Standards and Recommended Practices

Proposed SMPTE Standards

Proposed SMPTE Standards are published for your information. The first page of each appears here.

SMPTE 374M, Mapping of Vertical Ancillary Data Packets and Extended Video Line Data into Video DIF Blocks of DV-Based 50 Mb/s DIF Stream Format ($36.00 US)

SMPTE 375M, Mapping of Vertical Ancillary Data Packets (VANC) into VAUX DIF Blocks of DV-Based 100 Mb/s DIF Stream Format ($30.00 US)

SMPTE 376M, Mapping of Vertical Ancillary Data Packets (VANC) into VAUX DIF Blocks of DV-Based 25 Mb/s or 50 Mb/s Streams and Extended Video Line Data into VAUX DIF Blocks of DV-Based 25 Mb/s Stream ($32.00 US)

Approved SMPTE Standards

The Society recently approved two SMPTE Standards:

ANSI/SMPTE 300-2002, Motion-Picture Color Print Film (35-mm)—Manufacturer-Printed Latent Image Identification Information ($20.00 US)

SMPTE 363.2M-2002, Revision of SMPTE 363M-2002—Declarative Data Essence—Content Level 1 ($36.00 US)

Approved SMPTE Recommended Practices

The Society recently approved two SMPTE Recommended Practices:

RP 200-2002, Revision of RP 200-1999—Relative and Absolute Sound Pressure Levels for Motion-Picture Multichannel Sound Systems—Applicable for Analog Photographic Film Audio, Digital Photographic Film Audio, and D-Cinema ($22.00 US)

RP 210.4-2002, Revision of RP 210.2-2001 SMPTE Recommended Practice—Metadata Dictionary Registry of Metadata Element Descriptions ($36.00 US)

Archived SMPTE Documents

The Society recently archived one document. Engineering documents that relate to technologies no longer in wide use, but which are considered necessary to facilitate reproduction of archival material, may be designated “Archival.” Examples of candidates for Archival status are documents specifying obsolete film and videotape formats. Archival documents shall be retained and published by the Society but shall not be subject to further five-year review. They shall be designated by appending “(Archival)” immediately after the document number and last approval date.

RP 110-1992 Archival, Revision of RP 110-1988, SMPTE Recommended Practice Specifications for an Alignment Test Film for Anamorphic Attachments to 35-mm Motion-Picture Projectors ($20.00 US)

All documents are available from Society Headquarters at the prices shown above.

Carlos V. Girod, Jr., P.E.,
Director of Engineering

SMPTE Standards Subscription Service

The Society provides a Standards Subscription Service to assist firms, libraries, and individuals in establishing and maintaining a complete and current file of approved American National Standards, SMPTE Recommended Practices, and SMPTE Engineering Guidelines in the motion picture, television, and video magnetic recording fields. Through this service, the Society makes automatic distribution to standards subscribers of all new and revised standards, recommended practices, and guidelines that are approved during the calendar year in these fields. Documents are also available either in printed form or on CD-ROM.

For further information, write to:

Standards Subscription Service
SMPTE - Engineering Dept.
595 W. Hartsdale Ave.,
White Plains, NY 10607

PROPOSED SMPTE STANDARD

SMPTE 374M

for Television —
Mapping of Vertical Ancillary Data Packets and Extended Video Line Data into Video DIF Blocks of DV-Based 50 Mb/s DIF Stream Format

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1 Scope

The purpose of this standard is to specify mapping of the extended video line data and the vertical ancillary data packets (VANC) present in the vertical blanking interval (VBI) space of the serial digital interface (SDI) into a 50 Mb/s digital interface format (DIF) structure defined in SMPTE 314M. Format of a VANC packet is defined in SMPTE 291M.

Mapping of the extended video line data permits an increase of video aperture of 7.5 lines in the 525 system and an aperture increase of 9 lines in the 625 system. Mapping of VANC packets provides for carriage of metadata and data essence through the 50 Mb/s DV-based DIF stream structure.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

ANSI/SMPTE 259M-1997, Television — 10-Bit 4:2:2 Component and $4f_{sc}$ Composite Digital Signals — Serial Digital Interface

SMPTE 291M-1998, Television — Ancillary Data Packet and Space Formatting

PROPOSED SMPTE STANDARD

SMPTE 375M

for Television —
Mapping of Vertical Ancillary Data Packets (VANC) into VAUX DIF Blocks of DV-Based 100 Mb/s DIF Stream Format

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1 Scope

This standard specifies the mapping of vertical ancillary data packets (VANC) into the payload area of the DV-based 100 Mb/s digital interface format (DIF) structure VAUX DIF blocks as defined in SMPTE 370M. Metadata and data essence may be contained in VANC packets present in vertical blanking interval (VBI) of the uncompressed high-definition serial digital interface (HD-SDI). The purpose of this standard is to define how such data is mapped into the video auxiliary (VAUX) DIF blocks of the 100 Mb/s DV-based compressed signal stream format. This mapping is applicable to the 1080/60i, 1080/50i, and 720/60p signal formats present on the HD-SDI.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

SMPTE 291M-1997, Television – Ancillary Data Packet and Space Formatting

SMPTE 292M-1998, Television – Bit-Serial Digital Interface for High-Definition Television Systems

SMPTE 370M—2002, Television – Data Structure for DV Based Audio, Data and Compressed Video at 100 Mb/s 1080/60i, 1080/50i, 720/60p

SMPTE RP 168-2002, Definition of Vertical Switching Point for Synchronous Video Switching

PROPOSED SMPTE STANDARD

SMPTE 376M

for Television —
Mapping of Vertical Ancillary Data Packets (VANC) into VAUX DIF Blocks of DV-Based 25 Mb/s or 50 Mb/s Streams and Extended Video Line Data into VAUX DIF Blocks of DV-Based 25 Mb/s Stream

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1 Scope

The purpose of this standard is to define a method to uniformly map metadata and data essence present within vertical ancillary packets (VANC) on the serial digital Interface (SDI), into VAUX DIF blocks of a DV-based 25 Mb/s or 50 Mb/s stream. Additionally, the standard defines a mapping method that results in an increase of the video aperture by one video line (extended video line) for the 25 Mb/s DV-based compression scheme.

The VANC mapping is applicable to 525/60 and 625/50 signal formats that use the 25 Mb/s or 50 Mb/s DV-based compression system. The mapping of the extended video line is applicable only to the 25 Mb/s DV-based stream.

This mapping process requires use of a 10-bit SDI interface for the incoming video signal.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI/SMPTE 259M-1997, Television — 10-Bit 4:2:2 Component and $4f_{sc}$ Composite Digital Signals — Serial Digital Interface

SMPTE 291M-1997, Television — Ancillary Data Packet and Space Formatting

SMPTE 314M-1999, Television — Data Structure for DV-Based Audio, Data and Compressed Video — 25 and 50 Mb/s