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Informative Guidance for Stereoscopic Video

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1.0 SCOPE

This document provides informative guidance for the construction or production of stereoscopic 3D programming material intended for transmission or distribution using the frame-compatible stereoscopic 3D format defined in part 1 [SCTE 187-1] and part 2 [SCTE 187-2] of this standard.

2.0 INFORMATIVE REFERENCES

The following documents may provide valuable information to the reader but are not required when complying with this standard.

2.1 SCTE References

[SCTE 187-1] SCTE 187-1 201x Stereoscopic 3D Formatting and Coding for Cable

[SCTE 187-2] SCTE 187-2 201x Stereoscopic 3D PSI Signaling

2.2 Standards from other Organizations

[ST-0428-1] SMPTE ST-0428-1-2006, "D-Cinema Distribution Master - Image Characteristics (2048 x 1080)"

2.3 Published Materials

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3.0 COMPLIANCE NOTATION

"SHALL"	This word or the adjective "REQUIRED" means that the item is an absolute requirement of this specification.
"SHALL NOT"	This phrase means that the item is an absolute prohibition of this specification.

"SHOULD"	This word or the adjective "RECOMMENDED" means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighted before choosing a different course.
"SHOULD NOT"	This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.
"MAY"	This word or the adjective "OPTIONAL" means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.

4.0 DEFINITIONS AND ACRONYMS

FC-S3D	Frame-Compatible Stereoscopic Three-Dimensional
HIT	Horizontal Image Translation
PSI	Program-Specific Information
PMT	Program Map Table
SbS	Side-by-Side
TaB	Top-and-Bottom
ZPS	Zero Parallax Setting

Frame-Compatible Stereoscopic Three-Dimensional (FC-S3D): Refers to video content composed of left and right stereoscopic image pairs assembled into single packed frames for delivery through legacy video distribution systems. The left and right image pair are typically subject to a filtering, decimation and formatting process to generate a packed frame that has the same pixel count as the original left or right frame. A reverse of this process is performed to reconstruct the full stereoscopic image prior to display. Examples of frame-compatible formats include top-bottom and side-by-side.

5.0 INTRODUCTION

This standard is part three of a three-part standard that describes the use of stereoscopic, three-dimensional (S3D) video programming using a frame-compatible delivery mechanism for cable systems in North America. In many ways the FC-S3D signals can be processed and handled in the same way as flat (2-dimensional) video programming, and hence it is described as *frame-compatible*. The purpose of this three-part standard is to define those parts that are necessarily different from conventional (2-dimensional) video programming.