

### Formatting a ProDOS RAMdisk

You can use Apple Computer's **FILER** program to format the RAMdisk as instructed below. Any other program that will format large volumes will also work. For your convenience, **FILER** is provided on the AppleWorks Expander disk. Complete **Filer** instructions are in the ProDOS User's Manual and tutorial **HELP** screens are also available from within the program. Here's an outline of the **FILER**'s format procedure:

1. **Load Filer**

*Either*

Boot the AppleWorks Expander disk and then select the Copy Files option from the Main Menu

*or*

At the AppleSoft BASIC prompt ( **)**, use the ProDOS dash command, **-FILER**.

2. **Select option "V" from the FILER main menu.**
3. **Select option "F" from the Volume Commands menu.**
4. **Enter the number of the slot containing the RamFactor card.** For the new volume name enter: **RAMs**, where **s** is the RamFactor slot number. ( - or name it anything you like.)
5. **Answer "Y" to the "DESTROY 'RAMs'?(Y/N)" prompt.** Your RamFactor RAMdisk is formatted in less than a second.
6. **Press the ESC key twice to return to the FILER main menu.**
7. **Press "Q" to Quit Filer.**

If you booted the AW 2 Expander disk to run **Filer**, you will be left in Bird's Better 'Bye. (Instructions on screen and in AW 2 Expander User's Manual.) If you run **Filer** from another launcher program, you'll be returned to that launcher.

### Copying files to a ProDOS RAMdisk.

Treat the ProDOS RAMdisk just like any other ProDOS volume. Files can be copied to or from it by using a file-copy utility program, such as Apple's **FILER**, Central Point Software's **Copy II Plus** (version 6.5 or later), or Applied Engineering's **AUTOCOPY2** (**AUTOCOPY2** is described in the AW 2 Expander User's Manual).

When an Enhanced Apple //e system is cold booted, the RamFactor firmware (ROM) determines whether the card has been formatted and is bootable. If it is bootable, it will boot into the appropriate operating system. If not, the Apple ROM will continue with the slot search for the next bootable device. Apples with non-enhanced firmware will not support either the RamFactor or the Apple II Memory Expansion card as a cold-bootable device.

Whenever a **PR#s** command is issued or execution starts at **Cs00**, the RamFactor ROM again determines whether the card is bootable. If the RAMdisk is bootable the ROM will boot into the appropriate operating system. If a non-bootable RAMdisk is encountered, the ROM will enter the RamFactor Partition Manager firmware. Since an unpartitioned, bootable RamFactor RAMdisk will not allow access to the RPM firmware using the **PR#s** command, use the **Cs10G** command to force the activation of the RPM firmware. But remember, this will cause the entire contents of the RamFactor to be cleared.

Whenever the **IN#s** command is issued, the RamFactor ROM checks for the presence of the DOS 3.3 operating system. If DOS 3.3 is not found, the **IN#s** command has the same effect as the **PR#s** command. That is, if a bootable non-DOS 3.3 RAMdisk is present, it will boot; if not, it will access the RPM firmware. If DOS 3.3 is found, the RamFactor firmware will patch the **RWTS** routine, allowing access to the RAMdisk.

By activating the RamFactor Partition Manager firmware, the card is divided into nine partitions, with all of the available memory in the first partition, except for 1024 bytes which the RPM reserves for its own use. The other eight partitions are initially empty. For example, a one Megabyte RamFactor first accessed by ProDOS would yield a 1024K RAMdisk. When the Partition Manager is called, the first partition would then yield 1023K.

Once the card has been formatted into the nine partitions, access through DOS, ProDOS, or the Protocol Converter will deal with the currently selected partition. To recall the RPM menu to select another partition, use the **PR#s** command. The **PR#s** command does not boot a bootable partition.