

Australian Standard™

**Safety of machinery**

**Part 1906: Displays, controls, actuators  
and signals—Indication, marking and  
actuation—Requirements for the  
location and operation of actuators**

**STANDARDS**  
Australia



This Australian Standard was prepared by Committee SF-041, General Principles for the Guarding of Machinery. It was approved on behalf of the Council of Standards Australia on 26 April 2006.  
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The following are represented on Committee SF-041:

Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Department for Administration and Information Services, SA  
Department of Consumer and Employment Protection, WorkSafe Division, WA  
Department of Primary Industries, Mine Safety, NSW  
Engineers Australia  
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## PREFACE

This Standard was prepared by the Standards Australia Committee SF-041, as a revision, in part, of AS 4024.1—1996, *Safeguarding of Machinery, Part 1: General principles*.

During its work, the Committee considered a number of Standards originating within the European Community in the field of safety of machinery. Many of these European Standards are being adopted virtually unchanged as International Standards by the International Organization for Standardization (ISO) and the Committee has agreed to continue to use material emanating from both CEN and ISO in this new edition. This action will maintain consistency with previous editions of AS 4024.1 and other machine-specific Australian Standards.

This edition has been published as a series rather than the single Standard previously published as AS 4024.1. In doing this, the Committee has cleared the way for simple revisions in the future. When a new edition of a relevant Standard becomes available at the international level, it will be adopted and published within the framework of AS 4024 with a minimum delay, so ensuring continued international alignment.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

## CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 OBJECTIVE .....	4
3 REFERENCED DOCUMENTS.....	4
4 DEFINITIONS.....	5
5 GENERAL REQUIREMENTS.....	5
6 ACTIONS AND EFFECTS .....	6
 APPENDIX A      TYPICAL EXAMPLES OF MONOFUNCTION ACTUATORS .....	 10

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**1 SCOPE**

This Standard specifies safety-related requirements for actuators, operated by the hand or by other parts of the human body, at the man-machine interface.

It gives general requirements for—

- (a) the standard direction of movement for actuators;
- (b) the arrangement of an actuator in relation to other actuators; and
- (c) the correlation between an action and its final effects.

It is based on IEC 60447, but is also applicable to non-electric technical technologies, such as mechanical and fluid-powered systems.

It covers single actuators as well as groups of actuators forming part of an assembly.

**2 OBJECTIVE**

The objective of this Standard is to enable designers, manufacturers, suppliers, employers and users of machinery to minimize risks to the health and safety of employees and others working with or otherwise near machinery by providing requirements for the location and operation of actuators.

**3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard.

## AS

- |           |  |
|-----------|--|
| 4024      | Safety of machinery  |
| 4024.1201 | Part 1201: General principles—Basic terminology and methodology  |
| 4024.1202 | Part 1202: General principles—Technical principles   |
| 4024.1604 | Part 1604: Design of controls, interlocks and guarding—Emergency stop—Principles for design  |
| 4024.1902 | Part 1902: Displays, controls, actuators and signals—Ergonomic requirements for the design of displays and control actuators—Displays        |
| 4024.1904 | Part 1904: Displays, controls, actuators and signals—Indication, marking and actuation—Requirements for visual, auditory and tactile signals |
| 4024.1905 | Part 1905: Displays, controls, actuators and signals—Indication, marking and actuation—Requirements for marking                              |

## 60204

- |         |   |
|---------|---|
| 60204   | Safety of machinery—Electrical equipment of machines        |
| 60204.1 | Part 1: General requirements (IEC 60204-1, Ed.5 (FDIS) MOD) |

## IEC

- |       |  |
|-------|--|
| 60073 | Basic and safety principles for man-machine interface, marking and identification—Coding principles for indicators and actuators |
| 60447 | Man-machine interface (MMI)—Actuating principles   |