

PROPOSED

SMPTE RECOMMENDED PRACTICE

RP 137

Data Tracks on Low-Dispersion Magnetic Coatings
on 35-mm Motion-Picture Film

1. Scope

This practice specifies the position of three data tracks on 35-mm motion-picture film with a low-dispersion-density magnetic surface coated on the nonimage-forming side of the film. Use of one of the data tracks is also specified. The practice applies to all uses of 35-mm motion-picture film, including camera negative, intermediate, and release print films.

2. Data Tracks

2.1 The lateral location and width of the data tracks shall be as specified in the figure and table.

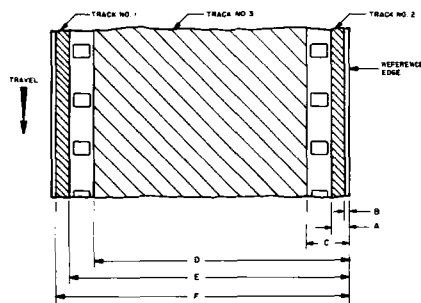
2.1.1 The data tracks shall be referred to by numbers, as shown in the figure, with data track No. 1 farthest from the reference edge. Data track No. 2 shall be the data track nearest the reference edge. Data track No. 3 shall be the data track between the perforations.

2.2 The recording shall be made so that the azimuth of the data track is at an angle of $90^\circ \pm 5'$ to the reference edge of the film.

2.3 The data tracks shall be recorded in such a manner that they can be reproduced properly by reproducing heads whose gaps are positioned along a common plane or in line.

3. Track Usage

3.1 Data track No. 1 shall be designated for the recording of SMPTE time and control code, specified in SMPTE Recommended Practice on Time and Control Codes for 24, 25 or 30 Frame-Per-Second Motion-Picture Systems, RP 136, if the camera frame rate is 24 frames per second. If the frame rate differs, the appropriate time code format shall be used.



As Seen with the Magnetic Surface Toward the Viewer

Dimensions	Inches	Millimeters
A	0.072 ± 0.003	1.83 ± 0.08
B	0.008 max	0.20 max
C	0.179 ± 0.003	4.55 ± 0.08
D	1.207 ± 0.003	30.66 ± 0.08
E	1.306 ± 0.003	33.17 ± 0.08
F	1.369 min	34.77 min

3.2 Data track No. 2 shall be available for the recording of any other data.

3.3 The area designated in the figure as track No. 3 is reserved for noncontact recording and reproduction of a data track or tracks. No format or track location is proposed at this time to encourage development of technology for noncontact recording and reproduction of data tracks.

INTERNATIONAL STANDARD

ISO 2906-1984 (E)

Cinematography — Image area produced by camera aperture on 35 mm motion-picture film — Position and dimensions

1 Scope and field of application

This International Standard specifies the position and dimensions for the image area produced by a camera aperture on 35 mm motion-picture film for rectilinear (non-anamorphic) pictures and for anamorphic pictures having a lateral compression ratio of 2 : 1 and an aspect ratio of 2,35 : 1.

It also gives recommendations for the perforations to be used to position the film in the camera.

2 Dimensions

2.1 The dimensions shall be as shown in the figure and given in the table; they apply to measurements of the image as formed on recently exposed and processed film.

NOTES

1 The "reference edge" in the figure serves as the datum for the specified dimensions. When edge guiding, it is recommended that this edge be used.

2 The dimensions specified are applicable to unshrunk film.

3 It is the purpose of this International Standard to provide a camera image such that the exposed area will always be larger than the maximum projectable image area. Observance of the specified dimensions meets this objective without causing double exposure of the area between the frames.

4 When intended for television, a slightly higher picture height can be transmitted than is usual for theatrical projection. The cinematographer is cautioned to take care to ensure that extraneous unwanted objects are clear of the picture.

2.2 The horizontal edge of the aperture shall be at substantially 90° to the edge of the film, with the vertical edge parallel to the edge of the film.