

The **FILER**

- **SUPER FAST COPY PROGRAM**
- **FILE UTILITIES (Copy, Lock, Unlock)**
- **DISK SYSTEM CHECK**
- **DISK SPEED CHECK**

CENTRAL POINT
Software, Inc.

SYSTEM REQUIREMENTS

Apple II Computer, 48K Memory
One or two disk drives

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INTRODUCTION

The Filer disk is a collection of useful utilities for your Apple or Apple compatible computer and disk drives. It fully supports the drives manufactured by Apple Computer, Inc. (Disk II), Micro-Sci (A2, A40, A70), Fourth Dimension, and Franklin. It also works well with the QuadLink board for the IBM by QUADRAM Corporation. This disk includes:

1. The Filer program. This allows you to copy individual files, copy DOS disks, lock and unlock files, and change the DOS booting program.
2. Fast Copy. A very fast, yet reliable copy program for DOS, CP/M, Pascal and other Apple compatible diskettes. It includes full read and write error checking and supports 35, 40 and 70 track drives.
3. Disk Speed and Disk Test. Helps you keep your disk drives adjusted to the correct speed for maximum reliability. It also allows you to check the read/write circuitry of your disk drives, and verify the integrity of your diskettes.

In addition, this disk includes Apple DOS 3.3, and FPBASIC (Applesoft). Please note that DOS 3.3, the Autostart ROM, and Applesoft are copyrighted programs of Apple Computer, Inc. and are licensed to Central Point Software to distribute for use in combination with the Filer.

You will want to keep your Filer Disk handy whenever you use your Apple II or Apple compatible computer. With it you can make fast, reliable back-ups of your valuable software, easily move programs and data files from disk to disk, and keep your diskettes and drives in top working condition. The following sections describe each of the individual programs included on the Filer Disk in greater detail.

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FILER INSTRUCTIONS

The Filer program is a disk utility designed for an Apple with DOS 3.3 and 35, 40, or 70 track disk drives. The Filer lets you manipulate data and files on disks with greater ease. Commands include locking, unlocking, deleting, and copying files, as well as cataloging the disk, determining the number of free sectors, copying the DOS or the entire disk, and changing which program the disk will run when booted. The Filer requires an Apple II with 48K of memory, DOS 3.3, and at least one disk drive.

To run the Filer, either boot up the Filer system disk and select the Filer option (option 1), or boot any standard DOS disk, insert the Filer disk, and type:

BRUN FILER

The disk will whirl, and in a few moments the main Filer menu will appear, displaying the Filer heading, the command menu, and the current slot and drive.

You will notice that the word "CATALOG" is in inverse. This is because CATALOG is the currently selected option, which is always displayed in inverse. To select another option, either type the number listed to its left, or use the arrow keys to move the inverse field. Once you've selected the option you want, simply press the <RETURN> key and it will execute.

Throughout the Filer, pressing the <RETURN> key usually selects the current or default option, and pressing <ESCAPE> always returns you immediately to the main menu. Pressing <ESCAPE> from the main menu will exit the program.

>>> SET SLOT & DRIVE

The slot and drive numbers displayed at the bottom of the main menu determine which disk drive Catalog, Lock, Unlock, Delete, and Change Booting Program will use. To change the slot and drive numbers, move the inverse field to the "SET SLOT & DRIVE" option and press <RETURN>. A flashing cursor will appear over the slot number. To change the number, type the new number. If you want to keep the same slot number, you can either retype the number, or simply press <RETURN>. The cursor will then appear over the drive number. As with the slot number, either type a new number or press <RETURN>. (If you type an invalid number, a tone will sound and the cursor will remain in place.)

>>> CATALOG

The CATALOG option gives both a standard DOS catalog and the number of free and used sectors on the disk. The catalog contains the following information for each file:

1. An asterisk if the file is locked.
2. A letter representing the filetype
(A=Applesoft Basic, I=Integer Basic, B=Binary, T=Text).
3. The number of sectors used by the file.
4. The name of the file.

>>> COPY DISK

After selecting the COPY DISK option, you are asked for the slot and drive numbers for both the source and destination disks. As with "SET SLOT & DRIVE", you can change these numbers or press <RETURN> for no change. If a single drive is being used, you will be prompted to insert the source or destination disks at the appropriate times.

COPY DISK automatically determines how many tracks are on the source disk, and formats and copies that number of tracks. Disks can be copied from 35-track drives to 40- or 70-track drives, but only the first 35 tracks will be formatted and copied. Likewise, 40-track disks can be copied onto 70-track disks. However, the reverse is not true. Attempting to copy to a drive with fewer tracks available will cause errors. COPY DISK should only be used to copy standard DOS format diskettes. In particular, do not use it to copy Pascal or CP/M diskettes. (Use Fast Copy instead).

>>> COPY DOS

This option allows you to copy only the disk operating system (the first three tracks on the disk) from one disk to another. This is useful for making master disks, which load DOS into the appropriate place in memory, regardless of how much memory your Apple contains. (The Filer disk is a 35-track master disk. You can create your own master disks by copying the DOS from the Filer disk onto your own initialized disks.) The COPY DOS option is similar to the COPY DISK option: Simply select slot and drive numbers, insert disks, and press <RETURN>.

>>> CHANGE BOOTING PROGRAM

This option will display the program that is run whenever a disk is booted, and lets you change DOS to boot with another program. The new program can be either a Basic or binary program or an Exec file.

When selected, the disk whirs and the message

```
THE DISK NOW BOOTS WITH  
FILE:
```

appears with the name of the booting program, and you are asked for a new filename. If you press <RETURN>, the program will simply return to the main menu without changing the booting program. If you enter a filename, the program will verify that the file is on the disk, determine its filetype, and modify DOS so that the disk will subsequently boot with this new program. You are then returned to the main menu.

>>> FILE OPTIONS

The four remaining options deal with individual files. When asked for a filename, pressing <RETURN> will return you directly to the main menu. To manipulate one or more files, you can enter a single filename or you can select a number of files at once using a special character called a wildcard character. The Filer uses "=" (an equals sign) as a wildcard character. This character lets you match any number of characters in the filename, as long as the rest of the name is identical.

For example, if you enter a filename of "H=I", the Filer will match it with any file on the disk that begins with an "H" and ends with an "I", including "HAWAII", "HUGE MARTINI", or simply "HI". Entering a filename of "=A=" matches any file that contains the letter "A". Entering "=" matches every file on the disk.

If you enter a filename containing the wildcard character, the Filer will ask:

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DO YOU WANT PROMPTING (Y/N) ?
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If you answer with a "Y" for yes, then for every matching file found, the filename will be displayed and you will be asked ("Y/N") whether or not you want to use this file. This protects you from accidentally disturbing files you didn't intend to change. If you answer no to the prompting question, then all matching files will be used. After all files have been operated on, the message "DONE" will appear; if no files match, "NO FILES SELECTED" will be displayed.

The current file being used is displayed whether or not prompting is selected, and files already operated on are shown at the bottom of the screen. When finished, you are again prompted for a filename. You can enter another filename or press <RETURN> to return to the main menu.

>>> LOCK FILES

This option allows you to lock one or more files at a time. If you enter a single filename, that file will be locked. If you enter a filename containing the wildcard character, only files that are currently unlocked will be matched and then locked. Hence if you select to lock files that are already locked, you will get a "NO FILES SELECTED" message.

>>> UNLOCK FILES

This option lets you unlock one or more files at a time. If you enter a single filename, that file will be unlocked. If you enter a filename containing the wildcard character, only files that are currently locked will be selected and unlocked. Hence, if you select to unlock files that are already unlocked, you will get a "NO FILES SELECTED" message.

>>> DELETE FILES

This option lets you delete one or more files. The files must be unlocked before they can be deleted. If you enter a single filename, that file will be deleted if it is unlocked. If you enter a filename containing the wildcard character, only files that are unlocked will be deleted. Hence, if you select to delete files that are locked, you will get a "NO FILES SELECTED" message.

>>> COPY FILES

This option lets you copy any number of files from one disk to another. You are first prompted for source and destination slot and drive numbers. If these do not need to be changed, simply press <RETURN> four times to "walk" through. If you are using only one drive, you will be prompted to insert the source and destination disks at the appropriate times. Enter the filename, and copying will begin.

If a file with the same filename already exists on the destination disk, the filename will be displayed with the message "EXISTS", or if the file is also locked, the message "IS LOCKED". You are then prompted:

<CR> TO COPY, <CTRL-C><CR> TO CANCEL, OR
COPY AS?

If you respond by entering <RETURN>, the old file will be deleted and the new file will be copied onto the disk. If you press <CTRL-C><RETURN>, the file will not be copied. If you want to copy the file with a new name, enter the new name, then press <RETURN>. The Filer will determine if this new filename is also on the destination disk. If it is, you will again be prompted to accept, cancel, or change the filename.

FAST COPY INSTRUCTIONS

FAST COPY is a program designed to copy standard 16 or 13 sector 35, 40 or 70 track disks quickly and reliably. Back-up copies can be made of DOS 3.2, 3.3, Pascal, and CP/M format disks. Copying with two drives takes less than 40 seconds, and with two controller cards, as little as 27 seconds.

To use FAST COPY, either boot the Filer disk and select the Fast Copy option (option 2), or boot any standard DOS disk, insert the Filer disk, and type:

BRUN FAST COPY

In a few moments the program heading will appear on the screen. The program will ask for information on slot and drive numbers, etc. By each prompt is a default value displayed in inverse. You can either change the value by entering a new number, or accept the default value simply by pressing <RETURN>.

If you make a mistake, pressing <ESCAPE> at any time will restart the program, allowing you to reenter the values. Pressing <ESCAPE> followed by "Q" will cleanly exit the program.

- ORIGINAL SLOT Enter the slot number of the drive you want to copy FROM, or press <RETURN> to accept the slot number listed. (Range is 1 to 7).
- ORIGINAL DRIVE Enter the drive number of the disk you want to copy FROM, or press <RETURN> to accept the drive number listed. (Range is 1 or 2).
- DUPLICATE SLOT Enter the slot number of the disk drive you want to copy TO, or press <RETURN> to accept the slot number listed. Fast Copy will look to see if your computer has an additional controller card and if so, its slot number will appear as the default. (Range is 1 to 7).
- DUPLICATE DRIVE Enter the drive number of the disk you want to copy TO, or press <RETURN> to accept the drive number listed. (Range is 1 or 2).
- ENTER START TRACK You may select a range of tracks on the disk to copy. This enables you to fix bad tracks on a disk, copy only the disk operating system, etc. Normally, you want to copy the entire disk, so press <RETURN> to accept track 0 as the starting track. Note that track start and end are specified as hexadecimal numbers.
- ENTER END TRACK As above, you may specify the last track you wish to copy. This is usually used to specify the number of tracks for larger disk drives with 40 tracks (27 HEX) or 70 tracks (45 HEX), but can also be used to fix a defective track or range of tracks on a diskette.
- ERASE DOS (Y OR N) If you enter "N" here or take the default, the program will copy three tracks at a time, but keep DOS in memory intact. If you enter "Y", five tracks will be copied at a time, producing a faster copy, but DOS will be erased and you will need to reboot after leaving the program before you can access the disk.

You are then prompted to insert the diskettes to be copied. (Pressing <ESCAPE> will restart the program, and pressing "Q" will quit.) Insert the disks and press <RETURN> to begin copying.

At the bottom of the screen will be the "COPY STATUS" display. This display shows any errors that may occur during copying. The tracks are numbered across the screen in hexadecimal and beneath are error numbers for each track copied. An error number of 0 means there were no errors and the track copied correctly. A disk has copied correctly if copying produced a row of zeros. An error number of 1 means your disk drive is not able to seek correctly and indicates a drive problem. An error number of 2 means an error occurred while reading the original disk. An error number of 3 means an error occurred while writing to the duplicate disk. If an error occurs, try recopying the disk, as it is probably unusable as it is.

When copying is finished, pressing <RETURN> will restart the program for copying another disk. To quit the program from here, press <RETURN>, then "Q".

Unlike most copy programs, FAST COPY does not stop copying if it encounters an error. This means that disks with one or two bad sectors can still be copied, with most of the data intact.

Since FAST COPY uses default values which are selected by simply pressing <RETURN>, most copying can be started quickly just by pressing <RETURN> a few times. If copying is done using two controller cards, the motors for both drives run simultaneously, eliminating the delays waiting for the drives to come up to speed. Copying time is as little as 27 seconds.

Note: Using two controller cards uses more power than the Apple power supply is rated for. While this should not damage the Apple, drives, or original disk, the supply may shut down momentarily, losing the program and anything else in memory. Using Fast Copy with more than one controller card is not recommended unless you have very few cards in your Apple's slots or have purchased a larger power supply.

DISK TEST INSTRUCTIONS

DISK TEST is a utility program that you can use to check out both your disk drives and your disks. DISK TEST includes four separate tests: check write-protect, write/read test, bad sector scan, and disk speed test.

The check write-protect option will tell you whether or not the switch that checks for a write-protect tab is working correctly. This is an important test, since it guarantees that your write-protected disks will never be overwritten.

The write/read test can be used to "certify" a disk, to ensure that the disk is in good condition before data is stored on it. The test can also point out possible problems with the reading and writing circuitry in the drive.

The bad sector scan is used to "verify" the data on any standard 16-sector formatted disk, to see if there are any data errors on the disk. If the bad sector scan shows an error on a disk, the disk itself may be in poor condition. You should copy the data file by file to another disk, then check the quality of the disk with the write/read test.

The disk speed test shows you whether or not the motor in the disk drive is spinning at the proper speed. If the drive is too fast or too slow, then it may not be able to store or read the data on a disk reliably. The speed of a drive can change with time, so you should check it periodically.

When you run DISK TEST, a menu will appear, similar to the menu in the Filer. The options are:

1. Select number of tracks
2. Check write-protect
3. Write/Read test
4. Bad sector scan
5. Set slot and drive
6. Disk speed test
7. Exit to Basic

Notice that the first option is displayed in inverse. To run any option, either use the arrow keys or type the number to the left to move the inverse field to that option. When you press [Return], the option in inverse will be run.

1. SELECT NUMBER OF TRACKS: DISK TEST can be used to test either 35, 40, or Micro-Sci 70 track drives and disks. The current number of tracks used is shown below the main menu. This number is always 35 unless you change it. If you have a 40-track drive and are using 40-track diskettes, you should select 40 tracks before running any of the other options.

To change the number of tracks, move the inverse field to the first option and press [Return]. The cursor will blink in front of the word "TRACKS". Type either "35", "40", or "70". You don't need to press [Return] to finish. (If you type anything other than 35, 40 or 70, the speaker will beep.) DISK TEST is now set to use the proper number of tracks.

2. CHECK WRITE-PROTECT: After selecting this option, the program will prompt you to insert a disk. Any disk will do, since nothing is written to or read from this diskette. Press [Return]. The drive light will come on and a message will appear. If the disk has a tab over the write-protect notch, or if the disk is inserted only partway, the message should be "THE DISK IS WRITE-PROTECTED". If a fully inserted disk does not have a write-protect tab, then the message "THE DISK IS NOT WRITE-PROTECTED" should appear. Press any key to return to the main menu.

3. WRITE/READ TEST: This option writes a pattern on each track of the disk, then reads the pattern back to make certain it was written correctly. If errors occur on only a few disks, then those disks are probably in poor condition. If errors occur regardless of what disk is used, then there is most likely a problem with the drive or the drive controller itself.

The program warns you that the data on the disk being certified will be overwritten, and prompts you to insert a scratch diskette. Make sure to use either a blank disk or a disk without any valuable data. Press [Return] and the write/read test will begin. If any errors are found, they will be displayed at the bottom of the screen. At any time, you can either press [ESC] to exit, or [Return] to see the total number of errors so far.

After the entire disk has been tested once, the number of errors will be shown. You can press [ESC] to exit, or press [Return] to go into a continuous testing mode. In continuous mode, the program repeats the write/read test over and over again, until you press [ESC] to exit. (The screen always explains what keys to press.) Continuous testing can help discover disks that are marginal.

4. BAD SECTOR SCAN: This option uses the normal DOS routines to read the data on a 16-sector (DOS 3.3) formatted diskette. If any sectors on the disk have errors, the track and sector numbers will be displayed at the bottom of the screen. Since this option does not write on the disk, you can safely use it to check out your DOS, CP/M, and PASCAL disks for bad sectors. (This option does not work with blank or most copy protected disks.)

Insert the disk and press [Return]. Each sector of the disk will be read. As with the previous option, you can press [Return] to see the number of errors so far, or press [ESC] to exit. After the disk has been read once, pressing [Return] will start the continuous testing mode where the disk is read continually until you exit this option.

5. SET SLOT AND DRIVE: When you first run DISK TEST, the current slot and drive used are the ones the program was loaded from. To select another slot or drive to test, run this option. The cursor will flash over the slot number. (If you type an invalid slot number, the speaker will beep.) The cursor will then flash over the drive number. Enter a new drive value in the same way. The new slot and drive numbers will be used by DISK TEST until you change them or exit the program.

6. DISK SPEED TEST: Your disk drives are designed to spin the diskette at approximately 5 revolutions per second, which is the same as 200.0 milliseconds (abbreviated "msec") per revolution. This speed can drift as much as 2 milliseconds without causing much problem. However, a drive speed faster than 198.0 msec or slower than 202.0 msec can cause disk errors. Since the drive speed can drift with time, you should check the speed periodically. The drive can be adjusted back to the correct speed by your computer dealer.

This option writes on one track of the disk being tested, so insert either a blank disk or a disk you don't need. Press [Return]. The drive will start up and the drive speed will be displayed on the screen. It may vary by a few tenths of a millisecond; this is normal. If the speed is too fast or too slow, you should have it adjusted. If all zeros or other strange numbers appear, then either the disk is bad or the drive has other problems. Press any key to return to the main menu.

7. EXIT TO BASIC: Select this option to leave the DISK/TEST program. From BASIC, you can run any of the FILER programs directly, or type "PRN" (where "N" is the slot your first disk drive is plugged into) to return to the main menu.