

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

## 1 Scope and field of application

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

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

## 2 Reference

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 the figure and given in the table. 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  $90^\circ \pm 5'$  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 the figure.

4.3 The septum between channel records shall be effectively opaque on prints.

NOTE — 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 such as two languages. 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.

### NOTES

1 It is recommended that the container and leader of the print having two sound records 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 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 4243. However, the cross-talk between them should not be less than 20 dB for stereophonic material, and not less than 26 dB for unrelated material.

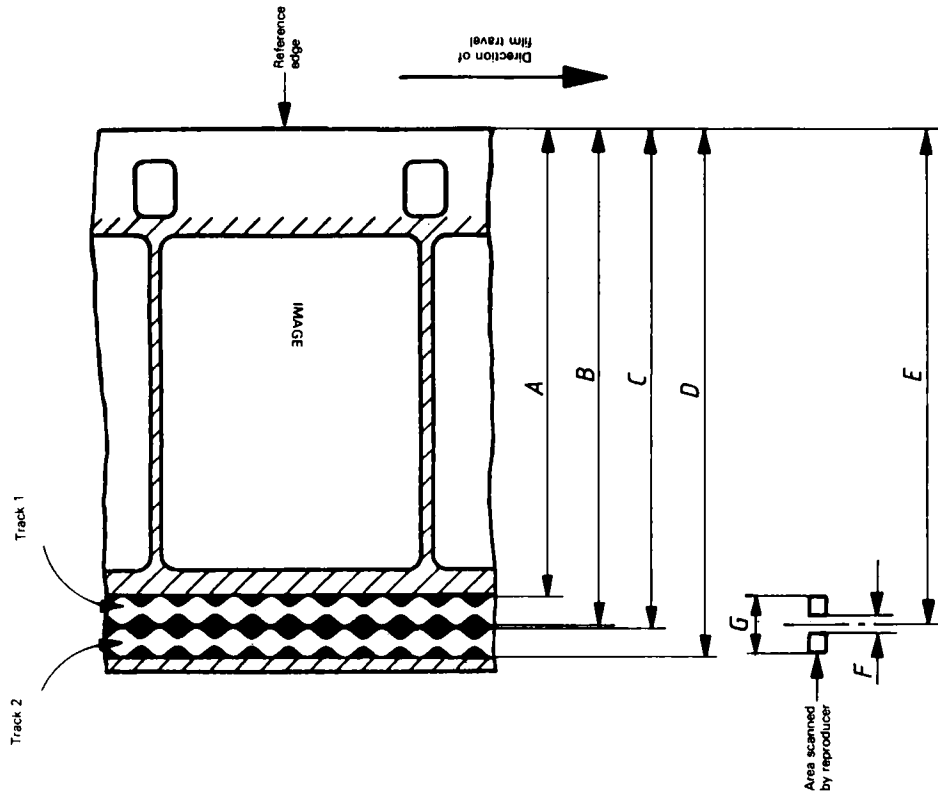


Figure — Two photographic sound tracks on 16 mm motion-picture prints

Table — 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