IBM ENHANCED KEYBOARD FOR THE PERSONAL COMPUTER

Table of Contents

IBM Announcement Letter No. ZG87-4014 dated April 2, 1987

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See final section for details of availability and limitations.

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IBM ENHANCED KEYBOARD FOR THE PERSONAL COMPUTER

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PRODUCT DESCRIPTION          ITEM NO   AAS NO    LANGUAGE

IBM Enhanced Keyboard        1391401   #1401     US-English
IBM Enhanced Keyboard        1396790   #6790     US-English
IBM Enhanced Keyboard        1391402   #1402     French
IBM Enhanced Keyboard        1391403   #1403     German
IBM Enhanced Keyboard        1391404   #1404     Italian
IBM Enhanced Keyboard        1393395   #3395     Italian
IBM Enhanced Keyboard        1391405   #1405     Spanish
IBM Enhanced Keyboard        1391406   #1406     UK-English
IBM Enhanced Keyboard        1391407   #1407     Danish
IBM Enhanced Keyboard        1391408   #1408     Hebrew
IBM Enhanced Keyboard        1391409   #1409     Norwegian
IBM Enhanced Keyboard        1391410   #1410     Portuguese
IBM Enhanced Keyboard        1391411   #1411     Swedish/Finnish
IBM Enhanced Keyboard        1391412   #1412     Swiss
IBM Enhanced Keyboard        1395881   #0245     Swiss-French
IBM Enhanced Keyboard        1395882   #0246     Swiss-German
PRODUCT DESCRIPTION          ITEM NO   AAS NO    LANGUAGE
IBM Enhanced Keyboard        1391414   #1414     Belgian
IBM Enhanced Keyboard        1391490   #1490     Arabic
IBM Enhanced Keyboard        1391511   #1511     Dutch
Keyboard Cable for  PC ATE   1391828   #1828
and PC XT286 - 3m
Arabic Language Supplement   95X2786   #2786
(version 4.0)
Hebrew Language Supplement   95X2794   #2794
(version 4.0)
Arabic Language Supplement   95X3704   #3704
(version 4.1)
Hebrew Language Supplement   95X3705   #3705
(version 4.1)
```

Product Description

The Enhanced Keyboard represents an advance in keyboard design for the IBM Personal System/2 system units. It is designed to meet the needs of the personal computer user, the office system user and the user who communicates and interacts with larger computer systems. The Enhanced Keyboard is provided in a 101 key version for U.S. and Hebrew users and 102 key versions for European and Arabic users . and it conforms to ISO standards. Both versions are recappable, as detailed in Highlights, so the key tops may be changed for applications requiring special keys. It is designed to be used with the Personal System/2 system units and may be used with the IBM Personal Computer AT Expanded or IBM Personal Computer XT286. It is not supported on other IBM System Units, and IBM provides no guarantee that it will work in conjunction with them.

Cookie Preferences

Highlights

- 101 Key U.S.and Hebrew Version; 102 Key World Trade and Arabic Versions

- Recappable keytop capability (93 unit size keys, 4 one and a half sized keys : Alt, AltGr, Ctrl, Ctrl)

- Selectric (TM) Typing Section for U.S. Version

- ISO Typing Section for European Version

- Dedicated Numeric Pad

- Dedicated Cursor and Screen Controls

- Twelve Function Keys

- Status lights for Num Lock, Caps Lock and Scroll Lock

- A microprocessor in the keyboard controls the system unit interface protocol, scan code generation and command processing.

- 3m or 2m long cables

- Language Support:
  US English, Hebrew, UK English, French, German, Italian, Spanish, Danish, Dutch, Norwegian, Portuguese, Swedish/Finnish, Swiss, Belgian and Arabic.

Details

KEYBOARD LAYOUT

The 101 key U.S. keyboard and the 102 key European keyboards differ only in the typing section of the keyboard. The typing section and the numeric pad have home row identifiers for the touch typist.

The keyboard layout may be divided into four (4) sections:

TYPING SECTION

The U.S. keyboard is arranged in a similar manner to the Selectric (TM) keyboard layout but with 47 graphic character keys. The tab, caps lock, shift, enter and backspace keys have a larger striking area and are located in their familiar Selectric (TM) locations. One control (Ctrl) and one alternate (Alt) key is placed on each side of the space bar.

The typing section for the European keyboard has a layout which meets the International Standards Organization (ISO) standard. It has 48 graphic character keys and a vertical enter key. An alternate graphic (AltGr) key on the right side of the space bar provides additional graphic characters.

NUMERIC PAD

The cursor and screen control keys have been separated from the numeric pad and therefore the numeric pad can be dedicated to numeric input. A division sign key has been added to the numeric pad so that the four arithmetic operators as well as an additional enter key may be easily accessed.

CURSOR/SCREEN CONTROLS

The cursor control keys are arranged in an inverted T arrangement. Insert, delete, home, end, page up and page down keys are separated from the numeric pad and located above the dedicated cursor control keys. The escape key (ESC) is isolated at the upper left of the keyboard. Dedicated Print Screen/SysRq, Scroll Lock, and Pause/Break keys are provided for commonly used functions.

FUNCTION KEYS

The function keys are located across the top of the keyboard spaced in groups of four. Two additional function keys are provided (F11 and F12) for a total of twelve.

INDICATOR LIGHTS

Cookie Preferences

Indicator lights, located at the upper right corner of the Keyboard indicate the status of the Num lock, Caps lock and Scroll lock keys.

CABLES

The keyboard is attached to the system unit with a 2m or 3m long pluggable, coiled cable, permitting adaptation of the computer to a variety of workspace configurations. Both cables have a central coiled section, 45 cm long when relaxed, and a 15 cm long section the side of the keyboard. The other section, the system side, is 60 cm and 195 cm long, respectively. Total lengths with the coiled section stretched are approximately 2m and 3m respectively. The keyboard cable P/N 1391828 allows the keyboards to be attached to IBM Personal Computer AT Expanded or IBM Personal Computer XT286.

KEYBOARD HEIGHT ADJUSTMENT

The Keyboard height can be adjusted to two different positions for typing comfort. With an adjustable typing angle it offers commonly used data and word processing functions, with separate numeric functions and cursor keypads.

TECHNICAL DATA

```
o   101 Keys for US and Hebrew
o   102 Keys for Europe and Arabic
o   Serial Interface
o   Status Lights for Caps Lock, Num Lock and Scroll Lock
o   Dimensions
    -   Length - 492 mm (19.37")
    -   Depth  - 210 mm ( 8.27")
    -   Height -  58 mm ( 2.28") Legs Extended,
                  50.2 mm (1.98") Retracted.
o   Weight:      2.25 Kg (5 pounds).
```

PREREQUISITES.

The keyboard is not included with the system unit and has to be ordered.

The Enhanced Keyboard is designed to be attached to the IBM Personal System/2 system units. It may also be attached to the current IBM Personal Computer AT Expanded and IBM Personal Computer XT286.

The appropriate keyboard cable is needed.

The Enhanced Keyboard is not supported on other IBM System Units than the ones specified and IBM provides no guarantee that it will work with them.

SOFTWARE SUPPORT

DOS 3.2

Software support is provided via DOS 3.2 for the US English and the four major European Languages: English, French, German, Italian, Spanish.

The following European Language Keyboard support:

```
Belgian
Danish
Norwegian
Portuguese
Swedish/Finnish
Swiss-German/Swiss-French
```

is contained in the National Languages Supplement, that has to be ordered in addition to DOS 3.2, with the following P/N.

```
National Language Supplement
Multiple Languages            62X8750
```

The following European Language Keyboard support:

```
Greek
Icelandic
Turkish
```

is contained in the National Language Supplement, that has to be ordered in addition to DOS 3.2, with the following P/N:

```
National Language Supplement
Greek, Icelandic, Turkish     62X8770
```

For the right to left languages: Arabic and Hebrew, Language Supplements are also required in addtion to DOS 3.2:

```
                        Personal Computer XTs/ATs
         Arabic Vs 2.0                62X9695
         Hebrew Vs 3.0                62X8756
```

DOS 3.3

Software support is provided via DOS 3.3 for the US English and the twelve European language keyboard layouts.

SUPPORT FOR GREEK, ICELANDIC, TURKISH

IBM intends to provide national language support for Iceland, Greece and Turkey to work with the IBM Personal Computer Disk Operating System (DOS) 3.3, but cannot make an announcement at this time.

For the right to left languages: Arabic and Hebrew, Language Supplements are also required as follows:

```
               Personal System/2      Personal System/2
                 Model 30, 50           Model 60,80
       Arabic    Vs 4.0 95X2786        Vs 4.1 95X3704
       Hebrew    Vs 4.0 95X2794        Vs 4.1 95X3705
```

IBM OPERATING SYSTEM/2

Software support is provided via IBM Operating System/2 for the US English and the twelve European language keyboard layouts.

LANGUAGE SUPPLEMENTS FOR RIGHT-TO-LEFT LANGUAGES

The following items are required for the Right-to-Left languages:

```
A)  For IBM Personal System/2 Model 30 and Model 50:
1.  The Bi-directional support and the keyboard routine for
    Arabic are contained in a dedicated Arabic Language
    Supplement (Version 4) P/N 95X2786
2.  The Bi-directional support and the keyboard routine for
    Hebrew are contained in a dedicated Hebrew Language
    Supplement (Version 4) P/N 95X2794
B)  For IBM Personal System/2 Model 60 and Model 80:
1.  The Bi-directional support and the keyboard routine for
    Arabic are contained in a dedicated Arabic Language
    Supplement (Version 4.1) P/N 95X3704
2.  The Bi-directional support and the keyboard routine for
    Hebrew are contained in a dedicated Hebrew Language
    Supplement (Version 4.1) P/N 95X3705
C)  For IBM Personal Computer XT286 and
    IBM Personal Computer AT Expanded:
1.  The Bi-directional support and the keyboard routine for
    Arabic are contained in a dedicated Arabic National
    Language Supplement (Version 2) P/N 62X9695
2.  The Bi-directional support and the keyboard routine for
    Hebrew are contained in a dedicated Hebrew National
    Language Supplement (Version 3) P/N 62X8756
```

The Language Supplements have to be ordered specifically and are provided free of charge when ordering a keyboard of the related language.

Additional copies can be obtained at a price using the Order Item Numbers detailed under 'Product Description' above.

SPECIAL CHARACTERS IN LEFT-TO-RIGHT LANGUAGES

DOS 3.3 allows for keyboard/display code page switching among several pairs of coge pages. These code pages are similar but they do not contain all of the same characters.

Every country keyboard is also supported by the new multilingual code page (Code Page 850). This code page contains all characters needed for the Left-to-Right languages and therefore keyboard engravings and displayed characters are consistent. Using the keyboard in any of the other code pages may result in an inconsistency in representation of unbroken vertical bar special character. (Note, however, that where the appropriate communications software is in use the unbroken vertical bar is correctly transmitted.)

Users with keyboards exhibiting this inconsistency who wish, for cosmetic reasons, to change the keytop engraved with an unbroken vertical bar to one with an engraving of a broken vertical bar may obtain a replacement keycap at no charge from the party providing this keyboard (e.g. the IBM Authorised Dealer or the IBM Branch Office).

Cookie Preferences

Announcement Countries

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The data in this letter is subject to the disclaimer in Letter ZS90-0112, which is available from IBM on request.

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Cookie Preferences