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INTERNATIONAL STANDARD

Characteristics of DAB receivers

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CHARACTERISTICS OF DAB RECEIVERS

FOREWORD

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International Standard IEC 62104 has been prepared by technical area 1, Terminals for audio, video and data services and contents, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This third edition cancels and replaces the second edition published in 2003. This edition constitutes a technical revision.

The main changes with respect to the previous edition are as follows.

- The document has been updated in line with the development of the DAB system, and in particular the introduction of DAB+ audio services (see ETSI TS 102 563).¹
- Requirements for displays, text and data applications have been introduced to reflect market trends.

¹ For an overview of the DAB standards, see ETSI TR 101 495.

- Additional test methods have been introduced to allow R.F. measurements to be made on receivers with integrated antennas and/or no external BER indicators by using an acoustic impairment method.
- Clause 6 has been updated to reflect the development of the market and to provide better guidance for the implementation of optional features.

The text of this standard is based on the following documents:

FDIS	Report on voting
100/2502/FDIS	100/2541/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

CHARACTERISTICS OF DAB RECEIVERS

1 Scope

This International Standard describes the digital audio broadcasting (DAB) receiver characteristics for consumer equipment intended for terrestrial and cable reception operating in VHF band III. Dedicated receivers for specific applications are not within the scope of this standard. This standard describes the characteristics for different classes and categories of DAB receivers such as standard and multimedia receivers and domestic, automotive and adapter receivers.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60169-10, *Radio-frequency connectors – Part 10: R.F. coaxial connectors with inner diameter of outer conductor 3 mm (0,12 in) with snap-on coupling – Characteristic impedance 50 ohms (Type SMB)*

IEC 60315-1, *Methods of measurement on radio receivers for various classes of emission – Part 1: General considerations and methods of measurement, including audio-frequency measurements*

IEC 60315-4, *Methods of measurement on radio receivers for various classes of emission – Part 4: Receivers for frequency-modulated sound-broadcasting emissions*

IEC 60958-3, *Digital audio interface – Part 3: Consumer applications*

IEC 61169-2:2007, *Radio-frequency connectors – Part 2: Sectional specification – Radio frequency coaxial connectors of type 9,52*

IEC 61169-24, *Radio-frequency connectors – Part 24: Sectional specification – Radio frequency coaxial connectors with screw coupling, typically for use in 75 ohm cable networks (type F)*

IEC 61606 (all parts), *Audio and audiovisual equipment – Digital audio parts – Basic measurement methods of audio characteristics*

IEC 61938, *Multimedia systems – Guide to the recommended characteristics of analogue interfaces to achieve interoperability*

IEC 62106:2009, *Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 MHz to 108,0 MHz*

ISO/IEC 10646, *Information technology – Universal Coded Character Set (UCS)*

ISO/IEC 11172-3, *Information technology – Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s – Part 3: Audio*

ISO/IEC 13818-3, *Information technology – Generic coding of moving pictures and associated audio information – Part 3: Audio*

ISO/IEC 14496-3 *Information technology – Coding of audio-visual objects – Part 3: Audio*

ISO/IEC 23003-1:2007, *Information technology – MPEG audio technologies – Part 1: MPEG Surround*

ISO 20860-1, *Road vehicles – 50 ohms impedance radio frequency connection system interface – Part 1: Dimensions and electrical requirements*

ETSI EN 300 401:2006, *Radio Broadcasting Systems; Digital Audio Broadcasting (DAB) to mobile, portable and fixed receivers*

ETSI EN 301 234, *Digital Audio Broadcasting (DAB); Multimedia Object Transfer (MOT) protocol*

ETSI TS 101 498, *Digital Audio Broadcasting (DAB); Broadcast Website*

ETSI TS 101 499, *Digital Audio Broadcasting (DAB); SlideShow; User Application Specification*

ETSI TS 101 756, *Digital Audio Broadcasting (DAB); Registered Tables*

ETSI TS 101 757, *Digital Audio Broadcasting System (DAB); Conformance Testing for DAB Audio*

ETSI TS 102 371, *Digital Audio Broadcasting (DAB); Digital Radio Mondiale (DRM); Transportation and Binary Encoding Specification for Service and Programme Information (SPI)*

ETSI TS 102 428, *Digital Audio Broadcasting (DAB); DMB video service; User Application Specification*

ETSI TS 102 563, *Digital Audio Broadcasting (DAB); Transport of Advanced Audio Coding (AAC) audio*

ETSI TS 102 652, *Digital Audio Broadcasting (DAB); Intellitext; Application specification*

ETSI TS 102 818, *Hybrid Digital Radio (DAB, DRM, RadioDNS); XML Specification for Service and Programme Information (SPI)*

ETSI TS 102 979, *Digital Audio Broadcasting (DAB); Journaline; User application specification*

ETSI TS 102 980, *Digital Audio Broadcasting (DAB); Dynamic Label Plus (DL Plus); Application specification*

ETSI TS 103 176, *Digital Audio Broadcasting (DAB); Rules of implementation; Service information features*

COST 207, *Digital Land Mobile Radio Communications – COST 207, Commission of the European Communities, Final Report, 14 March 1984 – 13 September 1988, Office for Official Publications of the European Communities, Luxembourg, 1989*