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Irish Standard  
I.S. EN 55103-2:2009

# Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use -- Part 2: Immunity

## I.S. EN 55103-2:2009

*Incorporating amendments/corrigenda issued since publication:*

EN 55103-2:2009/IS1:2012

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i> EN 55103-2:1996	<i>This document is based on:</i> EN 55103-2:2009 EN 55103-2:1996	<i>Published:</i> 17 July, 2009 6 November, 1996
This document was published under the authority of the NSAI and comes into effect on:  19 January, 2010		ICS number: 33.100.20
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# INTERPRETATION SHEET

# EN 55103-2/IS1

## FEUILLE D'INTERPRETATION

## INTERPRETATIONSBLATT

June 2012

ICS 33.100.20

English version

### **Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 2: Immunity**

Compatibilité électromagnétique -  
Norme de famille de produits pour les  
appareils à usage professionnel audio,  
vidéo, audiovisuels et de commande de  
lumière pour spectacles -  
Partie 2: Immunité

Elektromagnetische Verträglichkeit -  
Produktfamilienorm für Audio-, Video-  
und audiovisuelle Einrichtungen sowie für  
Studio-Lichtsteuereinrichtungen für  
professionellen Einsatz -  
Teil 2: Störfestigkeit

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## CENELEC

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## **Foreword**

This Interpretation Sheet to the European Standard EN 55103-2:2009 was prepared by the Interpretation Panel of the CLC/TC 210, "Electromagnetic compatibility (EMC)".

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 55103-2**

July 2009

ICS 33.100.20

Supersedes EN 55103-2:1996

English version

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# CENELEC

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

## **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 55103-2 on 2009-07-01.

This European Standard supersedes EN 55103-2:1996.

The following dates were fixed proposed:

- 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 immunity 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 7.4.

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

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

The objective of this standard is to define the immunity test requirements, test signals, performance criteria and test methods for apparatus defined in the scope, in relation to electromagnetic immunity to continuous and transient conducted and radiated electromagnetic disturbances including electrostatic discharges. These test requirements represent essential electromagnetic compatibility requirements.

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 If it is intended to use a hand-held transmitter in proximity, additional mitigation measures may have to be employed to increase the electromagnetic immunity further, beyond the specified limits.

This European Standard does not apply to

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

## 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 55020	2007	<i>Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement</i> (CISPR 20:2006)
EN 61000-3-2	2006	<i>Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)</i> (IEC 61000-3-2:2005)
EN 61000-4-2	1995	<i>Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test</i> (IEC 61000-4-2:1995 + A1:1998 + A2:2000)
+ A1	1998	
+ A2	2001	
EN 61000-4-3	2006	<i>Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test</i> (IEC 61000-4-3:2006 + A1:2007)
+ A1	2008	
EN 61000-4-4	2004	<i>Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test</i> (IEC 61000-4-4:2004)



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