



FOUNDED 1916

EXECUTIVE

Thomas J. Bentsen
Editorial Vice-President

LeRoy E. DeMarsh
Chairman/Board of Editors

Frederick C. Motts
Executive Director

JOURNAL STAFF

Jeffrey Friedman
Editor/Publisher

Joyce R. Hurwitz
Senior Editor

Aileen Moroney
Associate Editor

Mathew V. Kuriakose
Production/Graphics Supervisor

MaryAnn Frusciante
Production Coordinator

Marilyn Waldman
*Advertising/Editorial/Program
Coordinator*

ENGINEERING

Carlos V. Girod, Jr.
Director of Engineering

Mark S. Hyman
Staff Engineer

MARKETING

John Izzo, Jr.
Director of Marketing

Printed in the USA

SMPTE Journal®

VOL. 105, NO. 8

AUGUST 1996

MESSAGE FROM THE PRESIDENT

Hyperlinks and Keywords: Providing Improved Member Services on the Internet
Stanley N. Baron 459

SMPTE TUTORIAL

Searching for the Perfect Aspect Ratio
Mark Schubin 460

APPLICATIONS/PRACTICES PAPER

Digital Video and Audio Transmission Alternatives
Keith Y. Reynolds 479

TECHNICAL PAPERS

The Digital Versatile Disc (DVD): System Requirements and Channel Coding
Kees A. Schouhamer Immink 483

A Noncompressed NTSC Digital Videodisk Recorder Using
Magneto-Optical Media
T. Sekiguchi, T. Matsui, S. Itoi, et al. 490

SMPTE REPORTS

138th SMPTE Technical Conference and World Media Expo
Los Angeles, Calif., Oct. 8-12, 1996 497

31st SMPTE Advanced Motion Imaging Conference
New York, N.Y., Feb. 6-8, 1997 498

The 10 Hottest Technologies in Telcom
Carlos V. Girod, Jr. 499

SMPTE NEWS AND DEPARTMENTS

Sections Officers and Managers as of July 1, 1996 500

Section Meetings 502

News 504

Books, Booklets, Brochures 506

Engineering News 507

Calendar 508

Obituary 508

Professional Services 509

New Products 510

Classified 512

STANDARDS AND RECOMMENDED PRACTICES

Proposed SMPTE Standard 516
SMPTE 299M, Television — 24-Bit Digital Audio Format for HDTV Bit-Serial Interface

Proposed SMPTE Engineering Guideline 523
*EG 32, Emphasis of AES/EBU Audio in Television Systems and Preferred Audio
Sampling Rate*

SMPTE Journal (ISSN: 0036-1682) published monthly by the Society of Motion Picture and Television Engineers, 595 West Hartsdale Ave., White Plains, NY 10607. Periodicals postage paid at White Plains, N.Y., and at additional mailing office. Copyright © 1996 by the Society of Motion Picture and Television Engineers, Inc. All rights reserved. Printed in the U.S.A. No part of this issue may be reproduced without written permission of the publisher. Statements and opinions expressed in articles or editorials in the *SMPTE Journal* are expressions of contributors and do not necessarily represent the policies or opinions of the Society. Advertisements appearing in this publication are the sole responsibility of the advertiser. Subscription rates: SMPTE members, \$20.00 included in membership dues; nonmembers, U.S., \$90.00; elsewhere, \$100.00; airmail surcharge in addition to nonmember rates are: Europe \$50.00, Asia \$65.00. Single copy, \$10.00. MEMBERSHIP in SMPTE is available according to qualifications at the following annual dues: Active Member, \$80.00; Student Member, \$25.00. All members receive the *SMPTE Journal* as part of membership.

POSTMASTER: Send change of address to *SMPTE Journal*, 595 West Hartsdale Ave., White Plains, NY 10607-1824.