

JIS

JAPANESE INDUSTRIAL STANDARD

**File Specification for Japanese
Documents Interchange
(Raster Graphics Type)**

JIS X 4004^{—1989}

Translated and Published

by

Japanese Standards Association

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

CONTENTS

	Page
1. Scope	1
2. Definitions	1
3. Configuration of File for Japanese Document Interchange (Raster Graphics Type)	4
3.1 Document File	4
3.2 Document Header	5
3.3 Document Data	6
4. Document Header Part	8
4.1 Configuration of Document Header Part	8
4.2 Area-defining Label	8
4.3 Document Header Label	9
5. Document Data Part	13
5.1 Configuration of Document Data Part	13
5.2 Document Format Information	13
6. Text	16
6.1 Configuration of Text	16
6.2 Graphic Characters	16
6.3 Control Functions	16
6.3.1 Types and Representations of Control Functions	16
6.3.2 Functions of Control Functions	20
6.3.3 Representation of Control Functions	25
6.4 Fundamental Conditions of Format Control	28
7. Raster Graphics	28
7.1 Block	28
7.1.1 Block and Raster Graphic	28
7.1.2 Definition of Block	28
7.1.3 Positioning of Block	29
7.1.4 Arrangement of Block and Text	29

	Page
7.2 Display of Raster Graphic Data	30
7.2.1 Raster Graphic Area	30
7.2.2 Co-ordinates System of Raster Graphics	30
7.2.3 Raster Graphic Data	31
7.3 Coding of Raster Graphics	32
7.3.1 System of Coding	32
7.3.2 Bit Map Coding System	32
7.3.3 One-dimensional Coding System	33
7.3.4 Two-dimensional Coding System	34
7.4 Picture Elements Density	34
8. Block Data Parts	35
8.1 Configuration of Block Data Parts	35
8.2 Block Format Information	35
8.3 Representation of Raster Graphics Data	37
8.3.1 Raster Graphics Data	37
8.3.2 Raster Graphics Representation Attributes	38
8.3.3 Raster Graphics Data String	40
Appendix 1. System Labels	42
Appendix 2. Omission of Document Format Information	46
Appendix 3. Page Format	47
Applicable Standards, Corresponding International Standards and Reference Standards	49 50

File Specification for Japanese Documents Interchange X 4004-1989
(Raster Graphics Type)

1. Scope

This Japanese Industrial Standard specifies the document file specifications for use in the case where the Japanese document interchanges through characters and raster graphics are to be carried out, using flexible disk cartridges, between Japanese word processors or information interchanging machines having performances equal to or superior to these.

This Standard specifies the following contents.

- (1) Configuration of a document file
- (2) Types and forms of information constituting a document file
- (3) Types and functions of character symbols (graphic characters and control characters) to be used.
- (4) Configuration of block data part.
- (5) Representation of raster graphics and forms for storage into document file.

2. Definitions

For the main terms used in this Standard the definitions in the Japanese Industrial Standards dealing with information processing terms apply, and the rest of the terms shall be as follows:

- (1) document Information represented in two-dimensional form so as to be comprehensible by humans, for example, that which is printed on papers or displayed on screens. In this Standard, the document consists of not less than one page of document format information which defines the initial value of format at time of creation of document.
- (2) document file A file consisting of one or more pages of document as objects of Japanese document interchange. The document file consists of document header and document data. One document is stored on a medium as a pair of the document header information in the document header part and the document substance in the document data part.
- (3) file A string of related records to be treated as a single unit. The file can either be stored in the whole or part of one volume or extend over two or more volumes.
- (4) volume The physical unit of data medium which is capable of being attached or detached. In this Standard, one volume corresponds to a flexible disk cartridge. In one volume, either the whole body or one part of one file, or two or more files can be stored.