

ECMA

EUROPEAN COMPUTER MANUFACTURERS ASSOCIATION

STANDARD ECMA-30

FOR

OCR-B SUB-SETS
FOR NUMERIC APPLICATIONS

2nd Edition — March 1976

Free copies of this ECMA standard are available from
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BRIEF HISTORY

ECMA/TC4 started their standardization work in the field of Optical Character Recognition in June 1961. This work led to the adoption of the Standards ECMA-8 (Nominal Character Dimensions of the OCR-A Font), ECMA-11 (Alphanumeric Character Set for OCR-B) and ECMA-15 (Printing Specification for OCR). ECMA-8 and ECMA-11 are compatible with the International Standard ISO 1073 (Alphanumeric Sets for Character Recognition). The additional Standards ECMA-18 and ECMA-21 specify the positioning of characters on Single Line Documents and Journal Tape, respectively. In order to ensure better information interchange, further work has been undertaken on the standardization of the selection of OCR-B characters for those applications where the numerals alone are not sufficient but the full set is not required. This work led to the present Standard, issued in June 1971.

This 2nd Edition differs from the first one in that the character set for Single Line Documents has been reduced to 14 characters with only one additional optional character (SPACE). Furthermore, the letter Z has been selected instead of the letter V as one of the graphics for Journal Tape but has been put in the set of optional graphics. The basic set for Journal Tape is thereby reduced to 17 characters.

THIS 2nd EDITION SUPERSEDES THE EDITION DATED JUNE 1971.

1. PURPOSE

The purpose of this Standard ECMA-30 is to determine the choice of characters for those Optical Character Recognition systems which do not require to make use of the complete OCR-B repertoire and with which a restricted set makes for economical working.

2. SCOPE

The Standard specifies the OCR-B characters to be used for the following applications :

- A. Single-Line documents with a restricted repertoire.
- B. Journal Tapes

Due account has been taken of the distinguishability of characters as well as of system and semantic needs. The provision of two sets is made necessary by the differing requirements of the two applications. All the characters in the set for Single Line Documents, with the exception of the PRE-PRINTED LONG VERTICAL MARK, are included in the set for Journal Tape. This Standard does not specify the printed image, nor does it specify the printing quality for interchange applications. These are defined by the Standards ECMA-11 and ECMA-15, respectively.

The positioning of the characters is specified in Standard ECMA-18 for Single Line Documents and in Standard ECMA-21 for Journal Tape.

3. CHARACTER SET FOR SINGLE-LINE DOCUMENTS

3.1 Basic Set

10 numerals	0123456789
PLUS	+
GREATER THAN	>
LESS THAN	<
PRE-PRINTED LONG VERTICAL MARK	

3.2 Optional Character

If required, e.g. for definition purposes, the character SPACE can be included in the set. Not all machines will necessarily read the character SPACE.

4. CHARACTER SET FOR JOURNAL TAPE

4.1 Basic Set

10 numerals	0 1 2 3 4 5 6 7 8 9
PLUS	+
GREATER THAN	>
LESS THAN	<
LETTER C	C
LETTER E	E
LETTER N	N
LETTER X	X

4.2 Optional Characters

If more characters are required by the application, the set can be extended by inclusion of :

LETTER S	S
LETTER T	T
LETTER Z	Z

The use of these three letters is subject to a restriction : they may not appear in columns in which the numerals 1,2 and/or 5 can appear.

