

# ANSI/CEA Standard

## Connection Color Codes for Home Theater Systems

ANSI/CEA/CEDIA-863-B

February 2011



**CEA**<sup>®</sup>  
Consumer Electronics Association  
[www.CE.org](http://www.CE.org)

## NOTICE

Consumer Electronics Association (CEA<sup>®</sup>) 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/CEDIA **R10 Residential Systems Committee.**)

Published by

©CONSUMER ELECTRONICS ASSOCIATION &  
CUSTOM ELECTRONIC DESIGN AND INSTALLATION ASSOCIATION 2011

Technology & Standards Department  
1919 S. Eads Street  
Arlington, Virginia 22202

**PRICE: Please call Information Handling Services, USA and Canada (1-800-854-7179)  
International (303-397-7956),  
<http://global.ihs.com>**

OR

**The CEDIA Bookstore (1-800- 669-5329) or (317- 328-4336)  
<http://www.cedia.net/resources/>**

All rights reserved  
Printed in U.S.A.

PLEASE!

DON'T VIOLATE  
THE  
LAW!

This document is copyrighted by the Consumer Electronics Association (CEA<sup>®</sup>)/ Custom Electronic Design and Installation Association (CEDIA<sup>®</sup>) and may not be reproduced without permission.

Organizations may obtain permission to reproduce a limited number of copies by entering into a license agreement. For information contact:

Information Handling Services  
15 Inverness Way East  
Englewood, Colorado 80112-5704  
or call U.S.A. and Canada 1-800-854-7179, International (303) 397-7956  
See <http://global.ihs.com> or email [global@ihs.com](mailto:global@ihs.com)

OR

The CEDIA Bookstore  
7150 Winton Drive  
Suite 300  
Indianapolis, IN 46268  
(1-800- 669-5329) or (317- 328-4336)  
<http://www.cedia.net/resources/>



The following members of the CEA/CEDIA R10 WG1 Home Theater Audio Working Group contributed to the development of this document:

Rich Annibaldi, Pioneer  
Tom Cumberland, Axiom Audio  
Anthony Grimani, Performance Media Industries, Ltd.  
Joshua Kairoff, Display Engineering Inc.  
Mario Leone, Electronic Solutions, Inc.  
Floyd E. Toole, Harman Consumer Group  
Todd Welti, Harman International Industries  
Jason Zagnit, Polk Audio  
Walt Zerbe, Russound

## **FOREWORD**

This standard was developed under the auspices of the Consumer Electronics Association (CEA) R3 Audio Systems Committee, and is now maintained by the joint CEA and Custom Electronic Design & Installation Association (CEDIA) R10 Residential Systems Committee.

(This page intentionally left blank.)

## Contents

<b>1 Scope</b> .....	<b>1</b>
<b>2 References</b> .....	<b>1</b>
<b>2.1 Informative References</b> .....	<b>1</b>
<b>2.1.1 Informative Reference List</b> .....	<b>1</b>
<b>2.1.2 Informative Reference Acquisition</b> .....	<b>1</b>
<b>3 Color Palette</b> .....	<b>1</b>
<b>4 Connection Color-Codes</b> .....	<b>2</b>
<b>5 Shape-Defined Connections</b> .....	<b>4</b>
<b>6 Other Signal Connections</b> .....	<b>4</b>
<b>7 Implementation</b> .....	<b>5</b>

## Tables

<b>Table 1: Recommended Color Palette</b> .....	<b>1</b>
<b>Table 2: Line-Level and Speaker Connections</b> .....	<b>2</b>
<b>Table 3: Miscellaneous Connections</b> .....	<b>4</b>
<b>Table 4: Other Signal Connections</b> .....	<b>4</b>

## Figures

<b>Figure 1: Overhead View of Speaker Locations</b> .....	<b>3</b>
---	----------



(This page intentionally left blank.)



# Connection Color Codes for Home Theater Systems

## 1 Scope

This standard defines the colors for marking connections commonly used for electronic devices in a home theater system. This standard adds continuity to installation information, and ensures consistency of information to installers.

Refer to CEA/CEDIA-897 which defines the colors for marking F-Connectors, commonly used for electronic devices in a home television system. Refer to ANSI/CEA-803-A which defines the terms, abbreviations, and color codes applicable to automotive vehicle and automotive aftermarket audio and security equipment. Refer to CEA/CEDIA-CEB22 which addresses optimal speaker placement in a home theater system.

## 2 References

### 2.1 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 2.1.1.

#### 2.1.1 Informative Reference List

ANSI/CEA-803-A, Mobile Electronics Wiring Designations for Audio and Vehicle Security, April 2007  
 CEA/CEDIA-897, F-Connector Color Coding for Home Television Systems, March 2010  
 CEA/CEDIA-CEB22, Home Theater Recommended Practice: Audio Design, March 2009

Pantone® Color Formula Guide

#### 2.1.2 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](mailto:global@ihs.com)

Pantone® Color Formula Guide

- Pantone, Inc., 590 Commerce Blvd., Carlstadt, New Jersey, 07072-3098 USA; Phone 201 935 5500; Fax 201 896 0242; Internet <http://www.pantone.com>; Email [customer\\_service@pantone.com](mailto:customer_service@pantone.com)

## 3 Color Palette

The following is a reference list for manufacturing conformity. The colors in Table 1 are recommended from the Pantone® Color Formula Guide. The exact shades or hues are not specified. All color numbers are followed by a "C" denoting swatches for coated printing stock. The color examples shown in Table 1 may vary in appearance depending upon video display calibration, printer, paper quality, etc. For exact color references, users should consult a recently published Pantone® color guide.

**Table 1: Recommended Color Palette**

Color Name	Pantone® Specification	Example
White	Not applicable	
Red	032 C	