# ANSI/CEA Standard

Data Services on the Component Video Interfaces

ANSI/CEA-805-E

August 2013





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(Formulated under the cognizance of the CEA **R4.8 DTV Interface Subcommittee**.)

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### **FOREWORD**

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

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

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

CEA-805-E supersedes CEA-805-D.

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CEA-805-E

## **Data Services on the Component Video Interfaces**

#### 1 Scope

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

This standard 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.

This standard is designed to be extensible to future data, and even future higher bandwidth data.

Although this standard specifies only how data is carried on component video interfaces, in practice, the same signals are typically present on 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.

#### 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.

CEA-2020, Other VBI Waveforms, August 2006

IEC 61880-2: (2002-09) Video System (525/60) Video and Accompanied Data Using the Vertical Blanking Interval -- Part 2 525 Progressive Scan System