AppleWorks™ Modifier
for the Apple®][or Apple][plus

Now you can use AppleWorks on an Apple][and Apple][plus with the AppleWorks modifier disk from Videx®. Although AppleWorks was originally written to be used with the Apple //e or //c you can now use this powerful integrated program on standard Apple]['s.

Equipment you will need
To use the Videx AppleWorks modifier disk you will need the following:
• AppleWorks program disks: version A or B (not available from Videx)
• An Apple][or Apple][plus with 64K of memory.
• A Videoterm™ (with inverse chip) or UltraTerm display card in slot 3.
• The one-wire shift key modification installed in your Apple.

Terminology
In this manual we will refer to various parts of your computer. The following is a picture of the Apple][you can use as a visual glossary of terms we will use in this manual.
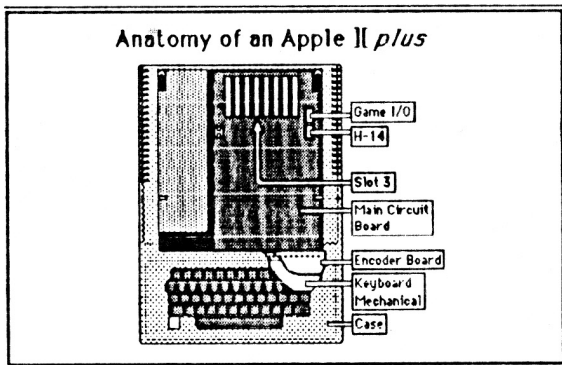

Figure 1: Visual glossary of terms

Using the AppleWorks modify disk
Follow these steps to use the AppleWorks modify disk:
1) Turn your computer off.
2) Insert the AppleWorks modify disk into drive 1 and turn your computer on.
3) ProDOS will load in a few seconds and the message "APPLEWORKS MODIFIER FOR THE APPLE][+" will appear.
4) When the modify program prompts you to "INSERT YOUR APPLEWORKS STARTUP DISK", replace the AppleWorks modify disk with the startup side of your AppleWorks disk, and press RETURN.

5) Next, the modify program will ask you to "REINSERT YOUR APPLEWORKS MODIFIER DISK". Replace the AppleWorks startup disk in drive 1 with the AppleWorks modify disk and press RETURN.

If everything is connected properly, you will see a high resolution introduction screen shortly. A few seconds later, the normal AppleWorks startup screen will appear. (If you are using a Videoterm without a soft video switch you would connect your video monitor to the Videoterm now) Put your copy of the AppleWorks program disk in drive 1 and press RETURN. AppleWorks should now be up and running on your Apple][.

NOTE: To copy your AppleWorks disks follow the instructions outlined on page 5 of the AppleWorks Tutorial.

After this configuration process has been completed you will not have to use your AppleWorks startup disk again; **you will use the AppleWorks modify disk as your startup disk from now on.**

If you need to go through the modify process again press "R" during the startup process. The AppleWorks modify procedures outlined above (from step 3 to 5) will need to be used again. Also, if you want to hurry up the loading process, you may press the space key while the introduction picture is displayed to go into AppleWorks more quickly.

Using AppleWorks on your Apple][

In order for AppleWorks to be adapted to standard Apple]['s, some changes had to be made in the operation of the program. The most obvious changes are in the use of the keyboard. Since the standard Apple][does not have the open-apple, tab, delete, or the up and down arrow keys we had to substitute other keys to get the same functions. The following is a chart of some important changes to be aware of.
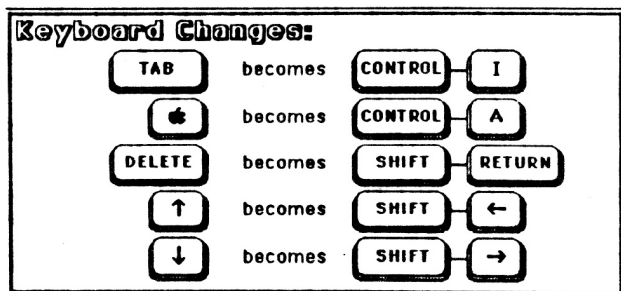

Figure 2: Keyboard changes to accommodate the Apple][and][+ keyboard

Typing Control-C will toggle the keyboard into caps-lock mode. That is, all the letters will be displayed in uppercase only. To return to the normal upper/lowercase keyboard enter another Control-C. **You must toggle into caps-lock mode to type in the @ symbol used in the AppleWorks spreadsheet**.

The one-wire shift key modification

The one-wire shift key modification is a simple change to your Apple][. It is easy to install or remove and is used by many programs that work on standard Apple]['s. When installed it is much easier for application programs to use the shift key to provide upper-and lowercase letters.

If you do not already have the one-wire modification installed in your Apple you will need to purchase a narrow-gauge wire with a spring-loaded clip on each end. In many electronic stores (such as Radio Shack) it is known by its trade name: EZ Hook. If you are uncomfortable doing this modification, your local dealer can do it for you. It is something they are probably familiar with.
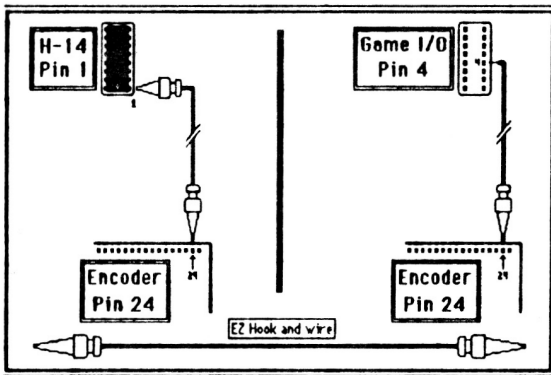
Figure 3: The one-wire shift key modification

The encoder board has 25 inch-long pins connecting it to the mechanical keyboard assembly. Connect one of the clips of the EZ hook onto pin 24 on the encoder board (the second pin from the right). The other end of the EZ hook should be connected to pin one of the chip at location H-14 [please refer to Figure 3]. That's all you have to do to make the one-wire shift key modification!

If, for some reason, you can not attach the EZ hook to H-14, cut one of the clip ends off. Expose one quarter inch of bare wire on the cut end. Plug the wire into pin hole 4 of the game I/O socket.

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