

Review: Quadlink

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Contributor

The idea that you can add all the benefits of the trusty Apple II Plus to the IBM Personal Computer for \$600 may bring you visions of home computing for the entire family. The question is whether Quadlink is the product that can satisfy these fantasies; our answer is no.

The problem is not that the board does not work; it functions very well in some circumstances. There are so many limitations to its use, though, that it's probable most of the Apple software you have won't run properly—or at all—on the Quadlink.

If you are interested in running Apple II programs that cannot be converted to run directly on the PC, that do not require special Apple peripherals, that do not require an 80-column display or the Shift key and are not protected with the common "half-tracking" scheme, Quadlink will work admirably. It is likely, though, that almost any package you want to use will need one of those things. It's especially frustrating to discover just how many programs are protected with half-tracking—you will simply be unable to run those programs using the Quadlink.

The problem is not really with the Quadlink; the IBM diskette drives are at fault. Regular Apple diskette drives can be made to read the half-tracks, which are located midway between normally used tracks on the diskette. The PC's drives, though, cannot read the information, so if you try to use the Apple disks, the programs will not run. You can't make copies, either, using standard Apple copy programs, so the only way to run such programs is to equip your PC with floppy-disk drives that can read half-track-protected diskettes.

The upshot of this is that you can't use many popular programs—the RasterBlaster and Star Blazer games, the DBMaster data-base system and the Locksmith copy program, for example—with the Quadlink board.

If you manage to find a program that doesn't use this scheme, you will probably encounter one of the other limitations. If the program requires more than a 40-column display, you will not be able to use it. Using lowercase characters is also a problem. The Quadlink does have lower-

case abilities, but it normally operates with uppercase characters only, and you must have special software to get at the lowercase circuitry. Unfortunately, the manufacturer doesn't provide any such routines with Quadlink, and the documentation makes no mention of lowercase use at all.

If you do manage through trial and error to discover the lowercase workings of the Quadlink, you will still have problems using the Shift key. Since most Apple programs that use both uppercase

and lowercase characters use special instructions to accomplish the task, the Shift key may or may not work with a particular program. You may find that it works but does not produce the characters you expect it will. You can probably use the Escape key as a substitute Shift key for many programs, but you will probably find it aggravating to be forced to go this route while you are using the expensive IBM keyboard.

The Quadlink also promises to permit you to use any IBM peripheral board you have with Apple programs under its control. In practice, though, this theory breaks down.

You can easily get a printer to function with Apple software. Any program that is set up to use an Apple-style peripheral card, though, is likely to not work as expected, either because the program will not receive the proper response from the IBM card or because the program will expect to find the peripheral in a slot the Quadlink cannot use. Quadlink was designed to address only the slots numbered 0, 2 and 6 when a program requires information from a peripheral, and the slots numbered 0, 1, 2 and 6 when a program has information to send to them. As a result, several programs, including some useful utilities, won't work.

If you want to use a program without the described limitations, the Quadlink board is easy to use and functions quite well. If you want to use a program that is subject to the limitations, you will find yourself struggling.

The documentation is no help, either. It looks great and is impressive for normal operations and installation procedures, but it contains little information on overcoming the problems we've mentioned. Any one who is contemplating use of the Quadlink had better have a good library of Apple manuals handy. Between what it never mentions and what functions it mentions but never explains well enough for you to use, we can only call the documentation "poor."

If you do decide to buy the product anyway, you'll find it is well built and will require minimal service. It is protected by a one-year warranty, and you can call Quadram if you need help. That still won't help you solve the board's basic drawbacks, though, so if you buy it you're on your own.

InfoWorld

Report Card

Quadlink



	Poor	Fair	Good	Excellent
Setup	11	11	11	47
Ease of Use	11	47	11	11
Performance	11	47	11	11
Documentation	47	11	11	11
Serviceability	11	11	11	47

Product details: List price, \$680. Apple II Plus-compatible plug-in board for the IBM Personal Computer; 6502 CPU; 64K RAM; game paddle port; Applesoft ROM; lowercase functions; AppleDOS 3.3, disk-filing utilities, Quadlink software version 1.00 included. Manufactured by Quadram Corporation, 4355 International Boulevard, Norcross, GA 30093; (404) 923-6666.

Product summary: Quadlink purports to enable you to run Apple II Plus software in your IBM Personal Computer. In truth, only a few programs will work well; most programs will run into one of several roadblocks that make this product generally unacceptable.