ANSI/CEA Standard

Data Services on the Component Video Interfaces

ANSI/CEA-805-D

November 2008

Approved American National Standard

ANSI

CEA

Consumer Electronics Association

www.CE.org

NOTICE

Consumer Electronics Association (CEA®) Standards, Bulletins and other technical publications are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers, facilitating interchangeability and improvement of products, and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his particular need. Existence of such Standards, Bulletins and other technical publications shall not in any respect preclude any member or nonmember of CEA from manufacturing or selling products not conforming to such Standards, Bulletins or other technical publications, nor shall the existence of such Standards, Bulletins and other technical publications preclude their voluntary use by those other than CEA members, whether the standard is to be used either domestically or internationally.

Standards, Bulletins and other technical publications are adopted by CEA in accordance with the American National Standards Institute (ANSI) patent policy. By such action, CEA does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the Standard, Bulletin or other technical publication.

Note: The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights.

By publication of this standard, no position is taken with respect to the validity of this claim or of any patent rights in connection therewith. The patent holder has, however, filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license. Details may be obtained from the publisher.

This CEA Standard is considered to have International Standardization implication, but the International Electrotechnical Commission activity has not progressed to the point where a valid comparison between the CEA Standard and the IEC document can be made.
This Standard does not purport to address all safety problems associated with its use or all applicable regulatory requirements. It is the responsibility of the user of this Standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before its use.

(Formulated under the cognizance of the CEA **R4.8 DTV Interface Subcommittee**.)
Published by
©CONSUMER ELECTRONICS ASSOCIATION 2011
Technology & Standards Department
www.CE.org

CONTENTS

Figures

Tables

FOREWORD

This standard, CEA-805-D, describes a method for carrying data services on analog Component Video Interfaces (CVI).

Methods for carrying Copy Generation Management System (CGMS-A), Analog Protection System (APS) and Redistribution Control Information, among other items, on CVI are described. These portions of CEA-805-D do not describe a complete content protection system; however, it is envisioned that such information as described in CEA-805-D could serve as a building block for such a system.

This standard was developed under the auspices of the Consumer Electronics Association Technology & Standards R4.8 DTV Interface Subcommittee.

CEA-805-D supersedes CEA-805-C.

Data Services on the Component Video Interfaces

1 Scope

This standard, CEA-805-D, specifies how data services are carried on analog Component Video Interfaces (CVI), as described in CEA-770.2-C and CEA-770.3-C. CEA-805-D applies to all CE devices carrying data on the CVI vertical blanking interval (VBI). All CEA-805-D references to component video and/or component video interfaces are analog only, and no reference to digital is implied.

CEA-805-D addresses the signal format and data structure of information when carried by means of the VBI of standard definition progressive and high definition YP_BP_R-type component video signals. It is also intended to be usable when the YP_BP_R signal is converted into other component video interfaces including RGB and VGA.

CEA-805-D is designed to be extensible to future data, and even future higher bandwidth data.

Although CEA-805-D specifies only how data is carried on 480i component video interfaces, in practice, the same signals are typically present on 480i composite video outputs. In addition, see Annex A (Informative) for information concerning data integrity during signal format conversions.

2 References

2.1 Normative References

The following standards contain provisions that, through reference in this text, constitute normative 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 listed in Section 2.1.1.

2.1.1 Normative Reference List

CEA-608-E, Line 21 Data Service (April, 2008)

CEA-770.2-D, Standard Definition TV Analog Component Video Interface (April, 2007)

CEA-770.3-D, High Definition Component Video Interface (February, 2008)

IEC 61880: (1998-01), Video System (525/60) Video and Accompanied Data Using the Vertical Blanking Interval—Analogue Interface

2.1.2 Normative Reference Acquisition

CEA Standards:

- Global Engineering Documents, World Headquarters, 15 Inverness Way East, Englewood, CO USA 80112-5776; Phone 800-854-7179; Fax 303-397-2740; Internet http://global.ihs.com ; Email global@ihs.com

IEC Standards:

- Global Engineering Documents, World Headquarters, 15 Inverness Way East, Englewood, CO USA 80112-5776; Phone 800-854-7179; Fax 303-397-2740; Internet http://global.ihs.com; Email global@ihs.com
- IEC Central Office, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland; Phone +41 22 919 02 11; Fax +41 22 919 03 00; Internet http://www.iec.ch ; Email pubinfor@iec.ch

2.2 Informative References

The following standards contain provisions that, through reference in this text, constitute informative 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 listed in Section 2.2.1.

CEA-2020, Other VBI Waveforms, August 2006