or additional pages are issued if it is desired to retain the ANSI approved text.

An effective date included as a note immediately following certain requirements is one established by Underwriters Laboratories Inc.

Approved as ANSI/UL 1230-1885, July 17, 1985
Approved as ANSI/UL 1230-1989, October 20, 1989
Approved as ANSI/UL 1230-1996, February 8, 1996

Revisions of this standard will be made by issuing revised or additional pages bearing their date of issue. A UL Standard is current only if it incorporates the most recently adopted revisions, all of which are itemized on the transmittal notice that accompanies the latest published set of revision pages.

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Amateur Movie Lights



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UL Standards for Safety are developed under a procedure which provides for participation and comment from the affected public as well as industry. The procedure takes into consideration a survey of known existing standards and the needs and opinions of a wide variety of interests concerned with the subject matter of the standard. Thus manufacturers, consumers, individuals associated with consumer-oriented organizations, academicians, government officials, industrial and commercial users, inspection authorities, insurance interests and others provide input to UL in the formulating of UL Standards for Safety, to keep them consonant with social and technological advances.

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December 20, 1994

Standard for

Amateur Movie Lights

UL 1230, Fourth Edition

Accompanying this transmittal notice is a copy of the Fourth edition of UL 1230.

THIS EDITION OF THE STANDARD IS NOW IN EFFECT.

Revised and/or additional pages may be issued from time to time.

DECEMBER 20, 1994

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FOREWORD

A. This Standard contains basic requirements for products covered by Underwriters Laboratories Inc. (UL) under its Follow-Up Service for this category within the limitations given below and in the Scope section of this Standard. These requirements are based upon sound engineering principles, research, records of tests and field experience, and an appreciation of the problems of manufacture, installation, and use derived from consultation with and information obtained from manufacturers, users, inspection authorities, and others having specialized experience. They are subject to revision as further experience and investigation may show is necessary or desirable.

B. The observance of the requirements of this Standard by a manufacturer is one of the conditions of the continued coverage of the manufacturer's product.

C. A product which complies with the text of this Standard will not necessarily be judged to comply with the Standard if, when examined and tested, it is found to have other features which impair the level of safety contemplated by these requirements.

D. A product employing materials or having forms of construction differing from those detailed in the requirements of this Standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be judged to comply with the Standard.

E. UL, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of UL represent its professional judgment given with due consideration to the necessary limitations of practical operation and state of the art at the time the Standard is processed. UL shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. UL shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

F. Many tests required by the Standards of UL are inherently hazardous and adequate safeguards for personnel and property shall be employed in conducting such tests.

INTRODUCTION

1 Scope

1.1 These requirements cover amateur movie and video lights intended to be hand held or attached to a camera. These lights may be cord connected, rated at a nominal 120 V for use with premises wiring systems in accordance with the National Electrical Code, ANSI/NFPA No. 70, or may be powered by low voltage built-in or separate battery supplies.

1.2 These requirements do not cover movie or video lights intended for professional or commercial use.

1.3 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this Standard, and that involves a risk of fire, electric shock, or injury to persons shall be evaluated using the appropriate additional component and end-product requirements as determined necessary to maintain the acceptable level of safety as originally anticipated by the intent of this Standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this Standard cannot be judged to comply with this Standard. Where considered appropriate, revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this Standard.

2 References

2.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

3 Glossary

3.1 **AMATEUR MOVIE LIGHT** – An assembly consisting of a light source (lamp) and enclosure intended to provide total or fill-in illumination for amateur motion picture or video photography.

3.2 **BOUNCE LIGHTING** – Provision on a movie light for directing the light beam away from the horizontal while the unit is mounted and used on a horizontally held support (camera).

3.3 **EXTERNAL** – The outside surface of the enclosure or the plane drawn across the open face of a reflector, but excluding guards and minor projections such as lamp bulb tips, handles, and control knobs.

3.4 **NET TOTAL HEAT FLUX DENSITY** – The power transferred to a unit area of a surface at room temperature due to both radiation and convection effects.

4 Components

4.1 Except as indicated in 4.2, a component of a product covered by this standard shall comply with the requirements for that component. See Appendix A for a list of standards covering components generally used in the products covered by this standard.

4.2 A component need not comply with a specific requirement that:

- a) Involves a feature or characteristic not needed in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

4.3 A component shall be used in accordance with its recognized rating established for the intended conditions of use.

4.4 Specific components are recognized as being incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits and shall be restricted to use only under those specific conditions for which they have been recognized.

5 Units of Measurement

5.1 If a value for measurement is followed by a value in other units in parentheses, the second value may be only approximate. The first stated value is the requirement.

CONSTRUCTION

6 Frame and Enclosure

6.1 Amateur movie lights shall be so formed and assembled that they will have the strength and rigidity necessary to resist the abuses to which they are likely to be subjected, without increasing the risk of fire, electric shock, or injury to persons due to total or partial collapse with resulting reduction of spacings, loosening or displacement of parts, or other serious defects.

6.2 Among the factors which are taken into consideration when determining the acceptability of a nonmetallic enclosure or an enclosure of magnesium are

- a) The mechanical strength,
- b) Resistance to impact,
- c) Moisture-absorptive properties,
- d) Combustibility, and
- e) Resistance to distortion at temperatures to which the material may be subjected under conditions of intended or abnormal usage.

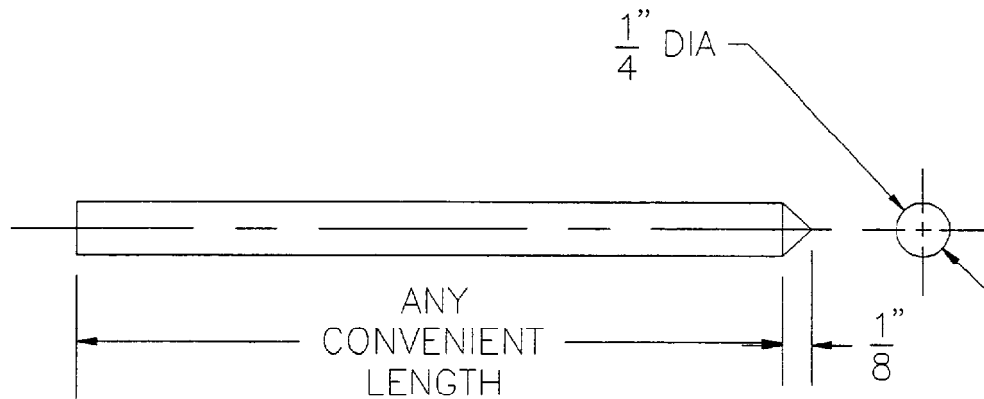
6.3 Electrical components shall be so located or enclosed as to provide protection against inadvertent contact with uninsulated live parts.

6.4 An opening anywhere in the enclosure of an amateur movie light is acceptable if a probe, as illustrated in Figure 6.1, when inserted point first as far as possible into the opening does not touch any uninsulated live part or coated-magnet wire.

6.5 In connection with the requirement of 6.4, the probe is to be applied with the lamp in place.

6.6 During the examination of a movie light in connection with 6.4, any part of the outer enclosure that may be removed without the use of tools is to be disregarded — that is, it will not be assumed that the part in question affords protection against the risk of electric shock.

Figure 6.1
Articulated accessibility probe



SB0614A

7 Mechanical Assembly

7.1 An amateur movie light shall be so assembled that it will not be adversely affected by the handling involved during intended operation.

7.2 A switch (other than a through-cord switch), a lampholder, or similar component shall be mounted securely and, except as noted in 7.3 shall be kept from turning. See 7.4.

7.3 The requirement that a switch be prevented from turning may be waived if the conditions of a – d are met:

- a) The switch is a plunger or other type that does not tend to rotate when operated (a toggle switch is considered to be subject to forces that tend to turn the switch during intended operation of the switch).
- b) The means for mounting the switch makes it unlikely that operation of the switch will loosen it.
- c) The spacings are not reduced below the minimum required values if the switch rotates.
- d) The intended operation of the switch is by mechanical means rather than by direct contact by persons.