

Australian Standard[®]

HEARING AIDS

**Part 3—HEARING AID
EQUIPMENT NOT
ENTIRELY WORN ON
THE LISTENER**

This Australian standard was prepared by Committee AK/11, Audiology. It was approved on behalf of the Council of the Standards Association of Australia on 25 November 1986 and published on 2 February 1987.

The following interests are represented on Committee AK/11:

Audiological Society of Australia
Better Hearing Australia
Department of Defence
Hearing Aid Council of Australia
National Acoustical Laboratories
Otolaryngological Society of Australia
State Pollution Control Commission of New South Wales
University of Melbourne
University of Queensland

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This standard was issued in draft form for comment as DR 85269.

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AS 1088 first published	1971
AS 1088.3 separately published	1987

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

ISBN 0 7262 4500 3

PREFACE

The standard was prepared by the Association's Committee on Audiology. It is identical with and has been reproduced from IEC Publication 118-3, Hearing Aids, Part 3: Hearing Aid Equipment Not Entirely Worn on the Listener. It supersedes (in part) AS 1088—1971, Methods of Measurement of the Electro-acoustic Characteristics of Air Conduction Hearing Aids.

The purpose of this standard is to describe a method of determining the overall electroacoustic performance of hearing aid equipment not entirely worn on the listener, used in rehabilitation of persons having impaired hearing. It should be read in conjunction with AS 1088.0, Hearing Aids, Part 0—Measurements of Electroacoustical Characteristics.

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

Cross-references: The references to IEC standards should be replaced by references to Australian standards as follows:

<i>Reference to IEC standards</i>	<i>Appropriate Australian standard</i>
IEC 65, Safety requirements for Mains Operated Electronic and Related Apparatus for Household and Similar General Use	AS 3250, Approval and Test Specification—Mains Operated Electronic and Related Equipment for Household and Similar General Use
IEC 118-0, Hearing Aids, Part 0: Measurement of Electroacoustical Characteristics	AS 1088.0, Hearing Aids, Part 0—Measurement of Electroacoustical Characteristics
IEC 268-4, Sound System Equipment, Part 4: Microphones	AS 1127, Sound System Equipment, Part 3—Microphones
IEC 318, An IEC Artificial Ear, of the Wideband Type, for the Calibration of Earphones Used in Audiometry	AS 1591, Instrumentation for Audiometry, Part 5—Wide Band Artificial Ear
IEC 711, Occluded-ear Simulator for the Measurement of Earphones Coupled to the Ear by Ear Inserts	AS 2928, Occluded-ear Simulator for the Measurement of Earphones Coupled to the Ear by Ear Inserts

CONTENTS

	<i>Page</i>
1 SCOPE	3
2 OBJECT	3
3 TEST EQUIPMENT	4
4 TEST PROCEDURE	4
5 RELATION BETWEEN TRANSMITTING AND RECEIVING DEVICES IN CASE OF WIRELESS TRANSMISSION	7
6 POWER SUPPLY	7
7 SAFETY REQUIREMENTS	7

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
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PART 3—HEARING AID EQUIPMENT NOT ENTIRELY WORN ON THE LISTENER

INTRODUCTION

In the rehabilitation of persons having impaired hearing, use is made of two types of electroacoustic amplification systems:

- a) Hearing aids entirely worn on the listener.
- b) Hearing aid equipment in which the microphone or microphones are not worn on the listener.

IEC Publication 118-0: Hearing Aids, Part 0: Measurement of Electroacoustical Characteristics, gives details of methods of measurements on hearing aids and in general covers the requirements for other hearing aid equipment.

However, measurements on hearing aid equipment involve certain test differences which are detailed in this standard. Reference is made wherever possible to IEC Publication 268: Sound System Equipment, for measurements not covered in IEC Publication 118-0.

1. Scope

The purpose of this standard is to describe a method of determining the overall electroacoustic performance of hearing aid equipment not entirely worn on the listener, used in the rehabilitation of persons having impaired hearing.

2. Object

The methods specified in this publication give information on the measurement of those parameters that are not fully covered in IEC Publication 118-0; i.e.:

Frequency response.

Air to air gain.

Acoustic output.

Gain and output controls.

Internal noise of the equipment.

Electrical input sensitivity and output power.

Overall effect of transmission paths in systems where the microphone(s) is (are) not connected by wire to the earphone(s).

Measurements other than the above are specified in IEC publications, for example IEC Publication 118-0 and IEC Publication 268.