

Australian Standard[®] 2201.1—1986

INTRUDER ALARM SYSTEMS Part 1—SYSTEMS INSTALLED IN CLIENT'S PREMISES



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AUSTRALIAN STANDARD

INTRUDER ALARM SYSTEMS
Part 1
SYSTEMS INSTALLED IN
CLIENT'S PREMISES

AS 2201.1—1986

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PREFACE

This edition of this standard was prepared by the Association's Committee on Intruder Alarm Equipment and Installations, to supersede AS 2201, Part 1—1978. The standard sets out requirements for the construction, installation, operation and maintenance of intruder alarm systems in client's premises and is intended to provide guidance in the preparation of a contract between a client and an alarm company. It does not specify the extent or degree of protection to be provided, nor does it necessarily cover all the requirements for a particular installation. It will however assist insurers, alarm companies, clients and the police in achieving a complete and accurate statement of the intruder alarm system required in particular premises.

The standard is Part 1 of a three-part standard, the parts of which are as follows:

Part 1—Systems Installed in Client's Premises (this part)

Part 2—Central Stations and Signalling Links

Part 3—Detection Devices.

The successful operation of an intruder alarm system requires the active cooperation of the client in carrying out the necessary procedures carefully and thoroughly. The usefulness of the whole system can be jeopardized by lack of care. This care must extend to the security of keys and of information regarding the system, its installation and method of operation. It is therefore essential that the alarm company and the client recognize the need for cooperation in the planning, commissioning and upkeep of the system.

The standard includes mandatory, optional and advisory material applicable to all parties, e.g. alarm companies, clients, insurance companies, concerned with intruder alarm systems and the design, installation, operation and maintenance thereof. It is expected that application of the requirements of this standard will result in significant improvements in system reliability and performance.

During the preparation of this standard the committee was aware that regulations governing the licensing and use of fixed and mobile radio services were being developed and that promulgation of such regulations may affect the feasibility of the use of such services as signalling links in central-station-operated intruder alarm systems. For this reason, requirements for signalling links using private radio carrier facilities have not been included in this standard although any system incorporating such links would need to comply in all other respects with the requirements of the standard.

The major changes in this edition are as follows:

- (a) Primary batteries are no longer permitted and only secondary batteries of the sealed type are acceptable.
- (b) The alarm initiating response has been reduced from 250 ms to 100 ms.
- (c) Reference to alarm bells has been deleted.
- (d) Both the external and internal alarms are now limited in time.
- (e) The visual alarm requirements (flashing lights) have been modified because of local regulatory requirements.
- (f) The use of a medium other than copper conductors for the transmission of signals is allowed provided that the signalling security level is maintained.
- (g) All open wiring is required to be monitored.
- (h) The central station of a central station monitored system is required to have a contingency plan prepared in the event of a major loss of communication.
- (j) A transient voltage disturbance test is included in the appendices.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

INTRUDER ALARM SYSTEMS

PART 1—SYSTEMS INSTALLED IN CLIENT'S PREMISES

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard sets out requirements for the construction, operation, performance and installation of intruder alarm equipment and systems installed in client's premises, up to and including alarm equipment and outgoing signalling facilities. Operating and maintenance procedures including administration of records are also included.

NOTES:

1. For a guide to the selection and application of intruder alarm systems for domestic or business premises, see AS 2630.
2. For requirements for central stations and signalling links for intruder alarm systems, see AS 2201.2.
3. For details of the design requirements and performance of various intruder detection devices, see AS 2201.3.

1.2 APPLICATION. Intruder alarm systems installed in client's premises shall comply with the requirements of the following Sections, as appropriate:

- Section 2 Classification of Detection Capability of Intruder Alarm Systems
- Section 3 System Requirements
- Section 4 Control Equipment
- Section 5 Power Supply Equipment
- Section 6 Signalling Systems
- Section 7 Wiring
- Section 8 Operating Procedures
- Section 9 Maintenance, Records and Reports

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

- AS 1102 Graphical Symbols for Electrotechnology
- AS 1103 Diagrams, Charts and Tables for Electrotechnology
- AS 1125 Conductors in Insulated Electric Cables and Flexible Cords
- AS 1259 Sound Level Meters
- AS 1828 Electrical Equipment for Explosive Atmospheres—Cable Glands
- AS 1931 High Voltage Testing Techniques
Part 1—General Definitions, Test Requirements, Test Procedures and Measuring Devices
- AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment
- AS 2034 Electrical Equipment for Explosive Atmospheres—Flameproof Electric Lighting Fittings
- AS 2052 Metallic Conduits and Fittings

- AS 2053 Non-metallic Conduit and Fittings
- AS 2201 Intruder Alarm Systems
2201.2—Central Stations and Signalling Links
2201.3—Detection Devices
- AS 2481 All-or-nothing Electrical Relays (Instantaneous and Timing Relays)
- AS 2630 Guide to the Selection and Application of Intruder Alarm Systems for Domestic and Business Premises
- AS 3000 SAA Wiring Rules
- AS 3100 Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment
- AS 3147 Approval and Test Specification for PVC Insulated Electric Cables and Flexible Cables for Working Voltages up to and Including 0.6/1 kV
- AS 3191 Approval and Test Specification for Electric Flexible Cords
- AS 3193 Approval and Test Specification for Transformer-type Battery Chargers

1.4 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.4.1 Access route—the specified route between the entry/exit door of the alarmed area and the control equipment.

NOTE: Access route is sometimes referred to as entry/exit route.

1.4.2 Alarm company—person or organization prepared to provide, install, operate, service and maintain an intruder alarm system.

1.4.3 Alarm condition—state realized in any part of an intruder alarm system resulting from any one of the following:

- (a) Operation of a detection device.
- (b) Operation of a tamper detection device.
- (c) Fault in the system.
- (d) Intrusion or attempted intrusion.

1.4.4 Alarmed area—that part of an area to which detection is afforded by an intruder alarm system.

1.4.5 Alarmed sector—that part of an alarmed area or alarmed zone to which at least one detection device is allotted and for which individual indication is provided.