

**Creative Firmware
P.O. Box 850064 - Richardson, Texas 75085**

The Drive-IIA Adapter

The Creative Firmware Drive-IIA Adapter plugs into the modem slot in the IBM PCjr. Installation is very simple and straightforward. Simply:

1. Remove the cover from your PCjr by inserting a large flat-bladed screwdriver into the slots on the back of the PCjr and giving the screwdriver a half turn.
2. Unplug the internal disk drive interface cable from the PCjr disk drive and plug it into connector J1 on the Drive-IIA Adapter. J1 is the side connector on the Drive-IIA Adapter. Note that the cable will only plug in one way.
3. Carefully dress the supplied cable so that it lays neatly across the interior of the PCjr. Do not run the cable directly over the disk drive - it could interfere with some of the moving parts. This cable has been pre-folded to help in this step.
4. Plug one end of the supplied cable into connector J2 on the Drive-IIA Adapter. J2 is the top connector. Note the orientation of pin 1 (the cable color stripe end). Pin 1 is marked on the Drive-IIA printed circuit board.
5. Plug the middle cable connector into the PCjr internal disk drive connector. This connector is marked "top" and must be plugged in with this side up.
6. Plug the Drive-IIA Adapter into the PCjr modem slot.
7. Position the cable so that the free end passes through the slot near the back of the right hand side of the PCjr.
8. Install the cover on your PCjr. Make sure that the disk drive interface cable is not pinched by the cover.
9. Connect the free end of the supplied disk drive interface cable to your second disk drive. Note the orientation of pin #1. Your second disk drive must be strapped as drive #1 (1st drive position normally marked as "0" or "DS0" on the disk drive printed circuit board) and the 150 ohm termination resistor pack left in place. This is the way most disk drives are configured when purchased. This drive will be recognized as drive "B" by your PCjr.

Customizing Your System Disk for 2nd Disk Drive Recognition

To enable your PCjr to recognize a second disk drive, you must copy the three enclosed programs onto your DOS 2.1 (or higher) system disk. You can create a new DOS 2.1 master disk by installing your original DOS 2.1 master disk into your PCjr disk drive. At the A> prompt, type `FORMAT B:/S` (return). This command automatically formats a diskette and copies the necessary DOS files to it. Install a new DSDD diskette into the PCjr internal disk drive when requested to do so.

Before you can utilize the second disk drive, you need to add three special programs to your system disk. These are:

1. CONFIG.SYS which "calls out" or "recognizes" DRIVE2.COM.
2. DRIVE2.COM which enables the second disk drive.
3. D2XMEM.COM which may be used when memory enhancement software is used (IBM, TECHMAR, MICROSOFT, etc. memory add-ons).

To copy these programs to your system disk, insert the Creative Firmware program disk into the PCjr disk drive and type `COPY *.* B:` (return). Don't forget the colon after the B! When the computer asks for the drive B disk, remove the CF program disk and insert your system disk in the drive. You will be instructed to insert the A and B diskettes twice more. When the message "3 file(s) copied. A>" appears, your system disk is ready. You may now re-boot your system (ALT-CTRL-DEL or cycle power). Your second disk drive will be recognized from now on.

Software provided for the many PCjr memory enhancement add-on boards causes a re-boot in order to utilize the additional memory. If you have one of these add-on boards, you can avoid an additional re-boot by creating a new CONFIG.SYS file which "recognizes" D2XMEN.COM instead of DRIVE2.COM. This is easily done by installing your system disk in your PCjr and proceeding as follows:

1. At the A> prompt, type COPY CON:CONFIG.SYS (return) (the A> will not reappear).
2. Type DEVICE=D2XMEN.COM (return) (the A> still will not reappear).
3. Hit the Fn6 key combination and then the ENTER key. You will get the message "1 file(s) copied. A>".

This creates the new CONFIG.SYS file on your system disk. If you have the IBM enhanced memory board, run the IBM INSTALL.COM program at this time. If you have a Microsoft or other enhanced memory board which uses a CONFIG.SYS file, you must re-create your CONFIG.SYS file so that it calls out D2XMEN.COM first and then the enhanced memory software.

The above files must be included on your system disk at boot-up time in order to recognize your second disk drive. Additionally, your second disk drive must always be turned on either before or at the same time the computer is turned on since the PCjr calibrates all disk drives during the boot-up process.

Note that the Creative Firmware software enables the 80 column mode (without having to run MODE 80) and the keyboard click when executed.

Troubleshooting/Problem Determination

The Creative Firmware Drive-IIA Adapter should work problem free with all IBM compatible DSDD disk drives. The following may help you diagnose a problem:

Problem: After booting up the system, you are still requested to "Insert diskette for Drive B".

Solution: You are calling out D2XMEN.COM in your CONFIG.SYS file but you are not executing video move software required for expanded memory (more than 128K). Either call out DRIVE2.COM in your CONFIG.SYS file or execute a memory expansion video move file.

Problem: You received a "Damaged or Missing Device Driver" message on boot-up.

Solution: You have probably not copied DRIVE2.COM or D2XMEN.COM to your system disk, or you misspelled DRIVE2.COM or D2XMEN.COM when you created your CONFIG.SYS file. If DRIVE2.COM or D2XMEN.COM has been properly copied to your system disk, then the file may be damaged. Try re-copying the files to your system disk. If this does not work, return your disk to Creative Firmware to have new files put on it.

Problem: The internal disk drive does not turn on at boot time and the system comes up in Cassette BASIC.

Solution: One of the connectors is plugged-in upside down. Check the connector orientations and correct.

Problem: Both "busy" lights on the A and B drives turn on and the PCjr is unable to boot-up.

Solution: Your external disk drive is strapped as drive #2. Strap it as drive #1. This is the 1st strapping position on the disk drive, usually marked as "0" or "DS0" on the disk drive printed circuit board.

Problem: The "busy" light on the second disk drive does not come on.

Solution: The second disk drive is not turned on, the fuse is blown, or it is not strapped as drive #1 (see above).

Problem: You get "Track not found" errors when trying to read drive B.

Solution: Your 2nd disk drive was not on when you booted the system. The PCjr calibrates all drives as part of the boot procedure. Re-boot the system with your B drive turned on.

Problem: Drive B cannot read diskettes formatted in drive A or drive A cannot read diskettes formatted in drive B.

Solution: Drive B has misaligned heads. It must be repaired.

WARRANTY

Creative Firmware warrants the Drive-IIA Adapter for one year from the date of purchase. Creative Firmware will, at its option, repair or replace any defective Drive-IIA Adapters returned during the warranty period. Return the Drive-IIA Adapter to your dealer for your warranty returns after calling your dealer and obtaining a return authorization. If you purchased a disk drive, this was provided through your dealer and carries a separate dealer warranty.