INTERNATIONAL STANDARD

ISO/IEC 7811-4

Second edition
1995-08-15

Identification cards — Recording technique —

Part 4:
Location of read-only magnetic tracks — Tracks 1 and 2

Cartes d'identification — Technique d'enregistrement —

Partie 4: Position des pistes magnétiques pour lecture uniquement — Pistes 1 et 2

Reference number
ISO/IEC 7811-4:1995(E)

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.

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 the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 7811-4 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Identification cards and related devices*.

This second edition cancels and replaces the first edition (ISO 7811-4:1985), of which it constitutes a technical revision.

ISO/IEC 7811 consists of the following parts, under the general title *Identification cards — Recording technique*:

— *Part 1: Embossing*

— *Part 2: Magnetic stripe*

— *Part 3: Location of embossed characters on ID-1 cards*

— *Part 4: Location of read-only magnetic tracks — Tracks 1 and 2*

— *Part 5: Location of read-write magnetic tracks — Track 2*

Introduction

ISO/IEC 7811 is one of a series of standards describing the parameters for identification cards as defined in clause 4 and the use of such cards for international interchange.

The recording technique and the coded character sets for track 1, intended for alphanumeric data, and for track 2, intended for numeric data, are specified in ISO/IEC 7811-2.

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Identification cards — Recording technique —

Part 4:
Location of read-only magnetic tracks — Tracks 1 and 2

1 Scope

This part of ISO/IEC 7811 specifies the location of the track for read-only magnetic recording, tracks 1 and 2, on identification cards.

ISO/IEC 10373 specifies the test procedures used to check cards against the parameters specified in this part of ISO/IEC 7811.

This part of ISO/IEC 7811 specifies the requirements for cards used for identification. It takes into consideration both human and machine aspects and states minimum requirements.

NOTE — Numeric values in the SI and/or Imperial measurement system in this part of ISO/IEC 7811 may have been rounded off and therefore are consistent with, but not exactly equal to, each other. Either system may be used, but the two should not be intermixed or reconverted. The original design was made using the Imperial measurement system.

2 Conformance

An identification card is in conformance with this part of ISO/IEC 7811 if it meets all mandatory requirements specified herein.

A prerequisite for conformance with this part of ISO/IEC 7811 is conformance with ISO/IEC 7810 and ISO/IEC 7811-2.

3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 7811. At the time of publication the editions indicated were valid. All standards are subject to revision and parties to agreements based on this part of ISO/IEC 7811 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid international standards.

ISO/IEC 7810:1995, *Identification cards — Physical characteristics.*

ISO/IEC 7811-2:1995, *Identification cards — Recording technique — Part 2: Magnetic stripe.*

ISO/IEC 10373:1993, *Identification cards — Test methods.*

4 Definition

For the purposes of this part of ISO/IEC 7811, the definition of "identification card" given in ISO/IEC 7810 applies.

5 Location of magnetic material

The magnetic material shall be located in the area shown in figure 1.

6 Location of encoded data tracks

Track 1 of encoded data shall extend between two lines, 5,66 mm (0,223 in) and 8,46 mm (0,333 in) from the top reference edge of the card, but not beyond a line 8,97 mm (0,353 in) from the top reference edge of the card (see figure 2).

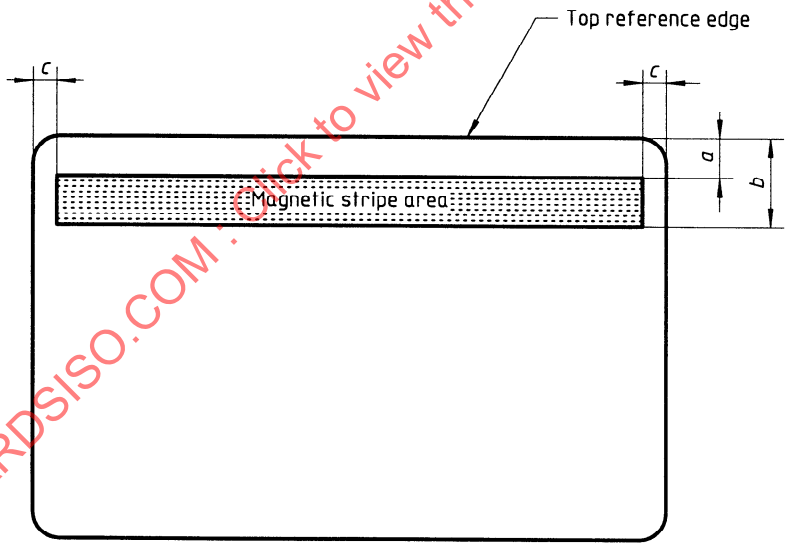
Track 2 of encoded data shall extend between two lines, 8,97 mm (0,353 in) and 11,76 mm (0,463 in) from the top reference edge of the card, but not closer than 8,46 mm (0,333 in) to the top reference edge of the card (see figure 2).

When track 3 specified in ISO/IEC 7811-5 is also encoded, the edge of track 2 nearest track 3, including the effects of fringing, shall not extend beyond 12,27 mm (0,483 in) from the top reference edge of the card.

7 Beginning and end of encoding

The centreline of the first data bit (start sentinel) shall be 7,44 ± 0,50 mm (0,293 ± 0,020 in) from the right edge of the card as shown in figure 3.

The centreline of the last data bit recorded shall not extend closer than 6,93 mm (0,273 in) from the left edge of the card as shown in figure 3.



Dimension	mm	in
a	5,54 max.	0,218 max.
b	11,89 min.	0,468 min.
c	2,92 max.	0,115 max.

Figure 1 — Location of magnetic stripe area for tracks 1 and 2