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Apple IIe Hardware: Dvorak Keyboard Layout

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The Dvorak keyboard layout, an option available on the Apple IIe and
Apple III, is popular with many typists.

Apple IIe:

The Dvorak keyboard layout is available on the revision "B" Apple IIe main
logic boards. If the user prefers the Dvorak layout over the standard
QWERTY, a minor modification can be made to the logic board.

The first--also the most versatile--method is to solder the main logic
board "X3" jumper located at board coordinate B14, tying the character
generator select line to the annunciator #2 address. The system follows the
Dvorak layout until the QWERTY layout is invoked with POKE 49244,0
(annunciator #2 off). To revert back to the Dvorak layout, POKE 49245,0
(annunciator #2 on) or press CTRL-RESET. At power-on, the system defaults
to the Dvorak layout.

Alternatively, jumper the "J19" solder pads together; this method, however,
prevents you from toggling to the QWERTY layout. If, instead, you solder a
two-pin Molex connector (available from electronics parts stores) at J19, a
shorting block, similar to the one used on the Apple IIe Extended 80-Column
Text Card, could be used to switch from the Dvorak to the QWERTY layout.

After making the modification of your choice, remove the video ROM (location
F4) from the main logic board. Bend pin #18, then re-insert the ROM, with
with pin #18 sticking out to the side instead of into the socket..

All of these modifications may void your warranty if a problem occurs as a
result of improper modification--that is, poor solder job, pins bent on
the wrong chip, chip plugged in backward, etc.--so be very careful.

Apple III:

Because the Apple III is a software driven machine, the Dvorak keyboard layout is enabled by "programming" the keyboard; this is done with the System Configuration Program on the System Utilities diskette. The Dvorak layout data is on the System Utilities Data diskette included in the System Utilities package.

To enable the Dvorak layout for a particular diskette:
1. Start up the System Utilities: select "System Configuration Program" from the main menu.
2. Select "Read A Driver" from the next menu.
3. Remove the Utilities diskette: insert the diskette you wish to modify into drive 1.
4. Press RETURN to read the SOS.DRIVER file.
5. Place the Utilities diskette back into drive 1.
6. Select ESCAPE to go back to the menu: choose "Change System Parameters".
7. Remove the Utilities diskette: insert the Utilities Data diskette in drive 1.
8. Select "Keyboard Layout": Type /UTILITIES.DATA/KEYBOARD.LAYOUT/DVORAK; press RETURN.
9. Place utilities diskette back into drive 1: press ESCAPE twice to return to the menu.
10. Select "Generate New System".
11. When system validation is complete, put the diskette you wish to modify into drive 1. Type .D1/SOS.DRIVER, then press RETURN. If you get a verification question here, answer "yes". You must remove the write-protect tab at this time, and you must unlock the SOS.DRIVER file (a function of the FILE HANDLING COMMANDS submenu).

Apple IIe and Apple III:

The final step is to rearrange the keycaps. At present, Apple does not offer the Dvorak keycap set. Because the keycap contours conform to the QWERTY layout, you will find your keyboard somewhat "lumpy".

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