



**Information technology equipment—
Immunity characteristics—Limits and
methods of measurement**

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-

This Standard was issued in draft form for comment as DR AS/NZS CISPR 24.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard[®]

**Information technology equipment—
Immunity characteristics—Limits and
methods of measurement**

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference, to supersede AS/NZS CISPR 24:2002.

A1 | Amendment No. 1 to this Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference, to add changes introduced by CISPR 24:2010/AMD 1:2015. As a consequence of Amendment No. 1, which is published as an Australian-only amendment, the designation of this Standard has been changed from AS/NZS CISPR 24:2013 to AS CISPR 24:2013.

A1 | The objective of this Standard is to establish requirements that will provide an adequate level of intrinsic immunity so that the equipment will operate as intended in its environment. Immunity test requirements are specified for equipment in relation to continuous and transient conducted and radiated disturbances, including electrostatic discharges (ESD). This Standard includes CISPR 24 Amendment No. 1 (April 2015). The changes required by the CISPR amendment are added at the end of this Standard.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
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References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
CISPR		AS/NZS	CISPR
16	Specification for radio disturbance and immunity measuring apparatus and methods	16	Specification for radio disturbance and immunity measuring apparatus and methods
16-1-2	Part 1-2: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Conducted disturbances	16.1.2	Part 1.2: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Conducted disturbances
20	Sound and television broadcast receivers and associated equipment—Immunity characteristics—Limits and methods of measurement	20	Sound and television broadcast receivers and associated equipment—Immunity characteristics—Limits and methods of measure
22	Information technology equipment—Radio disturbance characteristics—Limits and methods of measurement	22	Information technology equipment—Radio disturbance characteristics—Limits and methods of measurement
IEC		AS/NZS	
61000	Electromagnetic compatibility (EMC)	61000	Electromagnetic compatibility (EMC)
61000-4-2	Part 4-2: Testing and measurement techniques—Electrostatic discharge immunity test	61000.4.2	Part 4.2: Testing and measurement techniques—Electrostatic discharge immunity test
61000-4-3	Part 4-3: Testing and measurement techniques—Radiated, radio-frequency, electromagnetic field immunity test	61000.4.3	Part 4.3: Testing and measurement techniques—Radiated, radio-frequency, electromagnetic field immunity test

61000-4-4	Part 4-4: Testing and measurement techniques—Electrical fast transient/burst immunity test	61000.4.4	Part 4.4: Testing and measurement techniques—Electrical fast transient/burst immunity test
IEC		AS/NZS	
61000-4-5	Part 4-5: Testing and measurement techniques—Surge immunity test	61000.4.5	Part 4.5: Testing and measurement techniques—Surge immunity test
61000-4-6	Part 4-6: Testing and measurement techniques—Immunity to conducted disturbances, induced by radio-frequency fields	61000.4.6	Part 4.6: Testing and measurement techniques—Immunity to conducted disturbances, induced by radio-frequency fields
61000-4-8	Part 4-8: Testing and measurement techniques—Power frequency magnetic field immunity test	61000.4.8	Part 4.8: Testing and measurement techniques—Power frequency magnetic field immunity test

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The term ‘normative’ has been used in this Standard to define the application of the annex to which it applies. A ‘normative’ annex is an integral part of a Standard.

CONTENTS

1	Scope and object	7
2	Normative references.....	7
3	Terms and definitions	8
4	Immunity test requirements.....	11
4.1	General	11
4.2	Particular requirements.....	11
4.2.1	Electrostatic discharges (ESD).....	11
4.2.2	Electrical fast transients (EFT).....	12
4.2.3	Continuous radio frequency disturbances	12
4.2.4	Power-frequency magnetic fields.....	13
4.2.5	Surges.....	13
4.2.6	Voltage dips and interruptions	13
5	Applicability	13
6	Conditions during testing.....	14
6.1	General conditions.....	14
6.2	Particular conditions (EUT operational modes, etc.).....	15
7	Performance criteria	15
7.1	General performance criteria	15
7.2	Performance criterion A	15
7.3	Performance criterion B	15
7.4	Performance criterion C	15
7.5	Particular performance criteria	16
8	Product documentation	16
9	Measurement uncertainty.....	16
10	Immunity requirements	16
	Annex A (normative) Telephony terminal equipment	19
	Annex B (normative) Data processing equipment.....	29
	Annex C (normative) Local area networks (LAN).....	33
	Annex D (normative) Printers and plotters	34
	Annex E (normative) Copying machines	35
	Annex F (normative) Automatic teller machines (ATM).....	36
	Annex G (normative) Point of sale terminals (POST)	38
	Annex H (normative) xDSL Terminal equipment.....	40
	Bibliography.....	44
	Figure 1 – Description of ports	9
	Figure A.1 – Example sound coupling set-up between the acoustic output device of a telephone handset and an artificial ear for detecting demodulated sound pressure level.....	21
	Figure A.2 – Example test set-up for measuring the sound pressure level from the acoustic output device of a telephone handset.....	23
	Figure A.3 – Test setup for measuring the reference sound pressure level from a speaker/hands free phone.....	24
	Figure A.4 – Demodulation on analogue lines, set up.....	25

	<i>Page</i>
Figure A.5 – Example of typical small key telephone system or PABX.....	27
Figure H.1 – DSL access system configuration	40
Table 1 – Immunity, enclosure port.....	16
Table 2 – Immunity, signal ports and telecommunication ports.....	17
Table 3 – Immunity, input d.c. power port (excluding equipment marketed with a a.c./d.c. power converter).....	17
Table 4 – Immunity, input a.c. power ports (including equipment marketed with a separate a.c./d.c power converter)	18
Table A.1 – Criteria applied to TTE functions, used during continuous disturbance testing.....	19
Table A.2 – Maximum acoustic demodulated levels at an ear piece	22
Table A.3 – Maximum acoustic demodulated levels relative to reference level.....	23
Table A.4 – Maximum demodulated differential mode signals at analogue ports.....	25
Table A.5 – TTE performance criteria for spot frequency tests	26
Table A.6 – TTE performance criteria for non-continuous radio frequency disturbances	26
Table A.7 – Test configurations and performance assessment methods applicable to a PABX and associated terminals for continuous RF disturbance tests	28
Table H.1 – ITU-T recommendations for xDSL systems	41
Table H.2 – Example cable attenuation.....	41

INTRODUCTION

This CISPR publication establishes uniform requirements for the electromagnetic immunity of information technology equipment. The test methods are given in the referenced Basic EMC Immunity Standards. This publication specifies applicable tests, test levels, product operating conditions and assessment criteria.

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AUSTRALIAN STANDARD

Information technology equipment—Immunity characteristics—Limits and methods of measurement**1 Scope and object**

This CISPR publication applies to information technology equipment (ITE) as defined in CISPR 22.

The object of this publication is to establish requirements that will provide an adequate level of intrinsic immunity so that the equipment will operate as intended in its environment. The publication defines the immunity test requirements for equipment within its scope in relation to continuous and transient conducted and radiated disturbances, including electrostatic discharges (ESD).

Procedures are defined for the measurement of ITE and limits are specified which are developed for ITE within the frequency range from 0 Hz to 400 GHz.

For exceptional environmental conditions, special mitigation measures may be required.

Owing to testing and performance assessment considerations, some tests are specified in defined frequency bands or at selected frequencies. Equipment which fulfils the requirements at these frequencies is deemed to fulfil the requirements in the entire frequency range from 0 Hz to 400 GHz for electromagnetic phenomena.

The test requirements are specified for each port considered.

NOTE 1 Safety considerations are not covered in this publication.

NOTE 2 In special cases, situations will arise where the level of disturbance may exceed the levels specified in this publication, for example where a hand-held transmitter is used in proximity to equipment. In these instances, special mitigation measures may have to be employed.

2 Normative references

The following reference 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 60050-161:1990, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility*

IEC 60318-1:2009, *Electroacoustics – Simulators of human head and ear – Part 1: Ear simulators for the measurement of supra-aural and circumaural earphones*

IEC 61000-4-2:2008, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*

IEC 61000-4-3:2006, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*
Amendment 1(2007)
Amendment 2(2010)

IEC 61000-4-4:2004, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*