INTERNATIONAL STANDARD

ISO 7343

Second edition 1993-05-15

Cinematography — Two-track photographic sound records on 35 mm motion-picture prints — Positions and width dimensions

Cinématographie — Enregistrement de deux pistes sonores optiques sur copies d'exploitation cinématographiques 35 mm — Positions et dimensions en largeur



ISO 7343:1993(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7343 was prepared by Technical Committee ISO/TC 36, Cinematography.

This second edition cancels and replaces the first edition (ISO 7343:1983), of which it constitutes a technical revision.

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

[©] ISO 1993

Cinematography — Two-track photographic sound records on 35 mm motion-picture prints — Positions and width dimensions

1 Scope

- **1.1** This International Standard specifies the lateral positions and width dimensions of two-track variable area sound records on 35 mm motion-picture prints.
- **1.2** This International Standard specifies the area scanned in the sound reproducer.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2939:1986, Cinematography — Picture image area and photographic sound record on 35 mm motion-picture release prints — Position and dimensions.

3 Positions and dimensions

The positions and dimensions of the two sound records shall be as shown in figure 1 and given in table 1. In all other respects, the sound records shall comply with the requirements of ISO 2939.

4 Sound records

- **4.1** Channel 1 and channel 2 recording and reproducing slit images shall be positioned in line at an angle of $90^{\circ} \pm 5'$ to the reference edge of the film.
- **4.2** Channel 2 shall be recorded in the record nearest the outer edge of the film, as shown in figure 1.
- **4.3** The septum between channel records shall be effectively opaque on prints.

A lighter septum resulting from direct positive recordings being printed on reversal print materials shall not be cause for rejection of prints.

5 Picture-sound displacement

The picture-sound displacement shall be as specified in ISO 2939.

Table 1 — Dimensions

Dimension	mm	in
A ref. B C D ref. E ref. F ref. G max.	5,20 6,04 ± 0,05 6,30 ± 0,05 7,14 6,18 ± 0,03 2,13 0,05	0,205 0,238 ± 0,002 0,248 ± 0,002 0,281 0,243 ± 0,001 0,084 0,002

6 Track usage

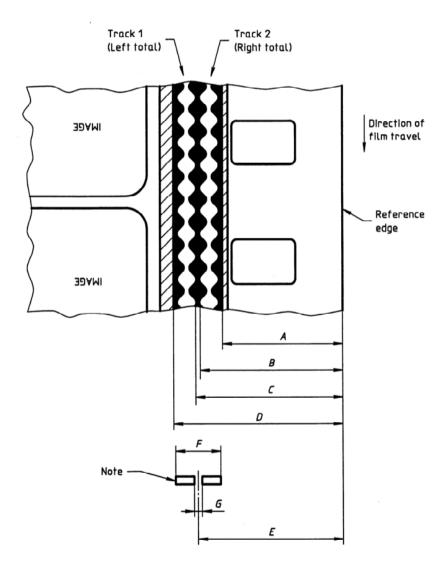
The two tracks specified in this International Standard may be used for either stereophonically related program material or separate, unrelated material such as two languages.

When used for two-channel stereophonic program material, it is common practice to employ an amplitude-phase matrix encoding wherein track 1 is used for the left total signal and track 2 for the right total signal. A left-only signal will then nominally modulate only track 1 and be presented over the left screen loudspeaker and a right-only signal will only

modulate track 2 and be presented over the right screen loudspeaker.

NOTES

- 1 The container and leader of the print having two sound records should be labelled with the above information.
- 2 Dimensions *B* and *C* were chosen to ensure separation of the channel 1 and channel 2 signals upon reproduction. Projector manufacturers will probably want to reduce the guard band on the photo-sensitive device between the channel 1 and channel 2 scanned areas as much as possible so that the projector will be fully compatible with sound records bearing a single channel and made in accordance with ISO 2939.



NOTE — The area scanned by the reproducer represents the area illuminated by the scanning beam and the effective active area of the photo-sensitive device.

Figure 1 — Two photographic sound tracks on 35 mm motion-picture prints







