CEA Standard

Joint EIA/CVCC Recommended Practice for Teletext: North American Basic Teletext Specification (NABTS)

CEA-516 R-2008

May 1988

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.

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's **R4 Video Systems Committee**.)

Published by

©CONSUMER ELECTRONICS ASSOCIATION 2009
Technology & Standards Department
1919 S. Eads Street
Arlington, Virginia 22202

PRICE: Please call IHS
USA and Canada (1-800-854-7179)
International (303-397-7956)
http://global.ihs.com

Printed in U.S.A.

JOINT EIA/CVCC/RECOMMENDED PRACTICE FOR
TELETEXT:NORTH AMERICAN BASIC TELETEXT SPECIFICATION

(NABTS)

TABLE OF CONTENTS

TABLE OF CONTENTS (con't)

TABLE OF CONTINUED (con't)

PREFACE

This preface is not part of the standard

This standard for the North American Basic Teletext Specification (NABTS) is published jointly by the Electronic Industries Association (EIA) and the Canadian Videotext Consultative Committee (CVCC). This specification represents one of three major teletext systems in use today. The publication of this standard is to document the NABTS to assist those desiring to implement the service and is not an endorsement of NABTS over any other system/service.

The NABTS is based on the following documents:

[1] “North American Broadcast Teletext Specification” published by CBS, June 22,1981

[2] Provisional “Broadcast Specification 14” Government of Canada, Department of Communication, June 19,1981.

[3] Joint ANSI (BSR X3. 110)/CSA (T500) Standard “Video/Teletext Presentation Level Protocol Syntax (North American PLPS)”, 1983 (NALPS).

[4] “ Characteristics of Teletext Systems” CCIR Report 957, Vol. XI, Part 1, Broadcast Service(Television), XVth Plenary Assembly, Geneva 198

JOINT EIA/CVCC RECOMMENDED PRACTICE FOR TELETEXT: NORTH AMERICAN BASIC TELETEXT SPECIFICATION (NABTS)

(From EIA/ IS-14 and Standards Proposal No. 1966, formulated under the cognizance of the EIA Broadcast Television Systems (BTS) Teletext Steering Committee and the Canadian Videotex Consultative Committee (CVCC) Teletext Subcommittee.)

Introduction

This document contains the technical description of the transmission technique, coding language, and user interface for one-way broadcast teletext-service applications in North America.

The first seven chapters in this specification generally correspond to the seven layers in the Open Systems Interconnection (OSI) basic reference model (chapter 1 corresponds to layer 1, etc.), however not all parts of each chapter necessarily correspond to the appropriate layer.

For reference the seven layers, and a summary of their most important functions, are:

1 – Physical	Provides the mechanical and electrical provisions for the physical interconnection
2 – Link	Provides the means for establishing and maintaining data links between network entities
3 – Network	Provides the means for exchange of network service data units over a network
4 – Transport	Provides a universal transport mechanism for lower level protocol
5 – Session	Provides for the binding and unbinding of two presentation entities
6 – Presentation	Provides the method of coding and presenting the information
7 – Application	Invokes the protocol directly serving the user

For a full specification of the OSI model see ISO 7498-1983, and CCIT X.200.

A fundamental concept embodied in this teletext standard is that of maintaining the distinction between the means of transporting the data and the coding of the teletext message. The data transmission system does not impose any restriction on the data which can be transmitted. Similarly, the coding language is independent of the transmission technique. For example, the presentation technique of this coding language may be used with conventional modems on a switched telephone network.

Because of this careful separation of functions, similar to the convention recommended by International Radio Consultative Committee (CCIR) and the International Telegraph and Telephone Consultative committee (CCITT), the present standard allows advances in technology without making basic level equipment obsolete.

The transmission system is defined in chapters 1, 2, 3 and 4. That part of the standard dealing with the coding and utilization of the teletext message is defined in chapters 5, 6 and 7. Chapter 6