

WITHDRAWN
TAS OCTOBER 1990

AS 1274—1978
UDC 534.843.1:725.824

Australian Standard 1274—1978

ELECTRO-ACOUSTIC RESPONSE OF MOTION-PICTURE CONTROL ROOMS AND INDOOR THEATRES

RECEIVED
STANDARDS ASSOCIATION
OF AUSTRALIA

MELBOURNE LIBRARY



STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Broadcasting Commission
Australian Broadcasting Control Board
Australian Commonwealth Film Unit
Australian Film Producers Association
Confederation of Australian Industry
Federation of Australian Commercial Television Stations
Motion Picture Exhibitors Association
State Government Film Centres
The Australian Film Laboratories Association
The Australian Motion Picture Studios Association

This standard, prepared by Committee MS/27, Cinematography, was approved on behalf of the Council of the Standards Association of Australia on 7 August 1978 and was published on 1 September 1978.

To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

This standard was issued in draft form for public review as DR 72089.

AUSTRALIAN STANDARD

**ELECTRO-ACOUSTIC
RESPONSE OF
MOTION-PICTURE
CONTROL ROOMS AND
INDOOR THEATRES**

AS 1274—1978

First published 1978

**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.**

ISBN 0 7262 1533 3

PREFACE

This standard was prepared by the Association's Committee on Cinematography. It is technically identical with International Standard 2969 published by the International Organization for Standardization but has been editorially re-arranged. Acknowledgement is made of the assistance received from this source.

The purpose of this standard is to promote a standard method of measuring one important factor in the reproduction of single channel sound for motion pictures in order to assist in standardization of reproduction of motion-picture sound in studio dubbing and review rooms, and in indoor theatres. The standard applies most closely to the characteristics of the electro-acoustic response of motion-picture control rooms and theatres of volume in excess of 250 m³. It does not, however, apply where the recorded sound is intended for reproduction under domestic listening conditions, i.e. to radio or television broadcasting, magnetic tape or disc records.

This standard requires reference to the following Australian standards:

- | | |
|---------|--|
| AS Z33 | Preferred Frequencies and Band Centres for Acoustical Measurements |
| AS Z41 | Octave, Half Octave and One-third Octave Band Pass Filters Intended for the Analysis of Sound and Vibrations |
| AS 1259 | Sound Level Meters
Part 2—Type 2, Precision |
| AS 1452 | Magnetic Sound Records on 35 mm Performed Film |

©Copyright — STANDARDS ASSOCIATION OF AUSTRALIA 1978

Users of standards are reminded that copyright subsists in all SAA publications. No part of this publication may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing of the Standards Association of Australia.

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
ELECTRO-ACOUSTIC RESPONSE OF
MOTION-PICTURE CONTROL ROOMS AND
INDOOR THEATRES

1 SCOPE. This standard specifies the characteristics of the electro-acoustic response of motion-picture control rooms, and indoor theatres. The standard also describes methods of measurement for the electro-acoustic response of studio dubbing and review rooms.

2 APPLICATION. The standard is intended to facilitate the standardization of reproduction of motion-picture sound in studio dubbing and review rooms, indoor theatres and the like by measuring the response of the B-chain as defined in the standard.

It does not apply to that part of the motion-picture sound system from the transducer to the input terminals of the main fader, i.e. the A-chain. Nor does it apply to recorded sound intended for reproduction under domestic listening conditions, e.g. radio and television broadcasting, magnetic tape or disc records.

3 DEFINITIONS.

3.1 Complete sound reproduction system—as presented diagrammatically in Fig. 1 and used in studio dubbing theatres, laboratory review rooms and indoor theatres, by convention consisting of an A-chain and a B-chain.

3.2 A-chain (transducer system)—that part of a motion-picture sound system as shown in Fig. 1, extending from the transducer to the input terminals of the main fader.

3.3 B-chain (final chain)—that part of a motion-picture sound reproduction system as shown in Fig. 1, commencing at the input terminals of the main fader and terminating at any position in the listening area of the room or auditorium at which sound pressure measurements are taken.

3.4 Electro-acoustic response (final chain)—the sound pressure level expressed in decibels with respect to an arbitrary reference pressure*, over a given frequency range measured at a given position in the listening area when pink noise of constant electromotive force (e.m.f.) is applied to the input terminals of the main fader, preceding the power amplifier (see Fig. 1).

*See Clause 5.