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Electroacoustics — Instruments for the measurement of sound intensity — Electromagnetic and electrostatic compatability requirements and test procedures

ICS 17.140.50; 33.100.10; 33.100.20

BSI British Standards

National foreword

This Published Document is the UK implementation of IEC TS 62370:2004+A1:2017. It supersedes DD IEC/TS 62370:2004 which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee EPL/29, Electroacoustics.

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

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Electroacoustics – Instruments for the measurement of sound intensity – Electromagnetic and electrostatic compatibility requirements and test procedures

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROACOUSTICS – INSTRUMENTS FOR THE MEASUREMENT OF SOUND INTENSITY – ELECTROMAGNETIC AND ELECTROSTATIC COMPATIBILITY REQUIREMENTS AND TEST PROCEDURES

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 62370, which is a technical specification, has been prepared by IEC technical committee 29: Electroacoustics.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
29/540/DTS	29/544A/RVC

Full information on the voting for the approval of this technical specification 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 2006. At this date, the publication will be

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- withdrawn;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

ELECTROACOUSTICS – INSTRUMENTS FOR THE MEASUREMENT OF SOUND INTENSITY – ELECTROMAGNETIC AND ELECTROSTATIC COMPATIBILITY REQUIREMENTS AND TEST PROCEDURES

1 Scope

1.1 This Technical Specification specifies requirements for instruments that measure sound intensity using pairs of pressure sensing microphones with respect to their immunity to power- and radio-frequency fields and to electrostatic discharge, and the permitted radio-frequency emissions, together with test procedures to verify conformance. Sound intensity measuring instruments are available in many different configurations and may be powered by batteries or from external power supply systems. The technical requirements in this Technical Specification apply to all configurations of instruments for the measurement of sound intensity.

1.2 The electromagnetic and electrostatic compatibility requirements are equally applicable for sound intensity measuring instruments used in residential, commercial and light-industrial environments, or industrial sites. The requirements of this Technical Specification are additional to those contained in IEC 61043 and do not alter any of the specifications contained therein. The requirements do not apply retrospectively to sound intensity measuring instruments complying with IEC 61043 prior to the publication of this Technical Specification.

NOTE 1 Compliance with this Technical Specification does not insure that the sound intensity measuring system is immune to interference from all electromagnetic sources.

NOTE 2 These requirements are the first attempt at defining electromagnetic and electrostatic compatibility requirements for sound intensity measuring systems. Requirements can be changed later when wider experience has been gained if found necessary.

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.

IEC 61000-4-2, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test*

IEC 61000-4-3:2002, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*
Amendment 1 (2002)

〈A1〉 IEC 61000-4-20:2010, *Electromagnetic compatibility (EMC) – Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides* 〈A1〉

IEC 61000-6-1:1997, *Electromagnetic compatibility (EMC) – Part 6: Generic standards – Section 1: Immunity for residential, commercial and light-industrial environments*

IEC 61000-6-2:1999, *Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments*