

# INTRODUCING ATARI DOS 2.5

In an ongoing effort to provide the highest quality of products for use with your ATARI Computer, the new ATARI Corp. is supplying you with the enclosed DOS 2.5 Master Diskette, Its advantages over ATARI DOS 3 include ease and convenience of use (most utilities are contained within a single file and need not be loaded from disk) and compatibility with DOS 2.0S. DOS 2.5 also allows you to use the full capacity of your ATARI 1050<sup>™</sup> Disk Drive and to access the full RAM potential of the ATARI 130XE™ Computer.

This short manual provides you with instructions for getting started with DOS 2.5. For complete information on DOS 2.5, including detailed discussions on the menu items, compatibility with DOS 3 and 2.0S, the RamDisk, and the 2.5 Utilities, you may consider obtaining the new *ATARI DOS 2.5 Manual*. Available from ATARI Customer Relations, P.O. Box 61657, Sunnyvale, CA 94088. Cost: \$10 plus \$2.50 for shipping and handling. California residents add appropriate tax. Please write *ATARI DOS 2.5 Manual* on the outside of your envelope when you order the book.

Getting Started With DOS 2.5 DOS 2.5 allows you to format diskettes and store information in either single or enhanced density. With enhanced density you can record about 50 percent more data on each diskette than you can with DOS 2.0S. Enhanceddensity storage is only possible if you have an ATARI 1050 Disk Drive: the 810<sup>™</sup> Disk Drive is not capable of formatting or managing data stored in enhanced density. You need a 1050 Disk Drive to begin working with DOS 2.5 because your DOS 2.5 Master Diskette is recorded in enhanced density. If you often use an 810 Disk Drive to access your files, you may want to format all your diskettes in single density.

DOS 2.5 works with any cartridgebased program that runs on your ATARI Computer and uses DOS even programs that predate DOS 2.5, including the AtariWriter<sup>™</sup> word processor and ATARI BASIC. With such programs you can always use DOS 2.5 instead of DOS 2.0S to prepare data diskettes and manage files.

Many diskette-based programs designed for use with the earlier DOS 2.0S can also be used with DOS 2.5. However, you may have to continue to use DOS 2.0S with certain *protected* diskette programs (see your program user's manual if you are unsure whether a program is protected.)

## THE DOS MENU

Load DOS into your ATARI Computer using the same procedures you use for either DOS 3 or DOS 2.0S: (If you have an ATARI 130XE, 65XE<sup>™</sup>, or 800XL<sup>™</sup> with built-in BASIC, type DOS and press [RETURN] to go from BASIC to DOS). The DOS Menu on your TV or monitor screen presents a list of the DOS 2.5 options. The prompt below the menu invites you to make a selection. You choose the function you want to use by pressing the letter corresponding to your selection and pressing [RETURN]. DOS then asks you for the information it needs to proceed.

### Summary of the DOS 2.5 Menu Options

If you have used DOS 2.0S, you will be familiar with most of these, but note the change in Option J, and the new Option P. If you have only used DOS 3, read this section for an introduction to DOS functions.

**A. DISK DIRECTORY** Allows you to call up a complete or selective list of the files on a diskette, showing the filenames, extenders (if any), the number of sectors allocated to each file, and the number of free sectors still available on the diskette.

**B. RUN CARTRIDGE** (Can ONLY be used with built-in BASIC or with a cartridge installed in the computer.) This option allows you to return control of your system to built-in BASIC or to the cartridge inserted in the cartridge slot.

**C. COPY FILE** Use this option when you have two or more disk drives and you want to copy files from one diskette to another. Also use this option to copy a file on the *same* diskette, assigning a second name to the copy.

**D. DELETE FILES** Lets you erase a file from a diskette, increasing the available space on a diskette.

**E. RENAME FILE** Use this option when you want to change the name of a file.

**F. LOCK FILE** Can be used to prevent you from changing, renaming, or accidentally erasing a file. You will still be able to read the file, but not write to it. When the directory is displayed, an asterisk is placed in front of the filename to indicate that the file is locked.

**G. UNLOCK FILE** This removes the asterisk from in front of the filename and allows you to make changes to the file, rename it, or delete it.

H. WRITE DOS FILES Use this option to add the DOS files (DOS.SYS and DUP.SYS) on your Master Diskette or System Diskette to a diskette in any disk drive.

I. FORMAT DISK Use to format a blank diskette, which is necessary before you can record any information on it. Be sure you do not have any files you want to keep on a diskette before formatting it. This option will format a diskette in enhanced density provided you are using a 1050 Disk Drive; otherwise, it will format in single density.

J. DUPLICATE DISK Use when you want to create an exact duplicate of a diskette. This option will automatically format the destination disk.

**K. BINARY SAVE** Saves the contents of specified memory locations on a diskette.

**L. BINARY LOAD** Lets you retrieve an object file from diskette.

**M. RUN AT ADDRESS** Use to enter the hexadecimal starting address of an object program after it has been loaded into RAM with

BINARY LOAD.

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N. CREATE MEM.SAV Reserves space on a diskette for the program in RAM to be stored while the DUPSYS file is being used. For some applications like programming, it is a good idea to create a MEM.SAV file on each new diskette you intend to use as a System Diskette. As you become more familiar with DOS. you may find there are cases where a MEM.SAV file serves no useful function. The inconvenience of waiting for MEM.SAV to load into memory may warrant deleting it from the disk.

**O. DUPLICATE FILE** Copies a file from one diskette to another, even if you have only a single disk drive.

**P. FORMAT SINGLE** Formats a diskette in single density using a 1050 Disk Drive.

## DOS 2.5 AND THE ATARI 130XE RAMDISK

The ATARI 130XE Computer is equipped with 131,072 bytes — 128K — of Random Access Memory (RAM), twice the maximum 64K available with earlier model ATARI Computers. The additional 64K RAM can be useful for many purposes: fast exchange of screen images for animation, additional storage for large data bases, and so forth.

You can also use the extra RAM of the 130XE as a very fast "virtual" disk drive. Set up as a "RamDisk" — recognized by DOS 2.5 as Drive 8 in your system—it can accommodate up to the equivalent of 499 sectors on a diskette. That is about half what you can store on a diskette formated in enhanced density. The "storage" capacity offered by the RamDisk is volatile memory, which means that information stored in it will be lost when you turn off your computer system. So before turning off your system, you should always be sure that any data currently in the RamDisk that you want to save permanently is recorded on an actual diskette.

However, the RamDisk can be a very convenient tool. It allows you to switch almost instantaneously between BASIC (or any other programming language) and DOS, and back again. You can also use it to work with files "stored" on Drive 8—a technique that might prove especially useful when you are transferring large amounts of data between two programs that are chained together (that is, when one program RUNs the other).

### To Activate the RamDisk

Your DOS 2.5 Master Diskette contains a file called RAMDISK.COM that automatically sets up the extra 64K RAM of the 130XE as a RamDisk. When you turn on your 130XE system with a DOS 2.5 Master or System Diskette containing RAM-DISK.COM, DOS will:

- Display a message that it is initializing the RamDisk;
- Set up your computer's extra 64K of memory to act very much as a disk drive, telling DOS to regard it as Drive 8; and
- Copy the DOS file DUPSYS and establish MEM.SAV on the RamDisk, and proceed when necessary to use the DUPSYS and MEM.SAV files on the Ram-Disk rather than the files of the same name on the Master or System Diskette.

If you wish to expand the usable capacity of your RamDisk, you may recover the memory used by DUPSYS and MEM.SAV by:

Changing the contents of location 5439 (\$153F) to ATASCII
1 — for example, POKE
5439,ASC(''1''); and

 Deleting the files DUP.SYS and MEM.SAV from the "diskette" in Drive 8—that is, the RamDisk. Use option D., DELETE FILE(S), on the DOS Menu and enter D8:\*. \* in response to the DELETE FILESPEC prompt.

**Note:** Booting a disk which doesn't contain DUPSYS will cause RAM-DISK.COM to initialize the Ram-Disk, but DUPSYS and MEM.SAV will not be moved to the RamDisk.

### Using DOS With the RamDisk

Because of the size of the Ram-Disk, you may not use DOS Menu option J., DUPLICATE DISK, to copy either a single-density or enhanced-density diskette to the RamDisk. Instead, you must copy individual files, taking care that they do not exceed in size the capacity of the RamDisk. You can ask DOS to duplicate the contents of the RamDisk on an actual diskette. From then on, however, that diskette will be capable under DOS of accessing only 499 sectors worth of data-though you can always duplicate its contents. back to the RamDisk.

### If You Do Not Want to Use the RamDisk

If you do not want to activate the ATARI 130XE RamDisk, you can either delete or rename the RAMDISK.COM file on your DOS 2.5 Master or System Diskette. You may then use the extra RAM for other purposes.

If you have applications for which you do not wish to use the RamDisk, it is recommended that you leave the RAMDISK.COM file intact on your DOS 2.5 Master Diskette. You might wish to make one working copy of DOS (a System Diskette) that contains RAMDISK.COM, and one that doe not. Or you can simply rename the RAMDISK.COM file on your System Diskette, then rename it back to RAMDISK.COM when you wish to use it.

# THE DOS 2.5 DISK UTILITIES

Your DOS 2.5 Master Diskette contains three new utility programs in addition to the standard disk utilities handled by the DUP.SYS file—those available from the DOS Menu. The programs, each which appears on the disk directory with a .COM exiender, function as follows:

COPY32.COM allows you to copy iles from diskettes formatted and written to from ATARI DOS 3 to DOS 2.5 diskettes, converting the iles in the process from DOS 3 to DOS 2.5.

DISKFIX.COM allows you to correct some problems that may occur with files on DOS 2.5 and 2.0S diskettes. Under certain conditions, you can also use this utility 'o recover deleted files.

SETUP.COM allows you to change certain DOS parameters. You can also use it to create an AUTORUN.SYS file that will automatically load and run a BASIC program when you boot your system.

**Note:** RAMDISK.COM is not a disk utility. It is used only to set up the RamDisk on a 130XE Computer.

Selecting and Loading a Utility All three utilities are binary files that are loaded and run using option L., BINARY LOAD, from the DOS 2.5 Menu. For example, to begin using the COPY32.COM program, with the DOS 2.5 Menu on your screen, you would type L and press [RETURN], then type COPY32.COM as the name of the file to load, and press [RETURN] again.

Specific instructions for using the COPY32.COM follow. There are also brief instructions for DISKFIX.COM and SETUP.COM. For more detailed instructions on the latter two utilities, consult the *ATARI DOS 2.5 Manual* (see the Introduction of this manual for ordering instructions).

#### COPY32.COM

Using this utility is much like using the COPY FILE function on the DOS Menu. After you load the COPY32.COM program, you are prompted to specify which drive will hold your DOS 3 (source) disk and which drive will hold your DOS 2.5 (destination) disk. If you have only one drive, type 1 in response to both prompts. In this case, you will have to swap your DOS 3 and DOS 2.5 diskettes during the copying process. If you have more than one disk drive, you may select one to hold your DOS 3 diskette and another to hold your DOS 2.5 diskette.

At this point, if you have only one drive, the utility prompts you to insert your DOS 3 disk in Drive 1. For safety, place a write-protect tab on your DOS 3 disk so that you will not erase valuable data if you make an error while swapping diskettes.

If you specified two different drives, the utility prompts you to insert both your DOS 3 and DOS 2.5 disks. After you insert the diskette or diskettes, press [START]. The COPY32.COM program reads the directory of the DOS 3 diskette and displays the files it contains, sixteen at a time, by number. Press [RETURN] to see the next sixteen files. When all the files on the diskette have been listed, you have the options to restart, return to DOS, or view the files again.

To convert a file, enter the number of the file you wish to convert. The utility prompts you to confirm your choice by pressing [START].

When you press [START], the program begins the conversion process by reading the specified file from the DOS 3 diskette. After COPY32.COM reads the entire file (or as much data as it can accommodate in its memory buffer), it asks you to swap disks if you specified the same drive for your DOS 3 and DOS 2.5 disks. With very large files, you may have to swap diskettes several times. If you are using two drives, the program copies and converts the file in a single operation. After the file has been copied and converted, press [START] to return to the listing of files on your DOS 3 diskette, from which you may choose another file to convert.

If an error occurs during the copy process, COPY32.COM displays an error number and prompts you press [START] to restart, or -[SELECT] to return to the DOS 2.5 menu.

**Note:** Unless you have two disk drives, you will be unable to convert files of more than 124,700 bytes (300 bytes less than the maximum file length possible under DOS 2.5).

### **DISKFIX.COM**

This program begins by showing you the current drive number and a menu with these five options:

- 1. Change Drive #
- 2. Unerase File
- 3. Verify Disk
- 4. Rename File by #
- 5. Quit to DOS

Type the number of the function you wish to use but do not press [RETURN] after typing your choice. After activating an option, follow the prompts.

### SETUP.COM

This program begins by showing you a menu with these four options:

- 1. Change current drive number
- 2. Change system configuration
- 3. Set up an AUTORUN for Boot
- 0. Quit Return to DOS

Menu selections 1 and 0 are used for "housekeeping" purposes. The two main functions of this utility are menu selections 2 and 3. Press the number key that corresponds to the function you wish to use, then follow the prompts.

# **Customer Support**

Atari Corp. welcomes any questions you might have about your ATARI Computer product.

Write to:

Atari Customer Relations P.O. Box 61657 Sunnyvale, CA 94088

Please write the subject of your letter on the outside of the envelope.

We suggest that you contact your local Atari User Group. They are outstanding sources of information on how to get the most out of your ATARI Computer. To receive a list of the user groups in your area, send a self-addressed stamped

- envelope to: Atari User Group List P.O. Box 61657
- Sunnyvale, CA 94088

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