

AS 2412—1980

Australian Standard[®]

**INFORMATION INTERCHANGE
ON 3.81 mm (0.150 in)
MAGNETIC TAPE CASSETTE
AT 4 cpmm (100 cpi), PHASE
ENCODED AT 63 ftpmm
(1 600 ftpi)**

The following scientific, industrial and governmental organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Banks Payment Systems Committee
Australian Bureau of Statistics
Australian Computer Users Association
Australian Public Service Board
CSIRO, Division of Computing Research
Department of Defence
Life Insurance Federation of Australia
Manufacturers of data processing equipment
National Library of Australia
Office Equipment Industry Association of Australia
Public Service Board, New South Wales
Qantas Airways Limited
Telecom Australia
Universities and Colleges

This standard, prepared by Committee MS/20, Computers and Information Processing, was approved on behalf of the Council of the Standards Association of Australia on 10 October 1980, and was published on 31 December 1980.

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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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.

AS 2412—1980

Australian Standard[®]

**INFORMATION INTERCHANGE
ON 3.81 mm (0.150 in)
MAGNETIC TAPE CASSETTE
AT 4 cpmm (100 cpi), PHASE
ENCODED AT 63 ftpmm
(1 600 ftpi)**

First published 1980

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

ISBN 0 7262 2089 2

PREFACE

This standard was prepared under the authority of the Association's Committee on Computers and Information Processing. It is identical with and has been reproduced from International Standard ISO 3407, drawn up by ISO/TC 97, Computers and Information Processing.

This standard specifies the essential characteristics of 3.81 magnetic tape cassettes to enable such cassettes to be interchanged between systems using the 7-bit coded character set. The recording system specified uses the 63 flux transitions per mm phase encoded method.

Numeric values in the SI system in this standard may have been rounded during conversion from imperial measurements, and are therefore consistent with, but not exactly equal to the values in the original design which were given using the imperial system. In use, the two should be neither intermixed nor reconverted. However, following the practice in the International standard, imperial values have been given in parentheses.

For the purpose of this Australian standard, the text of ISO 3407 given herein should be modified as follows:

- (a) *Terminology*: The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (b) *Decimal comma*: The decimal point should replace the decimal comma wherever it appears.
- (c) *Cross references*: The references to International Standards should be replaced by references to Australian standards as follows:

<i>Reference to International Standard</i>	<i>Appropriate Australian Standard</i>
ISO 646, 7-bit coded character set for information processing interchange	AS 1776, Information processing—7-bit coded character set for information interchange
ISO 2022, Code extension techniques for use with the ISO 7-bit coded character set	AS 1953, Code extension techniques for use with the standard 7-bit coded character set

© 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 and field of application	4
2 Definitions	4
3 Environment and transportation	5
4 Characteristics of tape	5
4.1 Mechanical properties	5
5 Tape cassette	7
5.1 Identification of cassette sides	7
6 Recording	9
6.1 Method of recording	9
6.2 Equipment	9
6.3 Density of recording	9
6.4 Flux transition spacing	9
6.5 Signal amplitude	9
6.6 Number of elongated gaps	9
6.7 Alignment error	10
6.8 Tape winding torque	10
6.9 Residuals of previous recordings	10
7 Format	10
7.1 Number of tracks	10
7.2 Track dimensions	10
7.3 Track designation	10
7.4 Use of tracks	10
7.5 Location of characters on the tracks	10
7.6 Sequence of recording	10
7.7 Code	10
7.8 Sequence of characters	10
7.9 Data block	10
7.10 Control block	11
7.11 Gaps	11
7.12 Preamble and postamble	11
7.13 Cyclic redundancy check (CRC)	11

FIGURES

Dimensions in millimetres and in inches	12 to 22
--	----------

ANNEXES

A Layer-to-layer adhesion	23
B Measurement of light transmittance	24 to 26

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-