

ANSI/CTA Standard

Other VBI Waveforms

ANSI/CTA-2020 R-2014

(Formerly ANSI/CEA-2020 R-2014)

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**Consumer
Technology
Association**

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(Formulated under the cognizance of the CTA **R4.3 Television Data Systems Subcommittee**.)

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FOREWORD

This standard, CEA-2020, defines four VBI waveforms in commercial use and defined by Nielsen and Gemstar TV Guide.

This standard was developed under the auspices of the Consumer Electronics Association (CEA) R4.3 Data Systems Subcommittee.

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Other VBI Waveforms

1 Scope

This standard, CEA-2020, specifies four Vertical Blanking Interval (VBI) waveforms in commercial use. The electrical properties of the waveforms are covered, but the meaning of the payload data is not.

The waveforms apply to 525-line, interlaced (i.e. 480i) analog television signals.

The waveforms may be present on analog inputs and analog outputs, but no conformance requirements about the actual presence of the waveforms are defined in CEA-2020.

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-C, Line 21 Data Services, August 2005

SMPTE 170M, SMPTE Standard for Television—Composite Analog Video Signal—NTSC for Studio Applications, 2004

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

SMPTE Standards:

- Society of Motion Picture and Television Engineers (SMPTE), 3 Barker Ave, White Plains, NY 10601; Phone 914-761-1100; Fax 914-761-3115; Internet <http://www.smpte.org>

2.2 Informative References

2.2.1 Informative Reference List

CEA-805-C, Data on the Component Video Interfaces, April 2006

CEA-516, Joint EIA/CVCC Recommended Practice for Teletext: North American Basic Teletext Specification (NABTS), 1988

IEC 61880 (1998-01), Video systems (525/60) – Video and accompanied data using the vertical blanking interval – Analogue interface

2.2.2 Informative 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 Varembe, 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

3 Definitions