BS EN 55103-1:2009



BSI British Standards

Electromagnetic compatibility — Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use —

Part 1: Emissions

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National foreword

This British Standard is the UK implementation of EN 55103-1:2009. It supersedes BS EN 55103-1:1997, which will be withdrawn on 1 July 2012.

The UK participation in its preparation was entrusted by Technical Committee GEL/210, EMC - Policy committee, to Subcommittee GEL/210/11, EMC product standards.

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

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English version

Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 1: Emissions

Compatibilité électromagnétique - Norme de famille de produits pour les appareils à usage professionnel audio, vidéo, audiovisuels et de commande de lumière pour spectacles - Partie 1: Emissions

Elektromagnetische Verträglichkeit - Produktfamiliennorm für Audio-, Video- und audiovisuelle Einrichtungen sowie für Studio-Lichtsteuereinrichtungen für professionellen Einsatz - Teil 1: Störaussendungen

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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.

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CENELEC

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

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 210, Electromagnetic compatibility (EMC).

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 55103-1 on 2009-07-01.

This European Standard supersedes EN 55103-1:1996.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2010-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-07-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers protection requirements of EC Directive 2004/108/EC. See Annex ZZ.

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1 Scope

This European Standard for EMC emission requirements applies to professional audio, video, audio-visual and entertainment lighting control apparatus as defined in 3.6 intended for use in the environments described in Clause 4. This includes the digital apparatus defined in 3.5 and sub-assemblies, see 6.3.

Disturbances in the frequency range 0 Hz to 400 GHz are covered, but requirements are not set over the whole of that range. See Note 5.

NOTE 1 In Annex D, information is included on infra-red radiation in the wavelength range 0,7 µm to 1,6 µm.

Fault conditions of source or victim apparatus are not taken into account. Apparatus as defined in 3.4, 3.5 and 3.6 may be operated with any source of power.

NOTE 2 Sources of power may include, for example: the public low-voltage supply; private supplies with similar characteristics; a d.c. source provided specifically for the apparatus; batteries internal to the apparatus; stand-by generators. Some standards may not apply to private low-voltage supplies.

NOTE 3 In special cases, for instance when highly susceptible apparatus is being used in proximity, additional mitigation measures may have to be employed to reduce the electromagnetic emission further, below the specified levels.

NOTE 4 Professional-user receiving apparatus may be very sensitive to disturbance; see Annex E.

This European Standard does not apply to

- consumer apparatus,
- apparatus specifically designed for security systems, and
- apparatus designed to radiate electromagnetic energy for radio communications purposes.

NOTE 5 To ensure freedom from interference, manufacturers should consider the characteristics of other equipment likely to be in the same environment and thus determine whether limitation of emissions in additional frequency ranges is necessary.

The objective of this standard is to define limits and methods of measurement for apparatus defined in the scope, in relation to continuous and transient, conducted and radiated disturbances. These requirements represent essential electromagnetic compatibility requirements.

2 Normative references

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

EN 55013	2001	*Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement* (CISPR 13:2001, mod.)
EN 55014-1 + A1 + A2	2000 2001 2002	*Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission* (CISPR 14-1:2000 + A1:2001 + A2:2002)
EN 55022	2006	*Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement* (CISPR 22:2005, mod.)
EN 60268-3	2000	*Sound system equipment - Part 3: Amplifiers* (IEC 60268-3:2000)