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*(Basically in accordance with BS 6803.1-1987; BS 6803.2-1986,
draft IEC 839.10.1.1 and IEC 839.10.1.2)*

Australian Standard®

**Intruder alarm systems—Road
vehicles****Part 1: Performance requirements**

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee EL/31, Intruder Alarm Equipment and Installation. It was approved on behalf of the Council of Standards Australia on 13 October 1989 and published on 9 February 1990.

The following interests are represented on Committee EL/31:

Association of Burglary Insurance Surveyors, Australasia
Australian Automobile Association
Australian Electrical and Electronic Manufacturers' Association
Australian Federal Police
Australian Security Industry Association
Building Owners and Managers Association of Australia
Confederation of Australian Industry
Department of Administrative Services—Construction Group
Department of Business and Consumer Affairs, N.S.W.
Department of Defence
Insurance Council of Australia
Metal Trades Industry Association of Australia
Police Department, N.S.W.
Public Works Department, N.S.W.
State Pollution Control Commission, N.S.W.
Tasmania Police
Telecom Australia
Victoria Police
Victorian Security Institute

Additional interests participating in preparation of this Standard:

Federal Chamber of Automotive Industries
Manufacturing and retailing interests

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This Standard was issued in draft form for comment as DR 88231. ✓

Australian Standard®

**Intruder alarm systems—Road
vehicles**

Part 1: Performance requirements

First published as AS 3749.1—1990.

PREFACE

This Standard was prepared by the Standards Australia Committee on Intruder Alarm Equipment and Installation. During the development of the Standard the Federal Chamber of Automotive Industries (FCAI), representing the manufacturers of motor vehicles, did not support the publication of the Standard in its final form and sought to have original equipment systems removed from its Scope.

The FCAI has expressed some concern that the minimum system requirements of this Standard may provide a higher level of security than is necessary for all types of road vehicles and may be too restrictive as to the choice of options available as a basis for setting the minimum system requirements. Also, FCAI has pointed out that interior movement detectors may be difficult to install and adjust in an original equipment fitment environment.

These concerns have been recognized, however the Committee believe that the minimum system requirements specified are necessary to achieve the purposes of this Standard. The Committee in reaching their conclusions, referenced British Standard BS 6803, *Vehicle security alarm systems, Part 1: Specification for systems installed as original vehicle equipment*, and Part 2: *Code of practice for systems installed after vehicle marketing*, as well as International Electrotechnical Commission Draft, IEC Publication 839, *Standard for transport alarm systems—General requirements (839-10-1-1) and Specific requirements for motor cars (839-10-1-2)*.

This Standard is basically in accordance with BS 6803 and draft IEC Publication 839. Specific exceptions are Clause 2.2.1(e) which requires detection devices to cover entry or attempted entry into the road vehicle to include entry via the glazed areas and Clause 5.2 which disallows the use of headlights as visual indicators.

This Standard is Part 1 of a two part Standard, the parts of which are as follows:

Part 1: *Performance requirements* (this Standard)

Part 2: *Installation and maintenance*

This Standard details the minimum performance requirements and associated test methods of a variety of vehicle alarm systems and will be a guide for consumers in their selection of equipment, which can be considered of high quality, if complying with these requirements. This Standard, together with Part 2, will also assist in the reduction of the number of false alarms, noise pollution and improvement in installation practices.

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STANDARDS AUSTRALIA

Australian Standard

Intruder alarm systems—Road vehicles

Part 1: Performance requirements

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard specifies requirements for the performance of alarm systems in road vehicles such as private cars, commercial and heavy goods vehicles and caravans.

1.2 APPLICATION. Vehicle alarm systems shall comply, with Section 2 and with the relevant requirements of the following Sections:

- (a) Section 3—Specific requirements for particular types of detectors.
- (b) Section 4—Remote arming devices.
- (c) Section 5—Signalling devices.

1.3 REFERENCED DOCUMENTS. The following documents are referred to in this Standard:

AS

- 1931 High voltage testing techniques
- 1931.1 Part 1: General definitions, test requirements, test procedures and measuring devices
- 2201 Intruder alarm systems
- 2201.1 Part 1: Systems installed in client's premises
- 2331 Methods of test for metallic and related coatings
- 2481 All-or-nothing electrical relays (instantaneous and timing relays)
- 3300 Approval and test specification—General requirements for household and similar electrical appliances

SAE

- J 1113 Electromagnetic susceptibility procedures for vehicle components (except aircraft)

Department of Transport and Communication's Standards which include frequency and power requirements of radio transmitters

Australian design rules ADR 42/000—General safety requirements

1.4 DEFINITIONS. For the purpose of this Standard, the definitions listed in AS 2201.1 and those below apply.

1.4.1 Direct switching—where a signal is sent from an existing or an installed switch to trigger the alarm.

1.4.2 Doppler microwave movement detector—a detection device designed to initiate an alarm condition in response to Doppler frequency effect provided by the reflection of microwaves from the standard target.

1.4.3 Doppler ultrasonic movement detector—a detection device designed to initiate an alarm condition in response to Doppler frequency effect provided by the reflection of ultrasonic waves from the standard target.

1.4.4 Glass breakage detector—a detector which detects the breakage of glass, being any glass window forming a part of the vehicle's outer perimeter.

1.4.5 Motion detector—a detection device that detects movement caused by jacking-up or towing the vehicle.

1.4.6 Movement detector—a detection device that detects movement inside the vehicle.

1.4.7 Passive arming—a function that automatically sets the alarm system.

1.4.8 Pulse module—a pulse module is an electronic device fitted to forcibly pulse the alarm system.

1.4.9 Range (of a detector)—the range within which the entry and movement of a standard target will cause the detector to initiate an alarm condition or signal to a processing device.

1.4.10 Remote arming—a method of remotely arming the vehicle.

1.4.11 Shock sensor—a device which detects shock/vibration to the vehicle.

1.4.12 Standard target—a mild steel plate measuring 150 × 150 × 1.5 mm.

1.4.13 Standby battery—a rechargeable battery, independent of the vehicle battery, which operates the alarm system when the vehicle battery is disconnected.

1.4.14 Trigger wire—a wire running directly from switches to the alarm system.

1.4.15 Voltage drop alarm—an alarm which is caused by a current variation resulting in a voltage drop in the system.

1.4.16 Working days—any days other than Saturdays, Sundays and public holidays.