Australian/New Zealand Standard™

Vehicles, boats, and internal combustion engine driven devices—Radio disturbance characteristics—Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/device

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Interferences. It was approved on behalf of the Council of Standards Australia on 10 April 2006 and on behalf of the Council of Standards New Zealand on 19 May 2006.
This Standard was published on 2 June 2006.

The following are represented on Committee TE-003:

Australian Broadcasting Corporation
Australian Chamber of Commerce and Industry
Australian Communications and Media Authority
Australian Electrical and Electronic Manufacturers Association
Australian Information Industry Association
Consumer Electronics Supplier Association
Electrical Compliance Testing Association
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interferences, to supersede AS/NZS CISPR 12:2004, as one of a series of Standards intended to facilitate control of electromagnetic interference and the compatibility of electrical and electronic equipment.

This Standard is identical with, and has been reproduced from CISPR 12:2005, *Vehicles, boats, and internal combustion engine driven devices—Radio disturbance characteristics—Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/device*.

The objective of this Standard is to provide limits of protection for broadcast receivers in the frequency range of 30 MHz to 1 000 MHz when used in the residential environment. This Standard applies to the emission of broadband and narrowband electromagnetic energy which may cause interference to radio reception and which is emitted from vehicles or boats propelled by an internal combustion engine, electrical means or both, and devices equipped with an internal combustion engine. Aircraft and traction systems are beyond the scope of this Standard, nor does it specify the measurement of electromagnetic disturbances while the vehicle is connected to power mains for charging.

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

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Any French text on figures should be ignored.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS/NZS	
60050	International Electrotechnical Vocabulary (IEV)	—	
60050-161	Chapter 161: Electromagneticcompatibility	—	
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	Part 1: Radio disturbance and immunity measuring apparatus	16.1	Part 1: Radio disturbance and immunity measuring apparatus
25	Limits and methods of measurement of radio disturbance characteristics for the protection of receivers used on board vehicles	25	Limits and methods of measurement of radio disturbance characteristics for the protection of receivers used on board vehicles

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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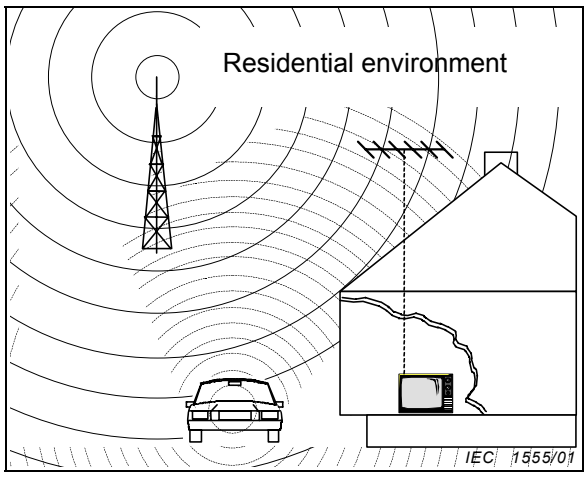
Vehicles, boats, and internal combustion engine driven devices—Radio disturbance characteristics—Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/devices

1 Scope

The limits in this International Standard are designed to provide protection for broadcast receivers in the frequency range of 30 MHz to 1 000 MHz when used in the residential environment. Compliance with this standard may not provide adequate protection for new types of radio transmissions or receivers used in the residential environment nearer than 10 m to the vehicle or device.



NOTE 1 Experience has shown that compliance with this standard may provide satisfactory protection for receivers of other types of transmissions when used in the residential environment, including radio transmissions in frequency ranges other than that specified.

This standard applies to the emission of broadband and narrowband electromagnetic energy which may cause interference to radio reception and which is emitted from

a) vehicles propelled by an internal combustion engine, electrical means or both (see 3.1);

b) boats propelled by an internal combustion engine, electrical means or both (see 3.2). Boats are to be tested in the same manner as vehicles except where they have unique characteristics as explicitly stated in this standard;

c) devices equipped with internal combustion engines (see 3.3).

This standard includes limits and test methods for both broadband and narrowband emissions.

This standard does not apply to aircraft, traction systems (railway, tramway and trolley bus), or to incomplete vehicles.

NOTE 2 Protection of receivers used on board the same vehicle as the disturbance source(s) are covered by CISPR 25.

The measurement of electromagnetic disturbances while the vehicle is connected to power mains for charging is not covered in this standard. The user is referred to appropriate IEC and CISPR standards which define measurement techniques and limits for this condition.