

# SmartMate Cartridge

Hard Disk Software  
For The  
Coleco Adam

By  
Walters Software Co.

User Friendly  
Smartkey Interface  
SmartDSK Operating System

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## **System Requirements.**

A standard ADAM Computer System, a TV or monitor, and a PowerMate single hard disk.

## **Optional Hardware.**

A memory expander, PowerMate disk drive(s), Adam disk drives.

## **Getting Started.**

1. With your Adam turned off, insert the SmartMATE cartridge into the cartridge slot with the cartridge label facing toward you.
2. Turn on your Adam computer accessories, (PowerMate, disk drives, TV, monitor, printer, ect.).
3. Turn on your Adam computer.
4. Pull the cartridge reset switch toward you.
5. The program will boot and the title screen will be displayed. *If the title screen is not displayed refer to the trouble shooting section of this manual.*

## **Title Screen.**

**Walters Software Co.**

**Presents**

**SmartMATE Manager**

**Copyright (C) 1990**

**Revision number.**

The first release was Rev. 1.8, when this program is upgraded or a bug is corrected the revision number will be changed.

**I.D. Number.**

When contacting Walters Software Co. for warranty information or help, have this number handy.

1. Push smartkey (VI) Continue, to continue.

**Dot Matrix Printer Error.**

1. If you receive this error, it means that you either don't have a dot matrix printer hooked up to your Adam computer or your dot matrix printer is not on line. Put your dot matrix printer on line and push smartkey (V) Retry, or push Smartkey (VI)Continue, to continue. The advantage of resetting your dot matrix printer is to get rid of any previous printer setup.

**Select Options.**

1. Smartkey (IV) Select Printer, is used to select between the Adam printer and a dot matrix printer.
2. Smartkey (V) Reserve One Bank, is used to select to reserve a 64K bank of your memory expander. Use this option if you plan on using SmartWRITER or any other program that uses a 64K memory expander. Use the full size option, smartkey (VI) Full Size, to use the setup the entire expander as a ramdisk.

**PowerMate Status.**

This screen tells you your Powermate is ready, and how many EOS volumes are available.

1. Push smartkey (VI) Continue, to continue.

## **Main Menu.**

If everything went well, you should now be at the Main Menu. This menu contains six smartkeys.

- (I). Boot Hard Dr.
  - (II). Boot Drive.
  - (III). Copy Software.
  - (IV). Select Volume.
  - (V). Select Disk Drive.
  - (VI). Boot Software.
- Escape/WP

1. Smartkey (I) Boot Hard Dr., is a hot key, it is used to boot whatever software is in block 0 volume 0 of the hard drive. This program can be a boot for almost any software program.

2. Smartkey (II) Boot Drive, will boot any drive including, the ramdisk or any BOS hard drive volume.

3. Smartkey (III) Copy Software, contains the copy options, Copy Media, Copy File, and Copy Block 0. The Copy Media option is used to copy any size drive to another. If the source is larger than the destination, you will have to use several disks/data packs to complete the copy. The Copy File is a standard single file copy utility with the ability to change the destination file name. Copy Block 0, is a special option that converts the block 0 boot block into a bootable boot file for booting software.

4. Smartkey (IV) Select Volume, is used to select a hard disk volume.

5. Smartkey (V) Select Disk Dr., is used to select the Powermate disk drive(s) if available.

6. Smartkey (VI) Boot Software, contains the options for selecting operating systems, and boot software, options.

7. Escape/WP, use this key to park the hard drive and quit, or return to the Main Menu.

## **I. Boot Hard Dr.**

This option will load block 0 of volume 0 into memory location 51200 and execute the code there. The Powermate hard disk comes from the factory with the MI hard disk program boot installed at block 0. You can install a boot for a program, or your own boot, but you must leave the first 128 bites. These contain the hard drive config information. Caution, you must have a program in block 0 to be able to use this option.

## **II. Boot Drive.**

With this option you can boot any drive, the drive must contain a bootable program. Select the drive by pushing the corresponding smartkey. If you wish to boot a particular volume, you must select it from the main menu before using this option. The last step is to select the operating system, push the smartkey for the operating system you wish to use and the program will boot.

## **III. Copy Software.**

Pushing this smartkey reveals three options, Copy Media, Copy File, and Copy Block 0. The first option will copy any size media to another. Caution, when using the ramdisk as the destination drive, make sure the source is smaller. When the source is larger than the destination drive you will be asked to change medias. When saving a drive make sure you number the medias so you can load them back in their correct order. Do not change the file name for a software program unless you change it in block 0 also. The program must be a file loading program, in order to use the block 0 option.

### **Copy Media.**

1. Push smartkey (III) Copy Media, to copy a media to a drive.
2. Push smartkey (VI) Load Drive, to load a media(s) to a drive.

### **Save Drive.**

1. Push smartkey (V) Save Drive, to save a media to a drive.
2. Select the drive for the source by pushing the corresponding smartkey.

3. Select the destination drive by pushing the corresponding smartkey.
4. The message "One Moment Please" will be displayed while Adam is busy copying.
5. If more than one media is required to complete the copy, you will be asked to insert another media.
6. "SAVE COMPLETE" will be displayed when the copy is completed.
7. Push smartkey (VI) Continue, to return to the (Copy Menu).
8. Push smartkey (VI) Previous Menu, to return to the (Main Menu).

#### **Load Drive.**

1. Push smartkey (VI) Load Drive, to load media(s) to a drive.
2. Select the source drive, (the one to contain the media(s) to be loading into the destination drive), by push the corresponding smartkey.
3. Type in the source drive size, this is the size of your drive, not the disk/data pack. Push smartkey (VI) Enter, to continue.
4. Select the destination drive, (the one to receive the copy), by pushing the corresponding smartkey.
5. The message "One Moment Please" will be displayed while Adam is busy copying.
6. If more than one media is required to complete the load, you will be asked to insert another media.
7. "LOAD COMPLETE" will be displayed when the load is completed. Push smartkey (VI) Continue, to return to the (Copy Menu).
8. Push Smartkey (VI) Previous Menu, to return to the (Main Menu).

#### **Copy File.**

1. Push smartkey (IV) Copy File, to copy a file.
2. Select the drive that contains the file to be copied, by pushing the corresponding smartkey.
3. Select the file by moving the black bar with the arrow key over the file name to be copied. Push smartkey (V) Continue, when you have the file name selected.
4. Push smartkey (V) No, not to rename the file.
5. Select the device to receive the file by pushing the corresponding smartkey.

6. "One Moment Please" will be displayed while Adam is copying the file.
7. "FILE SAVE COMPLETE" will be displayed when Adam is done copying the file.
8. Push smartkey (V) to copy another file, or push smartkey (VI) to return to the (Main Menu).

#### Copy Block 0.

1. Push smartkey (V) to copy block 0 from a media.
2. Select the drive that contains the block 0 to be copied, by pushing the corresponding smartkey.
3. Type in a file name, and push smartkey (V) Enter.
4. Select the drive to receive the file, by pushing the corresponding smartkey.
5. "One Moment Please" will be displayed while Adam is copying the file.
6. "FILE SAVE COMPLETE" will be displayed when Adam is done copying the file.
7. Push Smartkey (V) Previous Menu, to copy another file, or push smartkey (VI) Main Menu, to return to the (MainMenu).

#### Select Volume.

1. Push smartkey (IV) Select Volume, to advance to the next volume. The Volume number that is selected will be displayed on screen.

#### Select Disk Drive.

1. Push smartkey (V) Select Disk Dr., to select a MI disk drive. Selecting (No Disk Dr. Selected), will select data drive number one.

### **Boot Software.**

1. Push smartkey (VI) Boot Software, to boot a program from a drive, using the (.FL) boot files.
2. Push Smartkey (V) Continue, to continue, or smartkey (IV) to boot SmartWRITER.

### **SmartWRITER.**

1. Push smartkey (IV) Change Spacing, to change the line spacing of your dot matrix printer, (0-9). The line spacing will be displayed on screen.
2. Push smartkey (V) No, to use your Adam printer, or push smartkey (VI) Yes, to use your dot matrix printer.

### **Boot Software, (Continue).**

1. Select the drive that contains the program to be booted, by pushing the corresponding smartkey.
2. Use the arrow key to move the black bar over the file name with the (.FL) suffix.
3. Push smartkey (V) Continue, to select the program to be booted.
4. Select the operating system by pushing the corresponding smartkey.
5. If the program did not boot, make sure that the block 0 file was setup correctly and the program files copied to the same drive as the (.FL) file. If everything is OK try a different operating system. Make sure the program is a file loading type.

### **Boot Software Setup.**

To setup a program to be booted from the hard drive you must first copy the files to a hard drive volume. The first file should be the boot, (Block 0). Use the Block 0 copy option and copy the boot to a hard drive volume. This sets up a file with a (.FL) suffix. For SmartBASIC V1.1, I typed (BASIC1). The file name copied to the hard drive was, (BASIC1.FL). This is the file name you highlight to boot the SmartBASIC program. You must also copy the program file, (BASICPGM). Use the file copy option and copy the file to the same hard drive volume. use the Boot Software option to boot SmartBASIC.

If you want SmartBASIC 1, SmartBASIC 2, Super Basic or AdamCalc on the same volume you must change their file names. All these programs use the same program file name, (BASICPGM). You must also change the name in the boot program. Use TOOLKIT from SmartDSK III to modify the file name in the block 0 boot program. The easiest way is to make a backup of the original program. Using TOOLKIT set the offset to 51200 and load in block 0, scan down the program looking for the (BASICPGM) file name. When you find it, modify the name, I would recommend changing the (M) to something else. You must use the ASCII code, these can be found in the back of your SmartBASIC manual. When you are finished, copy block 0 back to the backup. Next load Block 1 in and scan for the (BASICPGM) file name. Modify it exactly like the one in Block 0, and copy it back to your backup. Use the copy options to copy block 0 and the program file to the hard drive.

### ADAM PROGRAMS.

Not all programs are file loading. SmartBASIC 1, SmartBASIC 2, and AdamCalc are. I have converted several Adam programs, Smartletters and forms, Adamlink, and Flash Card Maker. The disk included with your SmartMATE Cartridge contains the modified boots. Use these boots instead of the one on your original media. I have upgraded SpellingAID to file loading. The Print Works, and The Label Works have been modified to check the operating system in memory to see if the SmartDSK system needs to be loaded in. You can also copy the program into the ramdisk to be booted with the SmartDSK cartridge. I have a MOD. for SpeedyWrite to make the directory larger. SpeedyWrite must be copied to block 0 of a EOS volume directly from the media. Most SmartBASIC programs will work that don't modify the operating system directly. The right way to modify the operating system, is to put your routine some where in memory and modify the jump table to use that routine. This way the program will work with a new operating system. SmartDSK III has been upgraded to work with any size media or drive. This is the utilities I use when working with the hard drive. If you are using another program and can't get the program to boot, most likely it is the utility program fault.

## Trouble Shooting.

**Cartridge Won't Boot**, if the cartridge will not boot, turn off your Adam and reinsert the SmartMATE Cartridge.

**Program Won't Boot**, if a program will not boot, delete the files and try recopying them. Make sure you have copied all the files, including screen files. Some programs contain several files, SpellingAID needs all the DICT files on the original media. Some programs that are block loading, will work if copied with a copy program directly to a hard disk volume. I will also work with you in trying to get some programs to work. Contact Walters Software Co. for more information.

**"NO EOS VOLUMES"**, if you receive this message, it means that Adam cannot find any EOS volumes on your hard drive. Make sure you have at least one EOS volume on your hard drive before trying to use SmartMATE Cartridge.

**PowerMate not Available**, if you receive this message, it means that Adam can't talk to your PowerMate. Check all your cable connections, and make sure your powermate is turned on.

**Device Error #**, this error means there is something wrong with your media or the drive. The number tells us what the problem is.

### Device Error Messages.

- |                             |                            |
|-----------------------------|----------------------------|
| (1). Can't find the device. | (13). Full media.          |
| (2). DCB busy.              | (14). File NM error.       |
| (3). DCB idle error.        | (15). Rename error.        |
| (4). No date.               | (16). Delete error.        |
| (5). No file.               | (17). Range error.         |
| (6). File name exists.      | (18). Can't Syn1.          |
| (7). No FCB.                | (19). Can't Syn2.          |
| (8). Match error.           | (20). File locked.         |
| (9). Bad file number.       | (21). Tape stat error.     |
| (10). EOF error.            | (22). Device stat error.   |
| (11). Too big error.        | (23). No program.          |
| (12). Full catalog.         | (24). No catalog on media. |

Most of the errors you will never see, but I included a complete list anyway.