

# Apple II Technical Notes



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Developer Technical Support

## ProDOS 8

### #4: I/O Redirection in DOS and ProDOS

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| November 1988 |      |            |
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This Technical Note discusses I/O redirection differences between DOS 3.3 and ProDOS.

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Under DOS 3.3, all that is necessary to change the I/O hooks is installing your I/O routine addresses in the character-out vector (\$36-\$37) and the key-in vector (\$38-\$39) and notifying DOS (JSR \$3EA) to take your addresses and swap in its intercept routine addresses.

Under ProDOS, there is no instruction installed at \$3EA, so what do you do?

You simply leave the ProDOS BASIC command interpreter's intercept addresses installed at \$36-\$39 and install your I/O addresses in the global page at \$BE30-\$BE33. The locations \$BE30-\$BE31 should contain the output address (normally \$FDF0, the Monitor COUT1 routine), while \$BE32-\$BE33 should contain the input address (normally \$FD1B, the Monitor KEYIN routine).

By keeping these vectors in a global page, a special routine for moving the vectors is no longer needed, thus, no \$3EA instruction. You install the

addresses at their destination yourself.

If you intend to switch between devices (i.e., the screen and the printer), you should save the hooks you find in \$BE30-\$BE33 and restore them when you are done. Blindly replacing the values in the global page could easily leave you no way to restore input or output to the previous device when you are done.