

Expansion adapters are optional circuit boards that enable the computer to work with peripherals such as joysticks, modems, and multi-function adapters. The VGA (Video Graphics Array) Non-Interlaced Adapter is install in Slot 6. Six additional slots provide connections for six more 16-bit adapters.

To install an expansion adapter:

1. Open the computer.
2. Uncover an expansion slot by removing the corresponding metal slot cover from the back of the computer. Remove the screw from the slot cover. Any unoccupied 16-bit slot can be used by any ISA adapter.

Save the slot cover and the screw. Slot covers must be installed over empty slots to maintain proper airflow in the computer.
3. Hinged, plastic adapter guide cover.
4. Align the expansion adapter with the open expansion slot. Carefully press the edge connector of the adapter into the expansion slot. Be sure the expansion board is fully seated.
5. Use the screw you removed from the slot cover to fasten the expansion adapter to the back of the computer. Be sure the adapter is securely fastened.
6. Close the adapter guide cover.
7. Close the computer.
8. Reattach the computer cables.
9. If the expansion adapter supports video, memory, drives or any other device that requires updating the system configuration, be sure to run the setup utility after installing the adapter. This is necessary for the computer to operate properly. Refer to the "Configuring Your System" section.

INSTALLING ADDITIONAL DRIVES

The computer has two 3 1/2" drive bays and three 5 1/4" drive bays. A diskette drive is installed in the top 3 1/2" bay.

The 5 1/4" bays can be used for either 3 1/2" or 5 1/4" drives. To mount a 3 1/2" drive in a 5 1/4" bay, you must attach a mounting pan or mounting brackets to the drive. If necessary mounting hardware is not included with the drive, contact your computer dealer for parts and information.

DRIVE TYPES

NOTE: The number of internal drives of any given type is limited as shown here.

The following table shows the types of drives you can use in each drive bay.

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3 1/2" Diskette Drive	
3 1/2" or 5 1/4" Diskette Drive, SCSI Hard Disk Drive, SCSI Tape Drive, or CD-ROM Drive	
3 1/2" or 5 1/4" SCSI Hard Disk Drive, SCSI Tape Drive, IDE Hard Disk Drive, CD-ROM Drive, or QIC Tape Drive	
3 1/2" or 5 1/4" IDE Hard Disk Drive, SCSI Tape Drive, SCSI Hard Disk Drive, or CD-ROM Drive	
3 1/2" IDE Hard Disk Drive or SCSI Hard Disk Drive	

Diskette Drives: 2

IDE Drives: 2

SCSI Drives: 4

CAUTION: To obtain the best cooling during operation, mount the 5 1/4" hard drives as high as possible in the computer (or as far right as possible if using the computer as a desktop unit). Avoid placing high-power 5 1/4" drives in adjacent bays. Unless a storage device is equipped with its own cosmetic cover panel, be sure the original drive bay panel is in place before operating the computer. Never operate the computer while the cover is off. The cover is necessary to direct airflow that provides cooling for circuit boards and disk drives.

DRIVE CONNECTIONS

You must connect a drive power cable and drive data/controller cable to each drive you install.

DRIVE POWER CABLE

Five multi-colored, four-pin power cables extend from the computer power supply. One is connected to the installed 3 1/2" diskette drive. The remaining four are available for optional drives. The cable connectors are keyed for proper Pin 1 orientation.

DRIVE DATA/CONTROLLER CABLE

The main logic board has connectors for two data/controller cables. One connector is for a cable that is designed to connect to two IDE hard drives (SmartDrives).

NOTE: Do not use the IDE connector SCSI, ESDI, or ST-506 hard disk drives. These drives require separate interface adapters.

HARD DRIVE ACTIVITY LIGHT CABLE

The drive activity light on the front of the computer lights up whenever the computer accesses the IDE drive. If you install a SCSI or an ESDI hard disk drive, you can connect a cable that enables the light to indicate the activity

of a SCSI or an ESDI drive as well as an IDE drive.

One end of this two-wire jumper cable is already attached to the J10 AUX connector on the main logic board. The other end connects to the four-pin activity light connector (AT standard) on most SCSI or ESDI interface adapters.

INSTALLING A DRIVE IN THE BOTTOM 3 1/2" BAY

The bottom 3 1/2" drive bay can house either an IDE or a SCSI hard disk drive. Follow these steps to install a hard disk drive:

1. Adjust the switches and terminating resistors on the drive as necessary. Refer to the documentation included with the drive to determine whether any adjustments are required.
2. Open the computer.
3. Loosen the two screws, and slide the 3 1/2" mounting pan out of the bay as shown.
4. Select mounting holes that will recess the drive slightly from the front of the computer. Using the mounting screws supplied with the drive, attach the drive to the mounting pan.
5. Slide the pan back into the chassis. Align the holes on the mounting pan with those on the chassis, and fasten the screws.
6. Connect a four-pin power cable to the drive.
7. Connect the data/controller cable that is appropriate for your hard drive:
 - * For an IDE drive, connect the IDE data/controller cable to the drive. This cable is packaged with the IDE drive.
 - * For a SCSI drive, connect the SCSI data/controller cable between the drive and the SCSI interface adapter. This cable is packaged with the SCSI interface adapter.
8. Close the computer.
9. Run the setup utility to include the new drive as part of the computer's system configuration. Refer to the "Configuring Your System" section for instructions.

NOTE: Instructions provided here are for general use only. Refer to your drive and drive interface adapter documentation (if applicable) for specific instructions on connect data/controller cables.

INSTALLING A 5 1/4" DRIVE

The availability of appropriate data/controller cables determines the types of drives you can install in a particular 5 1/4" bay. Refer to the illustration under "Drive Types" for the types supported in each bay.

1. Adjust the switches and terminating resistors on the drive as necessary. Refer to the documentation included with the drive to determine whether any

adjustments are required.

2. Open the computer.
 3. Remove the panel that covers the drive bay. The panel is held in place by a screw on one side and a tab on the other.
 4. Connect a four-pin power cable to the drive.
 5. Connect the data/controller cable that is appropriate for your drive:
 - * For an IDE drive, connect the IDE data/controller cable to the drive. This cable is packaged with the IDE drive.
 - * For a SCSI drive, connect the SCSI data/controller cable between the drive and the SCSI interface adapter. This cable is packaged with the SCSI interface adapter.
 6. Slide the drive into the drive bay, and use four screws provided with the drive to secure the drive in the bay.
- NOTE: If you are installing a diskette drive or tape drive, the front of the drive should align with the other drive panels or drives.
7. Close the computer.
 8. Run the setup utility to include the new drive as part of the computer's system configuration. Refer to the "Configuring Your System" section for instructions.

INSTALLING A 3 1/2" DRIVE IN A 5 1/4" BAY

To fit a 3 1/2" drive to a 5 1/4" bay, you must attach a mounting pan or mounting brackets to the drive. Diskette drives require mounting pans. Hard disk drives require mounting brackets.

The availability of appropriate data/controller cables determines the types of drives (diskette, IDE, SCSI, and so on) you can install in a particular 5 1/4" bay. Refer to the illustration under "Drive Types" for the types supported in each bay.

3 1/2" HARD DISK DRIVE IN A 5 1/4" BAY

- * Use a 3 1/2" to 5 1/4" Hard Drive Mounting Bracket Adapter Kit (AXX-7004) to adapt the drive to the 5 1/4" bay. Secure the drive to the mounting brackets, using the screws provided with the brackets.
- * Position the drive so that it will be slightly recessed from the front of the computer.
- * Connect the drive power and data/controller cables.
- * After installing the drive in the bay, replace the drive bay panel.

NOTE: This information supplements drive and mounting kit documentation and the "Installing a 5 1/4" Drive" procedure. Refer to all these sources when installing your drive.