Adaptec ASH-1233 ATA Adapter

Installation Guide



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This *Installation Guide* explains how to install the Adaptec ASH-1233 adapter, connect ATA hard disk drives to it, and install the device drivers for your operating system.

For more detailed installation instructions, troubleshooting tips, and support and warranty information, refer to the *User's Guide* on the CD.

System Requirements

The minimum system requirements for the ASH-1233 adapter are:

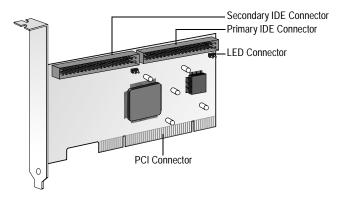
- Pentium II-266 MHz Processor or higher
- Microsoft[®] Windows[®] 98SE, Windows Me, Windows 2000, or Windows XP
- Available PCI slot with bus-mastering enabled



Note: Refer to your system or motherboard documentation for information on enabling bus-mastering.

- At least one ATA drive and IDE cable
- CD-ROM or DVD-ROM drive

This is Your Adaptec ASH-1233 Adapter



Installation Checklist

To successfully install your Adaptec ASH-1233 adapter and ATA disk drives, perform these tasks, in order:

- 1 Install the ASH-1233 adapter. (See page 4.)
- 2 Prepare your disk drives. (See page 7.)
- 3 Connect your disk drives to the ASH-1233 adapter. (See page 8.)
- 4 Mount your disk drives and connect the cables. (See page 12.)
- 5 Install the device drivers. (See page 13.)

Installing Your Adaptec ASH-1233 Adapter

You can install your Adaptec ASH-1233 adapter into a 32-bit or 64-bit PCI expansion slot.



Note: If you are installing the adapter into an existing system, back up all data before continuing.

To install the ASH-1233 adapter:

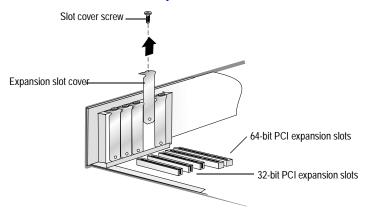
1 Discharge any static electricity build-up before handling the adapter by touching a grounded metal object (such as the exposed metal parts on the back of your computer).



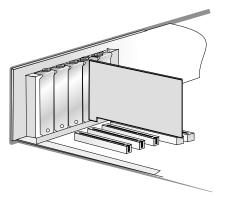
Caution: *Always* handle the adapter by its edges or metal bracket. Do not touch the gold PCI connector or any components on the adapter.

2 Turn off power to the computer and disconnect the power cord. Open the computer cabinet, following the manufacturer's instructions.

3 Locate an unused expansion slot and remove the slot cover. Save the slot cover screw for use in Step 5.



4 Insert the ASH-1233 adapter in the PCI expansion slot. Press down firmly until the adapter clicks into place. When installed properly, the adapter should appear level with the expansion slot.





Note: Depending on the tightness of the PCI slot, gentle but firm force may be required to insert the adapter.

5 Secure the adapter bracket with the slot cover screw you removed in Step 3.

Do not close the computer cabinet, reattach the power cord, or power on your computer yet. Continue with *Preparing Your ATA Disk Drives* on page 7.

Preparing Your ATA Disk Drives

Because setup can vary from device to device or computer to computer, always refer to your ATA disk drive and computer documentation for specific instructions.



Note: If you refer to the ATA drive's documentation for installation instructions, return to this document to continue with installation of the software included in your kit.

Before you begin, ensure that you have the correct cables for the ATA disk drives you are installing. Refer to the disk drives' documentation for more information on cables.

Setting Jumpers on ATA Disk Drives

If you are installing two hard disk drives, set up each drive as a *master*. This is typically done by changing jumper settings on the drive. The *master* setting is the factory default setting on most ATA drives. Refer to your hard disk drive documentation to determine the correct jumper setting for *master* operation.

If you are installing four hard disk drives, set up two drives as *master* and the other two as *slave*. Mark the *master* and *slave* drives so you remember which are which when you are connecting the cables.

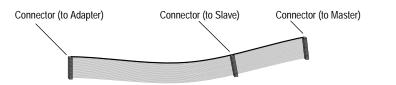
Connecting Your ATA Disk Drives

The ASH-1233 adapter supports up to four ATA disk drives in a master/ slave configuration. (See *Setting Jumpers on ATA Disk Drives* on page 7 for more information.)

Connect each ATA disk drive to the ASH-1233 adapter using the proper 40-pin IDE cable.



Note: The Adaptec ASH-1233 adapter does not support Cable Select (CSEL) settings. You must change the jumper settings to set disk drives as master or slave.



To connect your ATA disk drives, follow the instructions for your specific drive configuration:

- To install an ATA disk drive as the only device on a cable, see page 9.
- To install two ATA disk drives on the same cable, see page 11.

Connecting One ATA Disk Drive on a Cable

When you connect only one ATA disk drive to a cable, that disk drive must be set as a *master* drive. (See *Setting Jumpers on ATA Disk Drives* on page 7 for more information.)

To connect one ATA drive to the ASH-1233 adapter:

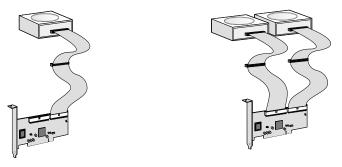
1 Connect the IDE cable to an IDE connector on the ASH-1233 adapter (as shown below), being careful to match pin 1 of the cable to pin 1 of the connector.

The cables and connectors are keyed. If the cable does not slide easily into the connector, *do not* force it. Instead, reverse the cable.



Note: The stripe along the edge of the cable indicates Pin #1. If the cable does not slide easily into the connector, reverse the cable.

2 Connect the other end of the IDE cable to a master drive, as shown below on the left.



3 Repeat Step 1 and 2 to connect a second ATA disk drive to the second IDE connector on the ASH-1233 adapter, as shown above on the right. Both disk drives must be set as master drives.

Continue with *Mounting ATA Disk Drives and Connecting Cables* on page 12.

Connecting Two ATA Disk Drives to the Same Cable

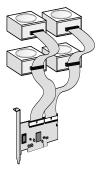
When you connect two ATA disk drives to a cable, one disk drive must be set as the *master*, the other must be set as the *slave*. (See *Setting Jumpers on ATA Disk Drives* on page 7 for more information.)

To connect two disk drives to the same cable:

- 1 Connect the IDE cable to an IDE connector on the ASH-1233 adapter.
- 2 Connect the *middle* connector on the IDE cable to the ATA disk drive that is set as the *slave*.
- 3 Connect the other end of the IDE cable to the ATA disk drive that is set as the *master*.

You can connect a maximum of four ATA disk drives to your ASH-1233 adapter, as shown at right.

Continue with *Mounting ATA Disk Drives and Connecting Cables* on page 12.

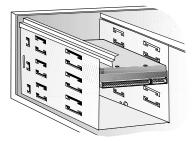


Mounting ATA Disk Drives and Connecting Cables

To complete the hardware installation:

1 Mount each ATA disk drive in an available drive bay inside your computer (as shown below).

Refer to your computer and device documentation for instructions on installing devices inside your computer.



- 2 Connect a power cable from your computer's power supply to each ATA disk drive.
- 3 Close your computer cabinet, reattach the power cord, then power on your computer.

Continue with *Installing the Device Driver* on page 13.

Installing the Device Driver

Before you can begin using your ASH-1233 adapter and ATA drives, you must install the device driver. Follow the instructions provided for your operating system (OS):

- For Windows XP, see below.
- For Windows 2000, see page 14.
- For Windows Me, see page 14.
- For Windows 98SE, see page 15.



Note: For more detailed instructions and for instructions on verifying driver installation, refer to the *User's Guide* on the CD. To complete the installation while installing a new OS, refer to the Readme file on the CD.

Windows XP

When you power on your computer, Windows automatically detects the new adapter and opens the New Hardware Installation Wizard.

To complete the device driver installation:

- 1 Insert the Adaptec ASH-1233 CD into your CD-ROM drive.
- 2 In the Wizard, click **Install the software automatically...**, then click **Next**.
- 3 If a message appears indicating that the driver is not digitally signed, click **Continue Anyway**.
- 4 When the installation is complete, click **Finish**.

Windows 2000

When you power on your computer, Windows automatically detects the new adapter and opens the New Hardware Installation Wizard.

To complete the device driver installation:

- 1 Insert the Adaptec ASH-1233 CD into your CD-ROM drive.
- 2 In the Wizard, click Next.
- 3 Select Search for a suitable driver..., then click Next.
- 4 Select CD-ROM drives, then click Next.
- 5 Click Next again.
- 6 When the installation is complete, click **Finish**.
- 7 Restart your computer if you are prompted to do so.

Windows Me

When you power on your computer, Windows automatically detects the new adapter and opens the New Hardware Installation Wizard. To complete the device driver installation:

- 1 Insert the Adaptec ASH-1233 CD into your CD-ROM drive.
- 2 In the Wizard, select Automatic search for a better driver..., then click Next.
- 3 When the installation is complete, click **Finish**.

Windows 98SE

Note: You may need your Windows 98SE CD during installation.

When you power on your computer, Windows automatically detects the new adapter and opens the New Hardware Installation Wizard. To complete the device driver installation:

- 1 Insert the Adaptec ASH-1233 CD into your CD-ROM drive.
- 2 In the Wizard, click Next.
- 3 Click Search for the best driver..., then click Next.
- 4 Select CD-ROM drive, then click Next.
- 5 Click Next again.
- 6 When the installation is complete, click **Finish**.

Registering Your Adaptec ASH-1233 Adapter

To register your ASH-1233 adapter, go to register.adaptec.com.



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Part Number: 513908-06, Ver. AA LB 04/04