INTERNATIONAL STANDARD

ISO 7739

Second edition
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Cinematography — Two-track photographic analogue sound records on 16 mm motion-picture prints — Positions and width dimensions

Cinématographie — Enregistrement de deux pistes sonores optiques analogues sur copies d'exploitation cinématographiques 16 mm — Positions et dimensions en largeur

Reference number
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Contents

Page

Foreword ..... **iv**
1 Scope **1**
2 Normative references **1**
3 Positions and dimensions **1**
4 Sound records **1**
5 Picture-sound displacement **1**
6 Track usage **1**

Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 36, *Cinematography*.

This second edition cancels and replaces the first edition (ISO 7739:1983), of which it constitutes a minor revision.

Cinematography — Two-track photographic analogue sound records on 16 mm motion-picture prints — Positions and width dimensions

1 Scope

This International Standard specifies the lateral positions and width dimensions of two-track variable area sound records on 16 mm motion-picture prints.

This International Standard also specifies the area scanned by the sound reproducer.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4243, *Cinematography — Picture image area and photographic sound record on 16 mm motion-picture release prints — Positions 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 ISO 4243.

4 Sound records

4.1 Channel 1 and channel 2 recording and reproducing slit images shall be positioned in line at an angle 90° ± 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 should not be cause for rejection of prints.

5 Picture-sound displacement

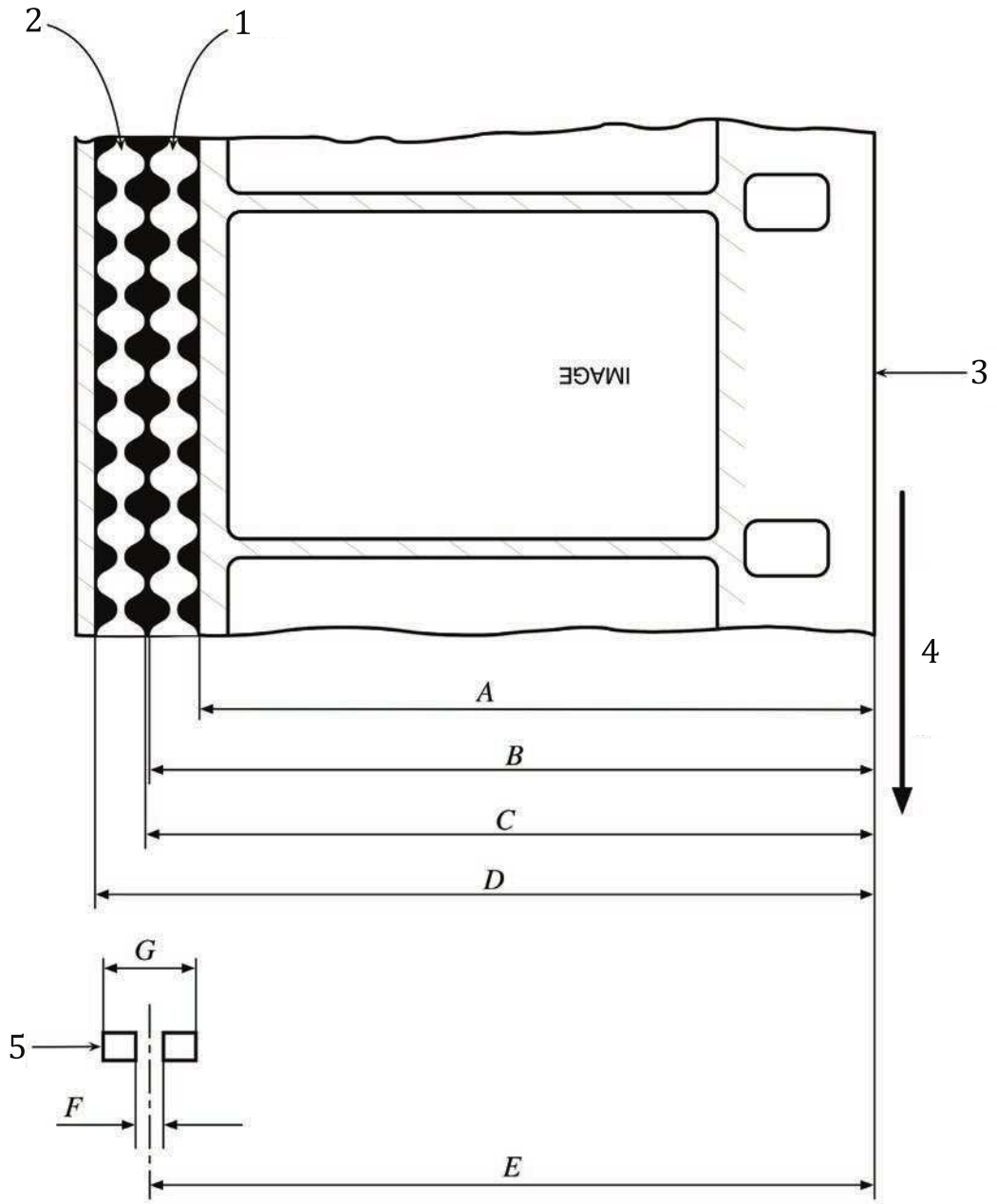
The picture-sound displacement shall be as specified in ISO 4243.

6 Track usage

The two tracks specified in this International Standard may be used for either related stereophonic material or unrelated material. When used for two-channel stereophonic program material, track 1 shall be used for the left (as viewed from the auditorium) loudspeaker channel and track 2 shall be used for the right (as viewed from the auditorium) loudspeaker channel.

It is recommended that the container and leader of the print having two sound records be labelled with the above information.

Dimensions *B* and *C* were chosen to ensure separation of channel 1 and channel 2 signals upon reproduction. Projector manufacturers will probably want to reduce the guard band between 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 4243. However, the crosstalk between them should not be less than 20 dB for stereophonic material, and not less than 26 dB for unrelated material.



Key

1 track 1
2 track 2
3 reference edge
4 direction of film travel
5 area scanned by reproducer

Figure 1 — Two photographic sound tracks on 16 mm motion-picture prints

Table 1 — Dimensions

Dimension	mm	in
A ref.	13,71	0,540
B	14,35 ± 0,05	0,565 ± 0,002
C	14,60 ± 0,05	0,575 ± 0,002
D ref.	15,24	0,600
E ref.	14,48 ± 0,03	0,570 ± 0,001
F max.	0,05	0,002
G ref.	1,80	0,071

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