

ACB-232XD Installation Guide

ADAPTEC ACB-232XD TROUBLESHOOTING CHECKLIST

- Gets a 1790 at boot-up:**
A 1790 Error is normal for an unformatted drive. Just press F1 to continue.
- Long boot time:**
Some PC AT systems may continue to retry booting to the hard drive even though it has not been formatted yet. You will have to allow this re-trying to continue for up to two minutes before the system will boot to the floppy drive. Then you can proceed to Debug and format the drive.
- Can't read floppy or boot to A (ACB-2322D only):**
Check floppy cables; be sure J5 goes to both floppy drives. Be sure that Pin 1 on the controller is connected to Pin 1 of the drive. If only one drive is being used, only the last connector on the twisted cable should be used. A floppy cable has wires 10-16 twisted between the two drive connectors.
- Recal error, or no drive attached error:**
Check the drive select jumper on the hard disk drive; be sure that it is correctly set for the type of cable you are using. Check hard drive cables; Be sure J3 goes to Drive 0, J2 goes to Drive 1, and J4 goes to both drives. Be sure that Pin 1 on the controller is connected to Pin 1 of the drive. If only one drive is being used, only J3 and J4 should be used.
- Incorrect drive parameters:**
ESDI drives have jumpers for "number of sectors per track" and for "bytes per sector", also for hard or soft sectoring. Consult your drive vendor for proper settings of these jumpers. Do not use soft sectoring.
- Misc. errors, or no format routine:**
Check that the controller jumpers are correctly set.
- Excessive defects, or fails to format:**
Make sure the drive is ESDI certified. Check with the drive manufacturer.
- Won't boot to C:**
Check to see that the SETUP program and CMOS RAM show drive type 1 is selected.
- Intermittent operation errors, or Read/Write errors:**
Check that the terminator on each drive is set properly. Check that the power supply can support the added current required by the drive. Be sure that the +5V and +12V voltages are correct. Consult with the drive vendor for the correct drive power requirements.
- If none of the above steps cure the problem, then swap out components in this order and try again:**
Replace the cables with known-good cables.
Swap the drive with a known-good drive.
Swap the 232XD controller with another 232XD controller.
- Adaptec maintains a bulletin board for information and questions.**
Call (408) 945-7727 or (408) 945-7689 by modem.

7727

F.C.C. CERTIFICATION

This equipment generates and uses radio frequency, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type-tested and found to comply with the limits for a Class B computing device in accordance with the specifications in 'Subpart J of Part 15 of FCC Rules', which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful.

"How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-00345-4.

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FIVE-YEAR LIMITED LIFE-TIME WARRANTY

The Seller warrants to the buyer that the products to be delivered under this purchase order will be free from defects in material and workmanship under normal use and service. Seller's obligations under this Warranty are limited, at its sole option, to (i) replacing or (ii) repairing or (iii) giving credit for, any such products which shall, within five (5) years from date of shipment, be returned to the Seller's factory, transportation charges prepaid, and which are, after examination, disclosed to the Seller's satisfaction to be thus defective. THIS WARRANTY IS EXPRESSED IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, STATUTORY, OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE SELLER'S PART, AND IT NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR THE SELLER ANY OTHER LIABILITIES IN CONNECTION WITH THE SALE OF THE SAID ARTICLES. This warranty shall not apply to any of such products which shall have been repaired or altered, except by the Seller, or which shall have been subjected to misuse, negligence, or accident. The aforementioned provisions do not extend the original warranty period of any product which has either been repaired or replaced by Seller. Prior to returning any products to Seller, Buyer must request and obtain a Return Material Authorization ('RMA') number from the seller.

CHANGES

The material in this guide is for information only and is subject to change without notice. Adaptec reserves the right to make changes in the product design without reservation and without notification to its users.

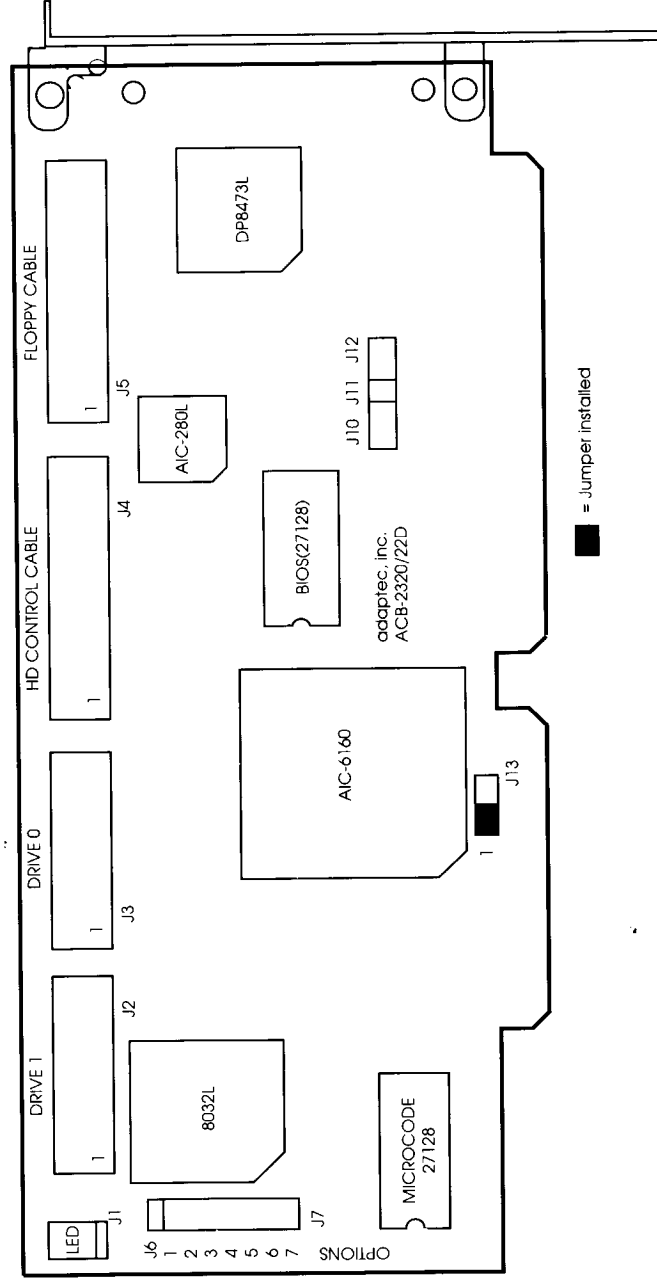
If you require further information or other technical support, please contact your authorized dealer.

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QUICK INSTALLATION

1. Install controller and drives into your PC AT, and cable them together. Run a floppy cable from J5 to both floppy drives (ACB-2322D only). The connector on the END of the cable goes to drive 0. Run a 34-pin hard drive cable from J4 and connect to both hard drives. Connect one 20-pin cable each from J3 to the first hard drive, and from J2 to the second hard drive (if installed).
2. Run your PC AT "SETUP" and set the hard drives to type 1.
3. Boot to DOS, and run DEBUG.
4. Type in : A > DEBUG <CR>
-G=C800:5 <CR>
5. The Adaptec format menu will be displayed.
6. Choose: 1 - to primary-format drive 0.
7. The controller will read the number of heads and cylinders from the drive. The manufacturer's defect list will also be read in.
8. Now just keep hitting <CR>, (to take the defaults).
9. After format is complete, Choose q - to end this program*. (Or 2 - to primary format the second drive)
10. Now you are ready to install your operating system software. Go to DOS FDISK and FORMAT, or SPEEDSTOR, DISK MANAGER, SCO XENIX, OS/2, UNIX, etc.

*Note: If you are using DOS and your hard drive has more than 1024 cylinders, select option 3, then enable 63-sector translation. Quit the program and then install your operating system.



| SOFTWARE OPTION JUMPERS | |
|-------------------------|--|
| J7-1 | NOT USED |
| J7-2 | LOGICAL DRIVE SPLITTING *Out = drive uses physical parameters In = Drive 0 is split into two logical drives. (if over 1024 cylinders). |
| J7-3 | RESERVED |
| J7-4 | NOT USED |
| J7-5 | READ AHEAD CACHE *Out = Enabled In = No Read Ahead performed. |
| J7-6 | RESERVED |
| J7-7 | RESERVED |

| CONNECTORS | |
|-------------------------------|--|
| J5 - FLOPPY DRIVE | |
| J3 - HARD DRIVE 0. DATA CABLE | |
| J2 - HARD DRIVE 1. DATA CABLE | |
| J4 - HARD DRIVE CONTROL CABLE | |
| J1 - DRIVE ACTIVITY LIGHT | |

* = as shipped
Out = No jumper installed
In = Jumper installed

| JUMPERS | |
|---------|--|
| J10-1 | HARD DISK PORT ADDRESS *Out = 1F0-1F7 In = 170-177 |
| J10-2 | FLOPPY DISK PORT ADDRESS *Out = 3F0-3F7 In = 370-377 |
| J10-3 | FLOPPY DISK DISABLE *Out = Floppy enabled In = Floppy disabled |
| J11-1 | FLOPPY DRIVE SPEED *Out = Single speed In = Dual speed |
| J12 | BIOS ADDRESS 1 2 3 out out out in out out in out out in out in in out in |
| J13 | DC000 *1-2 IRQ 14 2-3 IRQ 15 |