ANSI PH22.203-1981

American National Standard
dimensions of two-track photographic sound records on 35-mm motion-picture prints

Approved December 8, 1981 Secretariat: Society of Motion Picture and Television Engineers

1. Scope

1.1 This standard specifies the lateral location and dimensions of two-track variable-area sound records on 35-mm motion-picture prints.

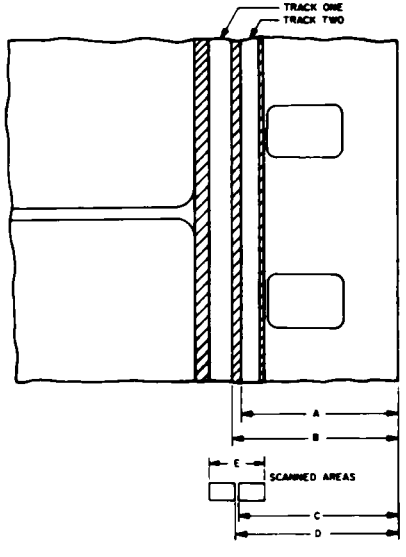
1.2 This standard also specifies the area scanned in the sound reproducer.

2. Sound Records

2.1 The dimensions and locations of the sound records shall be as specified in the figure and table. In all other respects, the sound records shall comply with American National Standard Position, Dimensions and Reproducing Speed of Photographic Sound Records on 35-mm Motion-Picture Release Prints, ANSI PH22.40-1978.

2.2 The Channel 1 and Channel 2 recording and reproducing slit images shall be positioned in line at an angle of 90° ± 5′ to the reference edge of the film.

2.3 Channel 2 shall be recorded in the record nearest the outer edge of the film, as shown in the figure.



Dimensions	Inches	Millimeters
A	0.238 ± 0.002	6.05 ± 0.05
B	0.248 ± 0.002	6.30 ± 0.05
C	0.242 ± 0.001	6.15 ± 0.03
D	0.244 ± 0.001	6.20 ± 0.03
E	0.084 ref	2.13 ref

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2.4 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.

3. Reproducing Speed and Picture-Sound Displacement

Reproducing speed and picture-sound displacement shall be as specified in ANSI PH22.40-1978.

4. Track Usage

The two tracks specified in this 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 one shall be used for the left (as viewed from the auditorium) loudspeaker channel. Track two shall be used for the right loudspeaker channel.

NOTE: Dimensions C and D 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 compatible with sound records made in accordance with ANSI PH22.40-1978.

ANSI PH22.204-1981

American National Standard
dimensions of two-track photographic sound records on 16-mm motion-picture prints

Approved December 8, 1981 Secretariat: Society of Motion Picture and Television Engineers

1. Scope

1.1 This standard specifies the lateral location and dimensions of two-track variable-area sound records on 16-mm motion-picture prints.

1.2 This standard also specifies the area scanned in the sound reproducer.

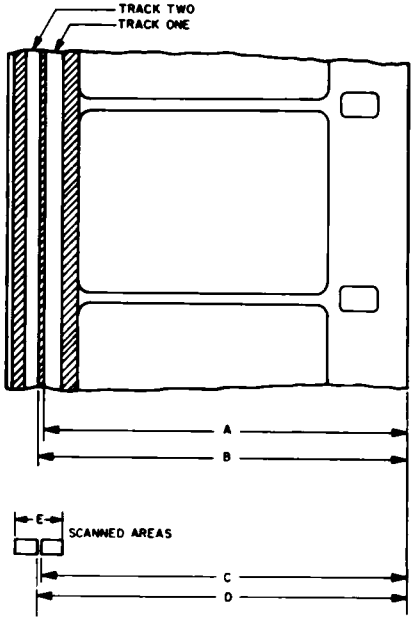
2. Sound Records

2.1 The dimensions and locations of the sound records shall be as specified in the figure and table. In all other respects, the sound records shall comply with American National Standard Dimensions of Photographic Sound Records on 16-mm Motion-Picture Prints, ANSI PH22.41-1975.

2.2 The Channel 1 and Channel 2 recording and reproducing slit images shall be positioned in line at an angle of 90° ± 5′ to the reference edge of the film.

2.3 Channel 2 shall be recorded in the record nearest the outer edge of the film, as shown in the figure.

2.4 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.



Dimensions	Inches	Millimeters
A	0.565 ± 0.002	14.35 ± 0.05
B	0.575 ± 0.002	14.60 ± 0.05
C	0.569 ± 0.001	14.45 ± 0.03
D	0.571 ± 0.001	14.50 ± 0.03
E	0.071 ref	1.80 ref

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3. Reproducing Speed and Picture-Sound Displacement

Reproducing speed and picture-sound displacement shall be as specified in ANSI PH22.41-1975.

4. Track Usage

The two tracks specified in this 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 one shall be used for the left (as viewed from the auditorium) loudspeaker channel. Track two shall be used for the right loudspeaker channel.

NOTE: Dimensions C and D 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 compatible with sound records made in accordance with ANSI PH22.41-1975.