

AS 1127.1—1989
IEC 268-1 (1985)

Australian Standard[®]

Sound system equipment

Part 1: General

This Australian Standard was prepared by Committee TE/8, Audio and Video Engineering and Recording. It was approved on behalf of the Council of Standards Australia on 1 November 1988 and published on 19 June 1989.

The following interests are represented on Committee TE/8:

Australian Broadcasting Corporation
Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industry
Consumer Electronics Suppliers Association
Department of Transport and Communications
Federation of Australian Commercial Television Stations
Federation of Australian Radio Broadcasters
Institution of Radio and Electronics Engineers Australia
National Acoustics Laboratories
Telecom Australia
University of New South Wales

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard[®]

Sound system equipment

Part 1: General

First published as part of AS 1127.1—1973.
Second edition 1989.

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 5439 8

PREFACE

This Standard was prepared by Standards Australia's Committee TE/8 on Audio and Video Engineering and Recording to supersede part of AS 1127.1—1973, *Sound system equipment, Part 1: General*. It is technically identical with, and has been reproduced from, IEC 268-1: Sound system equipment, Part 1: General.

The purpose of the Standard is to specify the performance of sound system equipment to compare different types of equipment and determine their proper application, by listing their physical characteristics and specifying, in separate documents, uniform methods of measurements to these characteristics.

For the purpose of this Australian Standard, the text of the IEC Publication used herein should be modified as follows:

- (a) *Terminology*. The words 'Australian Standard' should replace the words 'IEC Publication' wherever they appear.
- (b) *Cross-references*. The references to IEC Publications and ISO Standards should be replaced by reference to Australian Standards as follows:

<i>Reference to International Standard</i>		<i>Appropriate Australian Standard</i>	
IEC		AS	
27	Letter symbols to be used in electronic technology	1046	Letter symbols for use in electrotechnology
50	International electrotechnical vocabulary (IEV)	1852	International electrotechnical vocabulary
65	Safety requirements for mains operated electronic and related apparatus for household and similar general use	3250	Approval and test specification—Mains operated electronic and related equipment for household and similar general use
68	Basic environmental testing procedures	1007	Basic environmental testing procedures for electrotechnology
225	Octave, half-octave and third-octave band filters intended for the analysis of sound and vibrations	Z41	Octave, half-octave and one-third octave band pass filters intended for the analysis of sound and vibrations
263	Scales and sizes for plotting frequency characteristics and polar diagrams	—	
268	Sound system equipment	1127	Sound system equipment
268-1	Part 1: General	1127.1	Part 1: General
268-2	Part 2: Explanation of general terms	1127.2	Part 2: Explanation of general terms
268-3	Part 3: Sound system amplifiers	1127.6	Part 6: Amplifiers
417	Graphic symbols for use on equipment	1104	Informative symbols for use on electrical and electronic equipment
617	Graphical systems for diagrams	1102	Graphical symbols for electrotechnical documentation
551	Sound level meters	1259	Sound level meters

ISO		AS	
266	Acoustics—Preferred frequencies for measurements	2533	Acoustics—Preferred frequencies of measurement
GGIR			
468.2	Measurement of audio frequency noise in sound broadcasting, in sound recording systems and on sound programme circuits (Second Edition)	—	
468.3	Measurement of audio frequency noise voltage level in sound broadcasting (Third Edition)	—	

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
1 SCOPE	5
2 UNITS AND SYSTEM OF MEASUREMENT	6
3 FREQUENCIES OF MEASUREMENT	6
4 QUANTITIES TO BE SPECIFIED AND THEIR ACCURACY	6
5 MARKING AND SYMBOLS FOR MARKING	7
6 FILTERS, WEIGHTING CURVES AND METERS FOR NOISE SPECIFICATION AND MEASUREMENT	7
7 SIMULATED PROGRAMME SIGNAL	8
8 CLIMATIC CONDITIONS	8
9 INDIVIDUAL SPECIFICATIONS AND TYPE SPECIFICATION	9
10 GRAPHICAL PRESENTATION OF DATA	9
11 PERSONAL SAFETY AND PREVENTION OF SPREAD OF FIRE	10
12 MEASUREMENTS IN A UNIFORM ALTERNATING MAGNETIC FIELD	10
TABLE I	11
TABLE II	12
FIGURES	13
APPENDIX A. NOISE-WEIGHTING NETWORK AND QUASI-PEAK METER	16

STANDARDS AUSTRALIA

Australian Standard
Sound system equipment**Part 1: General****1. Scope**

This standard applies to sound systems of any kind, and to the parts of which they are composed or which are used as auxiliaries to such systems.

This standard deals with the determination of the performance of sound system equipment, the comparison of these types of equipment and the determination of their proper practical application, by listing the characteristics which are useful for their specification and laying down uniform methods of measurements for these characteristics.

The standard is confined to a description of the different characteristics and the relevant methods of measurement; it does not in general specify performance (except in Part 10).

The complete standard consists of the following parts, in which the characteristics of various parts of sound systems and their methods of measurement are specified; some parts include preferred values:

- Part 1: General.
(Uniform characteristics and methods of measurement)
- Part 2: Explanation of General Terms.
(Explanation of general terms and calculation methods)
- Part 3: Sound System Amplifiers.
(Amplifiers forming part of a sound system for professional and domestic applications)
- Part 4: Microphones.
(Microphones in professional and domestic applications)
- Part 5: Loudspeakers.
(Loudspeakers in professional and domestic applications, treated as entirely passive elements)
- Part 6: Auxiliary Passive Elements.
(Attenuators, transformers, filters and equalizers, applied as separate units to be combined with other separate sound system units)
- Part 7: Headphones and Headsets.
(Headphones and headsets intended to be used on the human ear)
- Part 8: Automatic Gain Control Devices.
(Limiters and compressors)
- Part 9: Artificial Reverberation, Time Delay and Frequency Shift Equipment.
(Devices commonly employed to achieve special effects in sound systems)
- Part 10: Programme Level Meters.
(Peak programme meters and vu-indicators)