

SMPTE Digital Library

Setting the standard for motion imaging technology

IEEE has partnered with the Society of Motion Picture and Television Engineers (SMPTE) to bring nearly a century of groundbreaking standards and peer-reviewed articles in the field of motion imaging to the IEEE *Xplore* digital library.

The SMPTE Digital Library includes the peer-reviewed *SMPTE Motion Imaging Journal*, proceedings from SMPTE conferences, and more than 800 standards, recommended practices, and engineering guidelines, dating back to 1916.

The SMPTE Digital Library:

- Provides key research on creation and delivery of quality images from camera to display
- Opens business opportunities by using industry-accepted standardized methods
- Describes state-of-the-art workflows for content creation and distribution
- Encourages system interoperability of products within the marketplace
- Accelerates innovation by understanding the media technology landscape.
- Increases productivity by providing access to previous research, avoiding redundant efforts

Stay ahead of the curve with the latest publications on applied media technologies by subscribing to the SMPTE Digital Library

SMPTE Content Areas

The collection of titles focuses on leading science and technology areas such as:

- Audio
- Broadband
- Compression
- Control Systems
- Digital Cinema
- Display
- File and Image Formats
- Film
- Networks
- Projection
- Recording
- Test and Measurement
- Time and Sync
- Video

SMPTE Digital Library Quick Facts:

Focuses on innovative content for technologies within the communications, media, and entertainment industries.

Unlimited full-text access to all SMPTE standards, journal articles, and conference papers.

More than 800 standards, including the iconic SMPTE Color Bars Television Test Patterns©, SMPTE Time Code©, and SMPTE Timed Text©

The peer-reviewed *SMPTE Motion Imaging Journal*—more than 20,000 articles with a backfile to 1916.

SMPTE conference proceedings, including the Annual SMPTE Technical Conference and Exhibition—more than 2,000 papers with a backfile to 1969.

Complete package available exclusively on IEEE *Xplore* (coming later in 2015)

About SMPTE

SMPTE is the Oscar® and Emmy® Award-winning society that is a leader in the advancement of the art, science, and craft of the image, sound, and metadata ecosystem, worldwide.

For a custom quote, contact an IEEE Sales Representative

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See how IEEE *Xplore* can help drive your research and innovation. Visit www.ieee.org/smpte-digital-library

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IEEE *Xplore* digital library www.ieee.org/ieeexplore E-mail: onlinesupport@ieee.org



SMPTE Digital Library: Coming Soon to the IEEE *Xplore*[®] Digital Library

SMPTE standards are helping members of the motion-imaging industry and related fields to achieve interoperability, accelerate time to market, and pursue new revenue streams with confidence. Popular SMPTE Standards include:

- **SMPTE Digital Cinema Packaging (DCP):** Industry recommended standards in captioning, object-based audio, stereoscopic 3D, and higher frame rates (HFR).
- **SMPTE Color Bars[®] Television Test Patterns:** THE consistent reference point for more than four decades to ensure color is calibrated correctly on broadcast monitors, programs, and on video cameras, and displayed beautifully for consumers.
- **SMPTE Time Code[®]:** Gives every frame of video its own unique identifying number, making digital editing possible, and enabling the association of other data to make audio and video even more meaningful, accurate, and repeatable.
- **Electro-Optical Transfer Function (EOTF) and High Dynamic Range (HDR):** Enables viewers to see a wider color range from the brightest whites to the darkest blacks, providing a substantial enhancement to HD or UHD TV pictures.
- **Serial Digital Interface (SDI and HD-SDI):** Well-established family of standards in the broadcasting industry for digital video interfaces used in broadcast-grade video.
- **Interoperable Master Format (IMF):** To solve the issue of the creation of multiple versions of a film, all individual assets are stored individually and represent the inventory required to produce any required version.
- **Material eXchange Format (MXF):** A very flexible file transfer format that permits interoperability of content among various applications used in the television production chain, and enhances operational efficiency and creative freedom.
- **SMPTE Transport of High Bit Rate Media Signals over IP Networks:** Creates a standardized framework for the transport of video over Internet Protocol (IP) networks that facilitates multipoint transmission, which is a critical enabler in monetizing content and advertising in new ways across multiple screens such as computers, smart phones, and tablets.
- **Compression Systems:** SMPTE has standardized five VC standards: VC-1 to VC-5 to provide well-reviewed documentation and enhanced interoperability.
- **Coding of Tactile Essence:** Standards regarding the capture, insertion and/or encoding into the broadcast, transmission, decoding and conversion of the tactile or haptic "feeling" and "impact" of a live event.

When You See High-Quality

Motion-Imaging Content, You See SMPTE[®]

Have you ever seen the color bars television test pattern? Watched a live sports broadcast in high definition, or a movie in 3D? Downloaded or streamed content to your device? Gone to see a live sporting or music event? Or used closed captioning?

Then you've most likely seen the Oscar[®] and Emmy[®] Award-winning SMPTE in action! SMPTE standards touch nearly every piece of motion imaging content consumed by billions of viewers around the world, ensuring that content is seen and heard in the highest possible quality on any display.

Coming Soon to the IEEE *Xplore*[®] Digital Library

IEEE *Xplore* includes top-ranked journals and technology research that is cited in patents three times more than any other publisher. With over three million full-text articles and papers, IEEE *Xplore* is your gateway to more than 30% of the world's current literature in electrical engineering, electronics, and computer science.



In 2016, SMPTE will celebrate its centennial year and, undoubtedly, the next 100 years will be very different from the first. Every step along the media chain is changing.

As a leader in the art, sciences, and craft of the image, sound and metadata ecosystem, the SMPTE Digital Library will continue to be the best source for technical information in the media industry.

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