Magnetic Videotape Recording Glossary

Term Group #2

The terms and definitions presented here were developed by the Nomenclature Subcommittee of the SMPTE Video Tape Recording Committee. The glossary sets forth the terms and definitions agreed to by the committee. Suggestions on deletions, additions and modifications should be sent to Alex E. Alden, Staff Engineer, Society Headquarters, as promptly as possible. The first group was published in the June 1970 issue of the *Journal*. Additional groups will be published as accord is reached.

Audio No. 1 Track. Synonym for Program Audio Track.

Audio No. 2 Track. Synonym for Cue Track.

Banding. A visible difference in the reproduced characteristics in that portion of a picture associated with one head channel, when compared with adjacent areas associated with other head channels. In quadruplex recorders, these differences occur in horizontal bands of 16 or 17 scanning lines when reproducing a 525/60 signal.

Hue. Banding in which the visible difference is in the hue.

Noise. Banding in which the visible difference is in noise level.

Saturation. Banding in which the visible difference is in saturation.

Capstan. The driven spindle in a tape machine, sometimes the motor shaft itself, which rotates in contact with the tape and meters the tape across the tape transport.

Control Track. The area on the tape containing a recording used by a servomechanism primarily to control the longitudinal motion of the tape during playback in a quadruplex system. (See SMPTE Recommended Practice RP 16.)

Control Track Signal. The signal recorded on the control track. (See SMPTE Recommended Practice RP 16.)

Dub.

1. To make a copy of a recording by rerecording.
2. A copy.

RF.

1. To dub by rerecording the RF signal recovered from the tape being copied.
2. A copy made by this process.

Video.

1. To dub by rerecording the video signal recovered from the tape being copied.
2. A copy made by this process.

Edit Pulse. The preferred term is Frame Pulse.

Frame Pulse. A pulse superimposed on the control track signal to identify the longitudinal position of a video track containing a vertical synchronizing pulse. Used as an aid in editing and in the synchronization of some recorders. (See SMPTE Recommended Practices RP 5 and RP 16.)

Head Channel. The signal path unique to each magnetic head. In a quadruplex system, the outputs of four channels combined to provide a continuous RF signal.

Head Clogging. The accumulation of debris on the head, the usual result of which is a loss of signal during playback, degradation, or failure to record during the record mode.

Pole Tips. Those parts of the video head which protrude radially beyond the rim of the head wheel and form the magnetic path to and from the tape.

Splice (Mechanical). A butt-joint between two pieces of tape held together by means of a strip of self-adhesive.

Splice Patch. See Splice (Mechanical).

Splicing Tape. The self-adhesive foil used to secure the butt-joint in a mechanical splice.

Tape, Magnetic. A tape consisting of a flexible base material usually coated on one side with a thin magnetizable layer.

Tracking Control Signal. The preferred term is Control Track Signal.

Transverse Recording. The preferred term is Quadruplex Recording.

Video Tape. Magnetic recording tape intended for recording and playback of television signals.

standards and recommended practices

International Standardization

The International Organization for Standardization (ISO), whose activities in the field of cinematography were described in the November 1967 *Journal* (pp. 1113–1115), approved in December 1968 Recommendations R 890 and 891. ISO Recommendation R 890, Location and Width of the Recording Head for Centre Sound Records on 16mm Perforated Magnetic Film, specifies the center position type of 200-mil sound record on 16mm motion-picture films, a system which is not in general use here in the USA.

ISO Recommendation R 891, Location and Width of the Recording Head for Edge Sound Records on 16 mm Perforated Magnetic Film, parallels and is in accordance with ANSI PH22.97 which specifies a 200-mil record on the nonperforated edge of 16mm film.

Attention is directed to the fact that only the technical content is published here. Copies of the complete recommendations are available from the American National Standards Institute, 1430 Broadway, New York, NY 10018. – A.E.A.

Proposed Withdrawal of American National Standard

The Sound and Standards Committees have recommended the withdrawal of American National Standard Specifications of 8mm Magnetic Sound Reproducing Characteristic, PH22.134-1963.

Withdrawal action was initiated because (a) the test film specified in Section 2 has never been available and (b) there is doubt as to the legitimacy of standardizing the electrical output of the sound reproducing system rather than the acoustical output.

The standard was published in the July 1963 *Journal*.

ommendation R 890 December 1968

LOCATION AND WIDTH OF THE RECORDING HEAD FOR CENTRE SOUND RECORDS ON 16 mm PERFORATED MAGNETIC FILM

1. SCOPE

commendation specifies the location and width of the recording head for a centre sound mm magnetic film perforated along one edge or along both edges.

2. DIMENSIONS

ons should be as specified in the following Figure and Table.

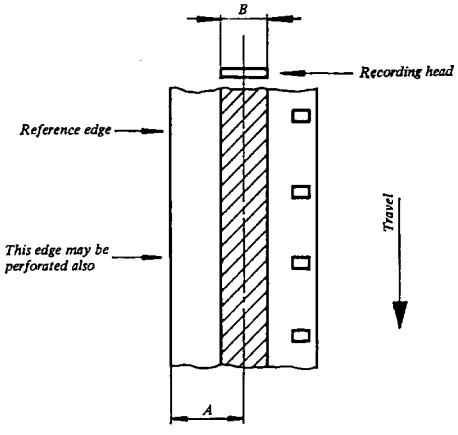

FIGURE – Location and width of recording head

Table of dimensions

Dimension	millimetres	inches
A	8.00 ± 0.05	0.315 ± 0.002
B	$5.00^{+0.10}_{0}$	$0.200^{+0.004}_{0}$

NOTES

1. The millimetre and inch values given for dimensions *B* are not exact conversions but represen practices in the two systems.

2. Recommendation No. 265 of the International Radio Consultative Committee of the Interna communication Union, *Recording standards for the international exchange of television progra recording*, and Publication No. 142 of the International Electrotechnical Commission, *Mag recording on 16 mm and 35 mm film for the international exchange of television programmes*, specification for a centre track but in conjunction with a secondary edge track.

3. MAGNETIC COATING

With the direction of travel as shown in the Figure, the magnetic coating should be on the of the film base.

ISO Recommendation R 891 December 1968

LOCATION AND WIDTH OF THE RECORDING HEAD FOR EDGE SOUND RECORDS ON 16 mm PERFORATED MAGNETIC FILM

1. SCOPE

This ISO Recommendation specifies the location and width of the recording head for an edge sound record on 16 mm magnetic film perforated along one edge.

2. DIMENSIONS

The dimensions should be as specified in the following Figure and Table.

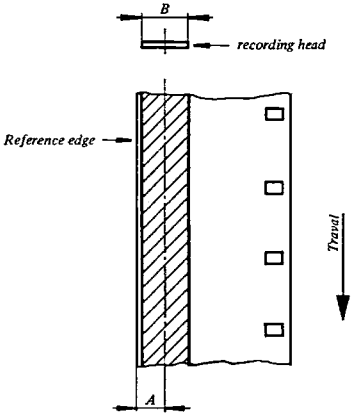

FIGURE. – Location and width of recording head

Table of dimensions

Dimensions	millimetres	inches
A	2.60 ± 0.05	0.103 ± 0.002
B	$5.00^{+0.10}_{0}$	$0.200^{+0.004}_{0}$

NOTE. – The millimetre and inche values given are not exact conversions but represent acceptable practices in the systems.

3. MAGNETIC COATING

With the direction of travel as shown in the Figure, the magnetic coating should be on the upper side of the film base.