

# Interfaces for DVB-IRD

The European Standard EN 50201:1998 has the status of a  
British Standard

ICS 33.160.20; 33.160.25

## National foreword

This British Standard is the English language version of EN 50201:1998.

The UK participation in its preparation was entrusted by Technical Committee EPL/100, Audio, video and multimedia systems and equipment, to Subcommittee EPL/100/3, Equipment and systems in the field of audio, video and audiovisual engineering, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

### Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled "International Standards Correspondence Index", or by using the "Find" facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 16, an inside back cover and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

This British Standard, having been prepared under the direction of the Electrotechnical Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 November 1999

© BSI 11-1999

### Amendments issued since publication

Amd. No.	Date	Comments

---

ICS 33.160.20; 33.160.25

Descriptors: telecasting, television receivers, decoders, digital technics, video equipment, interfaces, modems, video signals, specifications

English version

## Interfaces for DVB-IRD

Interfaces pour décodeur DVB intégré

Schnittstellen für DVB-IRD

This European Standard was approved by CENELEC on 1998-08-01.

CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

### **CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B-1050 Brussels**

## Foreword

This European Standard was prepared by the DVB-TM ad hoc group on Physical Interfaces, together with the former Technical Committee CENELEC TC 203, Electronic entertainment and educational systems for household and similar use (in July 1998 TC 203 has become part of TC 206, Consumer equipment for entertainment and information and related sub-systems).

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50201 on 1998-08-01.

The following dates were fixed:

Annexes designated "informative" are given for information only.

In this standard annexes A and B are informative.

— latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-08-01

— latest date by which national standards conflicting with the EN have to be withdrawn (dow) 1999-08-01

Annexes designated "informative" are given for information only.

In this standard annexes A and B are informative.

## Contents

	Page
Foreword	2
1 Scope	3
2 Normative references	3
2.1 IEC Publications	3
2.2 CENELEC Publications	3
2.3 Publications by ETSI	3
2.4 Industrial publications	3
3 Explanation of terms and definitions	4
4 Interface requirements for DVB-IRDs	4
4.1 RF input in the satellite IF range	4
4.2 RF i/o in the vhf/uhf range	4
4.3 Modem interface	4
4.4 Video signals	5
4.5 Audio signals	6
4.6 Data signals output	6
4.7 Physical interfaces for control signals	7
4.8 Interface for detachable conditional access module	7
4.9 Connectors	7
Annex A (informative) Configuration examples	9
Annex B (informative) CATV Channel assignments	16

## 1 Scope

This specification is an application standard, identifying recommended interfaces for connections of digital video broadcast integrated receiver decoder (DVB-IRD) equipment. If a recommended interface is supported, then the full specification of that interface, which may include options, applies. Interfaces not mentioned in this document are not excluded, and especially interfaces which are under development at the time of writing of this document may be added at a later stage. For mechanical and electrical details of the interfaces, reference is made to existing standards of IEC or CENELEC wherever possible, or standards which are known to be in an advanced state of development.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

### 2.1 IEC Publications

IEC 60807-9, *Rectangular connectors for frequencies below 3 Mhz — Part 9: Detail specification for a range of peritelevision connectors.*

IEC 60933-1, *Audio, video and audio-visual systems, interconnections and matching values — Part 1: 21 contact connector for video systems, application No. 1.*

IEC 61883, *Connectors used in the field of audio, video and audio-visual engineering.*

IEC 61937, *Interface for multichannel non-PCM encoded audio bitstreams.*

NOTE This standard is being developed within the Program of Work of WG11 of IEC/SC100C. At the time of this writing the latest version is the first draft attached to 100C/196/CDV.

### 2.2 CENELEC Publications

EN 50049-1, *Domestic and similar electronic equipment interconnection requirements: Peritelevision connector.*

EN 50157-1, *Domestic and similar electronic equipment interconnection requirements: AV link — Part 1: General.*

EN 50157-2-1, *Part 2-1: Signal quality matching and automatic selection of source devices.*

EN 50221, *Common interface specification for conditional access and other digital video broadcasting decoder applications.*

EN 60169-24, *Radio-frequency connectors — Part 24: Radio frequency coaxial connectors with screw coupling, typically for use in 75 Ohm cable distribution systems (type F).* (IEC 60169-24)

EN 60933-5, *Audio, video and audio-visual systems, interconnections and matching values — Part 5: Y/C connector for video systems.* (IEC 60933-5)

EN 60958, *Digital audio interface.* (IEC 60958)

EN 61030, *Audio, video and audio-visual systems — Domestic digital bus (D2B).* (IEC 61030)

EN 61319-1, *Interfaces for satellite receiving equipment — Part 1: Europe.* (IEC 61319-1)

HD 134.2, *Radio frequency connectors — Part 2: coaxial unmatched connector.* (IEC 60169-2)

### 2.3 Publications by ETSI

ETS 300 158, *Satellite Earth Stations; television receive-only, FSS.*

ETS 300 249, *Satellite Earth Stations; television receive-only, BSS.*

ETS 300 784, *Satellite Earth Stations; television receive only FSS and BSS.*

ETS 300 421, *Digital broadcasting systems for television, sound and data services; Framing structure, channel coding and modulation for 11/12 GHz satellite services.*

ETS 300 429, *Digital broadcasting systems for television sound and data services; Framing structure, channel coding and modulation for cable systems.*

ETS 300473, *Digital broadcasting systems for television sound and data services; Satellite Master Antenna Television (SMATV) distribution systems.*

ETR 154, *Third edition: Digital Video Broadcasting (DVB); implementation guidelines for the use MPEG-2 Systems, Video and Audio in satellite, cable and terrestrial broadcasting applications.*

### 2.4 Industrial publications

PCMCIA, *PC Card Standard, release 3, Personal Computer Memory Card International Association, Sunnyvale, Cal.*

IEEE 1394, *Standard for a high performance serial bus.*

IEEE 1284, (1994), *Signalling method for a bi-directional parallel peripheral interface for personal computers.*

ANSI/EIA, RS232, *Interface between data terminal equipment and data-circuit terminating equipment employing serial binary data interchange.*

NOTE The latest version of this standard is published as RS232E (1991).