AS/NZS CISPR 12:2009
CISPR 12, Ed.6.0 (2007)

AS/NZS CISPR 12:2009

Australian/New Zealand Standard™

Vehicles, boats and internal combustion engines—Radio disturbance characteristics—Limits and methods of measurement for the protection of off-board receivers

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Interference. It was approved on behalf of the Council of Standards Australia on 05 May 2009 and on behalf of the Council of Standards New Zealand on 15 May 2009.
This Standard was published on 22 June 2009.

The following are represented on Committee TE-003:

Association of Consulting Engineers Australia
Australian Broadcasting Corporation
Australian Chamber of Commerce and Industry
Australian Communications and Media Authority
Australian Industry Group
Australian Information Industry Association
Australian Subscription Television and Radio Association
Consumer Electronics Suppliers Association
Department of Defence (Australia)
Electrical Compliance Testing Association
Energy Networks Association
Engineers Australia
Free TV Australia
Ministry of Economic Development (New Zealand)
National Measurement Institute
SingTel Optus Pty
Society of Automotive Engineers Australasia
Telstra Corporation
University of Western Australia
Wireless Institute Australia

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

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.

This Standard was issued in draft form for comment as DR 08183.

Australian/New Zealand Standard™

Vehicles, boats and internal combustion engines—Radio disturbance characteristics—Limits and methods of measurement for the protection of off-board receivers

Originated as AS 2557—1982.
Previous edition AS/NZS CISPR 12:2006.
Third edition 2009.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 9171 9

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference, to supersede AS/NZS CISPR 12:2006.

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 is identical with, and has been reproduced from CISPR 12, Ed.6.0 (2007), *Vehicles, boats and internal combustion engines—Radio disturbance characteristics—Limits and methods of measurement for the protection of off-board receivers*.

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.

The terms 'normative' and 'informative' are used 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.

CONTENTS

Page

INTRODUCTION

There is a specific need for standards to define acceptable radio frequency performance of all electrical/electronic products. CISPR 12 has been developed to serve the road vehicle and related industries with test methods and limits that provide satisfactory protection for radio reception.

CISPR 12 has been used for many years as a regulatory requirement in numerous countries, to provide protection for radio receivers in the residential environment. It has been extremely effective in protecting the radio environment outside the vehicle.

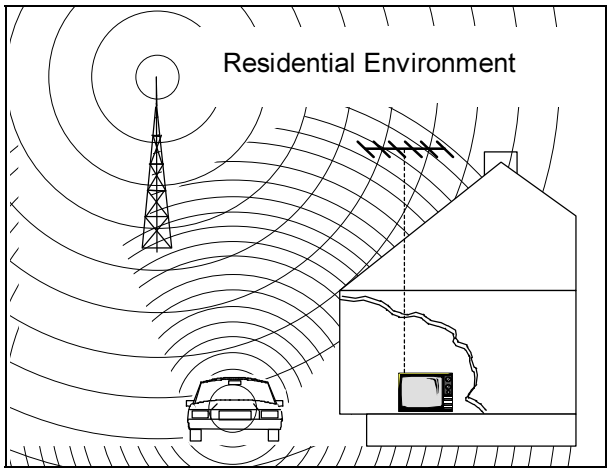
STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

Vehicles, boats and internal combustion engines—Radio disturbance characteristics—Limits and methods of measurement for the protection of off-board receivers

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, boat 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 electromagnetic energy which may cause interference to radio reception and which is emitted from

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

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;

devices equipped with internal combustion engines (see 3.3).

See Annex G for a flow chart to help determine the applicability of CISPR 12.

This standard does not apply to aircraft, traction systems (railway, tramway and electric trolley bus), or to incomplete vehicles. In the case of a dual-mode trolley bus (e.g. propelled by power from either a.c./d.c. mains or an internal combustion engine), the internal combustion propulsion system must be included, but the a.c./d.c. mains portion of the vehicle propulsion system is excluded from this standard.

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.

Annex H lists work being considered for future revisions.