

ICS 33.160
CCS M 64



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17953-2012

Replacing GB/T 17953-2000

**Interface for 4: 2: 2 digital component video signals in standard
definition television**

标准清晰度电视4:2:2数字分量视频信号接口

(English Translation)

Issued on: June 29, 2012

Implemented on: October 1, 2012

Issued by: Standardization Administration of China

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Foreword

This standard rule according to GB/T 1.1-2009 given draft.

This standard replaces GB/T 17953-2000 "4.2.2 digital component video signal interface", compared with the GB/T 17953-2000 the main changes are as follows.

- Subject to the original standard was revised, clearly define the scope of this standard;
- The original standard format has been revised and adjusted;
- Original standard 4.1 adds illustration;
- Original Standard 4.2.4 "Each timing reference signal generated by the four-word, the order FF0000XY" to "each timing group the reference signal from the four-word, order 3FF000000XYZ";
- The bit serial interface electrical characteristics of the rise and fall times of the allowable range from the "0.75ns to 1.50ns" to "0.40ns to 1.50ns";
- 6.6.2.4 delete the original standard input jitter;
- Increase in the content of 5.7 cable interface features;
- Delete the original criteria in Appendix A.

This standard uses redrafted law revision adopted ITU-RBT.656-5.2007 "in ITU-RBT.601 in 4.2.2 mode Digital 525 line and 625-line television under the system of component video signal interface "in the section on 625-line television systems, and the bit serial Rise and fall times of the allowable range of electrical characteristics of the interface by "0.75ns to 1.50ns" to "0.40ns to 1.50ns".

This standard was proposed by the State Administration of Radio, Film and Television.

This standard by the National Film and Television Broadcasting Standardization Technical Committee (SAC/TC239) centralized.

This standard was drafted. the State Administration of Radio, Film Radio and Television Planning Institute.

1 Scope

This standard specifies a 625-line standard definition digital television system operating at GB/T 14857-1993 in 4.2.2 mode Component video signal interface.

This standard applies to digital work under GB/T 14857-1993 in 4.2.2 mode component video signal interface.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 3174-1995 PAL-D television broadcasting system specifications Limits and methods of measurement of radio disturbance GB 9254-2008 Information Technology Equipment (IEC/CISPR22.2006, IDT) GB/T 14857-1993 specifications of encoding parameters of digital television studio (ITU-RBT.601-3.1992, EQV) GB/T 20562-2006 studio serial digital signal jitter parameters and methods of measurement (ITU-RBT.1363-1.1998, MOD) GY/T160-2000 digital component studio interfaces ancillary data signal format GY/T161-2000 transmission of digital TV within the ancillary data space of digital audio and ancillary data specifications GY/T163-2000 digital television transmission standard in the ancillary data space of time code and control code GY/T164-2000 studio Serial digital fiber transmission system SJ/T11072-1996 BNC RF coaxial connector ISO 2110 data communication -25 pin DTE/DCE interface connector and pin assignment (Datacommunication-25-pin DTE/DCEinterfaceconnectorandpinassignments) ITU-RBT.803.1992 digital television studio equipment to avoid interference (Theavoidanceofinterferencegenera-tedbydigitaltelevisionstudioequipment)

3.1 Terms and Definitions

The following terms and definitions apply to this document.

Interface

Way connection between a single sender and a single receiver between, including mechanical and digital signals through two parts. There are currently and Line interface and serial interface in two ways. Through digital signal interface includes a video signal, digital blanking data, the timing reference signal and the auxiliary signal.

3.2 Acronyms

The following abbreviations apply to this document.