

Australian Standard®

**Electromagnetic interference—
Household electrical appliances,
portable tools and similar electrical
equipment—Limits and methods of
measurement**

This Australian Standard was prepared by Committee TE/3, Electromagnetic Interference. It was approved on behalf of the Council of Standards Australia on 14 May 1990 and published on 17 September 1990.

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measurement**

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PREFACE

This Standard was prepared by the Standards Australia Committee on Electromagnetic Interference to supersede AS 1044—1973, *Limits of electromagnetic interference for electrical appliances and equipment*.

This Standard is identical with and has been reproduced from IEC/CISPR Publication 14* including its 1st and 2nd Amendments (June 1987 and June 1989).

Switched mode power supplies (SMPS) are covered by this Standard unless covered by a specific product Standard.

For the purposes of this Australian Standard, the text of the IEC/CISPR 14 should be modified as follows:

- (a) *Terminology*: The words 'Australian Standard' should replace the words 'IEC Publication' wherever they appear.
- (b) *Page number references*: The text references at the bottom left-hand corner of each page, apply to the CISPR publication page numbers.
- (c) *Cross-references*: The references to IEC Publications should be replaced by references to Australian Standards as follows:

<i>Reference to IEC Publication</i>	<i>Appropriate Australian Standard</i>	
CISPR	AS	
15 Limits and methods measurement of radio interference characteristics of fluorescent lamps and luminaires	—	
16 C.I.S.P.R. specification for radio interference measuring apparatus and measuring methods	1052	Electromagnetic Interference—Measuring apparatus and measurement methods
50(902) International Electrotechnical Vocabulary—Radio interference	1852(902)	International electrotechnical Vocabulary—Electromagnetic interference
536 Classification of electrical and electronic equipment with regard to protection against electric shock	—	

* C.I.S.P.R. Publication 14 (1985) Limits and methods of measurement of radio interference characteristics of household electrical appliances, portable tools and similar electrical apparatus.

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CONTENTS

Clause	<i>Page</i>
1. Scope	4
2. Object	4
3. Definitions	4
4. Limits of interference	4
4.1 Continuous interference	4
4.2 Discontinuous interference	7
4.3 Radiated interference from equipment with built-in batteries	10
5. Operating conditions and interpretation of results	11
5.1 General	11
5.2 Interference produced by regulating controls incorporating semiconductor devices	12
5.3 Definition of normal loads and standard operating conditions for electrical equipment	14
6. Methods of measurement of radio-noise voltages (0.15 MHz to 30 MHz)	26
6.1 Artificial mains network	26
6.2 Measurement procedure	26
7. Methods of measurement of interference power from mains operated appliances (30 MHz to 300 MHz)	29
7.1 General	29
7.2 Measurement procedure	29
7.3 Appliances having auxiliary apparatus connected at the end of a lead other than the mains lead	29
8. Methods of measurement of radiated power from equipment with built-in batteries (30 MHz to 300 MHz)	30
8.1 Measuring site	30
8.2 Measurement procedure	30
9. Interpretation of C.I.S.P.R. radio interference limit	31
9.1 Significance of a C.I.S.P.R. limit	31
9.2 Type tests	31
9.3 Compliance with limits for appliances in large-scale production	31
APPENDIX A — Limits of radio noise produced by the switching operations of specific appliances when the formula $20 \log_{10} \frac{30}{N}$ is applicable	33
APPENDIX B — Example of the use of the upper quartile method to determine compliance with interference limits	35
APPENDIX C — Example of a device and its application for the measurement of interference from mains powered appliances as specified in Clause 7	36
APPENDIX D — Guidance notes for the measurement of discontinuous interference	38
FIGURES	43

STANDARDS AUSTRALIA

Australian Standard**Electromagnetic interference—Household electrical appliances, portable tools and similar electrical equipment—Limits and methods of measurement**

(Revision of AS 1044—1973)

1. Scope

- 1.1 This publication applies to the conduction and the radiation of electromagnetic energy from household electrical equipment, portable tools and other electrical apparatus which may cause interference to radio reception, such as: office machines, cine or slide projectors, electric toys, recording apparatus, milking machines, motor-driven electromedical apparatus, etc., but excluding those producing high-frequency radiation for heating and therapeutic purposes.

Separate motors, sold as such, are also excluded.

- 1.2 The frequency range covered is 0.15 MHz to 300 MHz.

- 1.3 Multifunction equipment which is subjected simultaneously to different clauses of this publication and/or other publications shall be tested with each function operated in isolation, if this can be achieved without modifying the equipment internally. The equipment thus tested shall be deemed to have complied with the requirements of all the clauses/publications when each function has satisfied the requirements of the relevant clause/publication.

For equipment for which it is not practicable to test with each function operated in isolation, or where the isolation of a particular function would result in the equipment being unable to fulfil its primary function, the equipment shall be deemed to have complied only if it meets the provisions of each clause/publication with the necessary functions operative.

2. Object

To establish uniform requirements for the radio interference level of household electrical equipment, portable tools and other electrical apparatus which may cause interference to radio reception, to fix limits of interference, to describe methods of measurement, and to give guidance for the standardization of measuring methods and limits for the level of radio interference generated by household appliances, portable tools and other above-mentioned electrical apparatus.

3. Definitions

For the purpose of this publication, the definitions contained in IEC Publication 50(902): International Electrotechnical Vocabulary (IEV), Chapter 902: Radio Interference, apply.

4. Limits of interference**4.1 Continuous interference***

Commutator motors as well as other devices incorporated in household appliances, portable tools and similar electrical apparatus may cause continuous interference.

* Electromagnetic disturbance, the effect of which is not resolvable into a succession of discrete impulses in the normal operation of the particular receiving system concerned, for example commutator motor interference.