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**Information technology — 120 mm DVD —  
Read-only disk**

*Technologies de l'information — Disque DVD de diamètre 120 mm —  
Disque DVD à lecture seule*

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

This International Standard was prepared by JISC (as Standard JIS X 6241-1997) with document support and contribution from ECMA and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Annexes A to H form a normative part of this International Standard. Annexes J to L are for information only.



# Information technology — 120 mm DVD — Read-only disk

## Section 1 - General

### 1 Scope

This International Standard specifies the mechanical, physical and optical characteristics of a 120 mm, read-only optical disk to enable the interchange of such disks. It specifies the quality of the recorded signals, the format of the data and the recording method, thereby allowing for information interchange by means of such disks. This disk is identified as DVD - Read-Only Disk.

This International Standard specifies

- four related but different Types of this disk (see clause 7),
- the conditions for conformance,
- the environments in which the disk is to be operated and stored,
- the mechanical and physical characteristics of the disk, so as to provide mechanical interchange between data processing systems,
- the format of the information on the disk, including the physical disposition of the tracks and sectors, the error correcting codes and the coding method used,
- the characteristics of the signals recorded on the disk, enabling data processing systems to read the data from the disk.

This International Standard provides for interchange of disks between disk drives. Together with a standard for volume and file structure, it provides for full data interchange between data processing systems.

### 2 Conformance

#### 2.1 Optical Disk

A claim of conformance shall specify the Type of the disk. An optical disk shall be in conformance with this International Standard if it meets the mandatory requirements specified for its Type.

#### 2.2 Generating system

A generating system shall be in conformance with this International Standard if the optical disk it generates is in accordance with 2.1.

#### 2.3 Receiving system

A receiving system shall be in conformance with this International Standard if it is able to handle all four Types of optical disk according to 2.1.

### 3 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 950 (1991) *Safety of information technology equipment.*

### 4 Definitions

For the purposes of this International Standard, the following definitions apply.

**4.1 Adhesive layer:** A layer of adhesive material bonding together the two parts of the disk.

**4.2 Channel bit:** The elements by which, after modulation, the binary values ZERO and ONE are represented on the disk by pits.