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# SMPTE STABLE DOCUMENT

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**SMPTE STANDARD****SMPTE 137-2000**Revision of  
ANSI/SMPTE 137-1994

# for Motion-Picture Film (35-mm) — Release Prints — Four Magnetic Audio Records



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**1 Scope**

**1.1** This standard specifies the position, dimensions, reproducing speed, identity, and use of the four magnetic audio records on 35-mm motion-picture release prints.

**1.2** The standard also specifies the longitudinal picture-audio displacement on the film.

**2 Audio records**

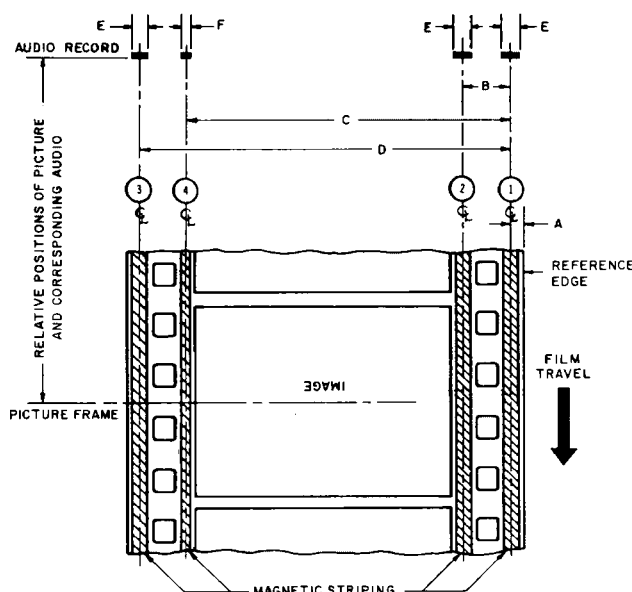
**2.1** The lateral location and width of the magnetic audio records shall be as specified in figure 1 and table 1.

**2.1.1** The records shall be referred to by number, as shown in figure 1, with record No. 1 nearest the reference edge. The left and right channel apply to a listener facing the screen. Record No. 1 shall be used for the left loudspeaker channel. Record No. 2 shall be used for the center loudspeaker channel. Record No. 3 shall be used for the right loudspeaker channel. Record No. 4 shall be used for the surround or auditorium loudspeakers or control signals or both.

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

**2.3** With the direction of film travel as shown in figure 1, the magnetic striping shall be on the surface of the film facing the projector lens.

**2.4** The audio records shall be recorded in such a manner that they can be reproduced properly by reproducing heads whose gaps are positioned along a common plane and in line.

**Figure 1 – Magnetic audio records****Table 1 – Specifications**

| Dimensions | Inches        | Millimeters  |
|------------|---------------|--------------|
| A          | 0.040 ± 0.002 | 1.02 ± 0.05  |
| B          | 0.171 ± 0.002 | 4.34 ± 0.05  |
| C          | 1.148 ± 0.002 | 29.16 ± 0.05 |
| D          | 1.298 ± 0.002 | 32.97 ± 0.05 |
| E          | 0.059 min     | 1.50 min     |
| F          | 0.036 ± 0.002 | 0.91 ± 0.05  |