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# ALL-IN-WONDER

## User's Guide

Version 1.0

Rev. A

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## CHAPTER 1

# Getting Started

Welcome to the convergence of your PC, TV and video! This new technology changes the way you view TV, graphics, and video on your PC.

ATI's ALL-IN-WONDER is a powerful TV, 2D & 3D graphics and video accelerator. Its features will take your PC's graphics and video capabilities to the next level.

This guide provides all the information you need to install your ALL-IN-WONDER.



### IN THIS CHAPTER...

- **What is ALL-IN-WONDER?**
- **What's in the Package?**
- **System Requirements**
- **Using this Guide**
- **Other Sources of Information**

## What is ALL-IN-WONDER?

The ALL-IN-WONDER delivers high-performance 3D and 2D graphics. You can play games, watch TV or videos, listen to audio CDs, explore the internet, and work in Windows 95 like never before.

ATI's 3D RAGE II accelerator chip provides advanced 3D support and accelerated 2D graphics. Games and software applications that support the 3D RAGE II — including Direct 3D applications — run with fluid motion and in brilliant color.

The ALL-IN-WONDER's advanced features support the next generation of 3D capabilities:

- Gouraud shading
- Perspective correction
- Alpha blending
- Mip mapping
- Bilinear filtering
- Z-buffering

The ALL-IN-WONDER is a part of ATI's legendary *mach64* family of graphics accelerators. Your existing 2D games and applications will snap to life with 64-bit acceleration and faster, more vibrant colors.

You can use ALL-IN-WONDER to connect your computer to a television. This feature is ideal for playing games, giving presentations, watching movies, and browsing the Internet. (For more information, see *Using Your ALL-IN-WONDER* on page 19.)

ALL-IN-WONDER also turns your PC into an intelligent TV with the following features:

- Zoom-in
- Scheduled viewing
- Channel scanning
- Video capture
- Closed captioning with “Hot Words” and “Look Back” features
- Program transcript recording

## What's in the Package?

Your package includes the following hardware, software, and documentation:

- ALL-IN-WONDER accelerator card
- Display driver CD-ROM with online User's Guide
- Input/Output cable adapters
- Getting Started Guide
- A collection of software that will kick-start your new multimedia experience

If any components are missing or damaged, please contact your dealer.

## System Requirements

- **Computer System** — Pentium<sup>®</sup>/Pentium Pro<sup>®</sup>, or compatible systems with PCI Local Bus
- **Expansion Slot** — 32-bit PCI Local Bus
- **Operating System** — Windows 95<sup>®</sup>  
*Graphics features only are supported under Windows 3.1x<sup>®</sup>, Windows NT<sup>®</sup> (3.51, 4.0), and OS/2 (2.1, Warp)*
- **Monitor** — VGA, supporting minimum 640x480 resolution.  
*A Plug-and-Play monitor that supports VESA's Display Channel specifications (DDC1 or DDC2b) is required to take advantage of the DDC1/DDC2b features.*

## Using this Guide

The organization of this guide is as follows:



**Installing the Hardware** contains step-by-step instructions to help you place your card in your computer.



**Installing ATI's Enhanced Windows 95 Software** describes how to install display driver and ATI Video Player software.



**Using Your ALL-IN-WONDER** explains how you can take advantage of the advanced new features of the ALL-IN-WONDER.



**Reference** contains troubleshooting tips and specifications about your card.

## Other Sources of Information

If you need additional help or require information that is not included in this guide, see the following sources of information:

### Readme File

This file contains the latest information about your ALL-IN-WONDER card.

#### To view the Readme file in DOS

- 1 Insert the *ATI Installation CD-ROM* into the disk drive.
- 2 In an MS-DOS window, type **D:** (or substitute your CD-ROM drive letter).
- 3 Type **README**.

### Online Help

If you require additional information, you can refer to the online help available under Windows 95 for more information about using ATI's *mach64* enhanced drivers.



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## CHAPTER 2

# Hardware Installation

Installing your card consists of three, easy steps.

- **Placing the card in your computer**
- **Attaching input and output cables and optional TV, VCR, camcorder, etc.**
- **Installing ATI's enhanced display drivers**

This chapter explains how to place your card in your computer, and describes the input and output cables.



### IN THIS CHAPTER...

- **Preparing Your Computer**
- **Installing the Hardware**



Turn off the power to your system and discharge your body's static electric charge by touching a grounded surface — e.g., the metal surface of the power supply — before performing any hardware procedure.

The manufacturer assumes no liability for any damage, caused directly or indirectly, by improper installation of any components by unauthorized service personnel. If you do not feel comfortable performing the installation, consult a qualified computer technician.

Damage to system components, the accelerator card, and injury to yourself may result if power is applied during installation.

## Preparing Your Computer

If you are using an operating system other than Windows 95, you may need to do the following before installing your card:

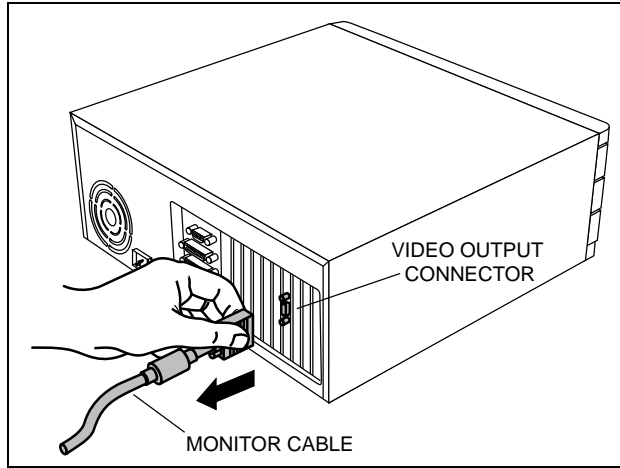
- If your current system configuration uses special drivers that are not 640x480 VGA, you may encounter conflicts with the card. We recommend that you first reconfigure your operating system to use a **VGA** driver supplied with your operating system before installing the card. For more information about changing your operating system configuration, see your operating system documentation.

## Installing the Hardware

Now that you have prepared your computer, you are ready to install your card.

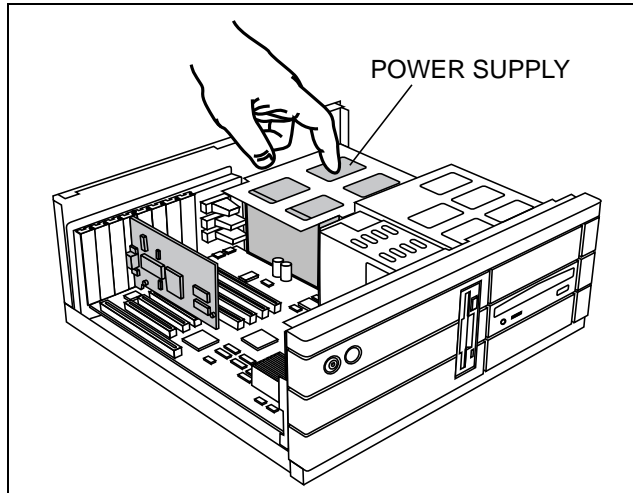
### To install your card

- 1 Power off the computer and monitor, then disconnect the monitor cable from the back of your computer.



- 2 Remove the computer cover. If necessary, consult your computer system manual about removing the cover.

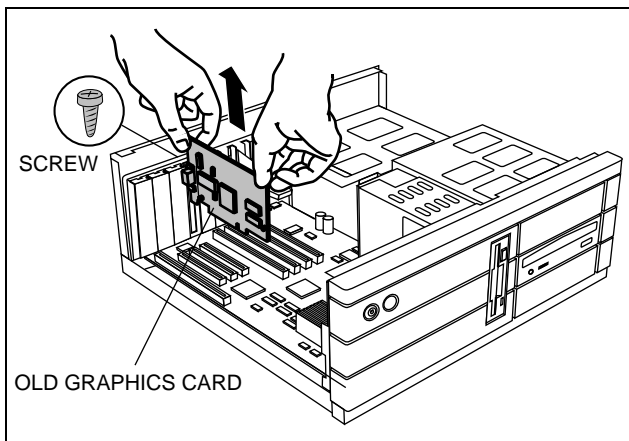
*Remember to discharge your body's static electricity by touching the metal surface of the computer chassis.*



- 3 If there is an existing graphics card, remove it from your computer.

*If the old graphics card sticks, rock it gently from end to end.*

*Remember to save the screw.*

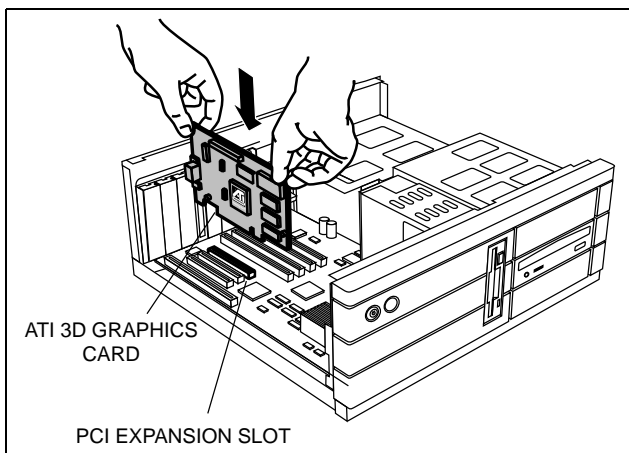


*or*

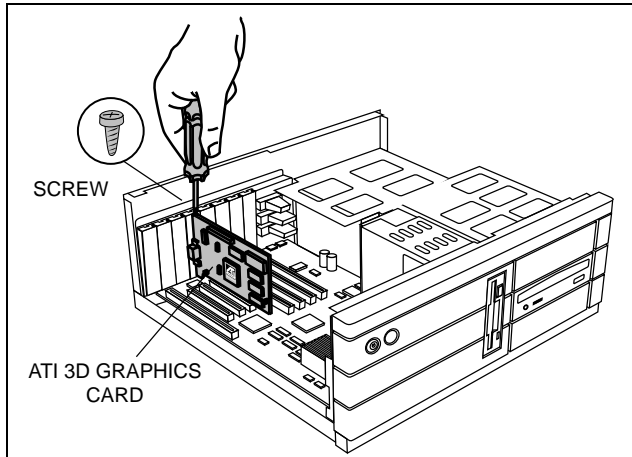
If your computer has any on-board graphics capability, you may need to disable it on the motherboard. For more information, see your computer documentation.

- 4 Align your card with an empty PCI expansion slot and gently insert it into place. You may need to remove the cover from the rear of the PCI expansion slot that you selected.

*Grasp the card by the top edge and carefully seat it firmly into the PCI slot.*

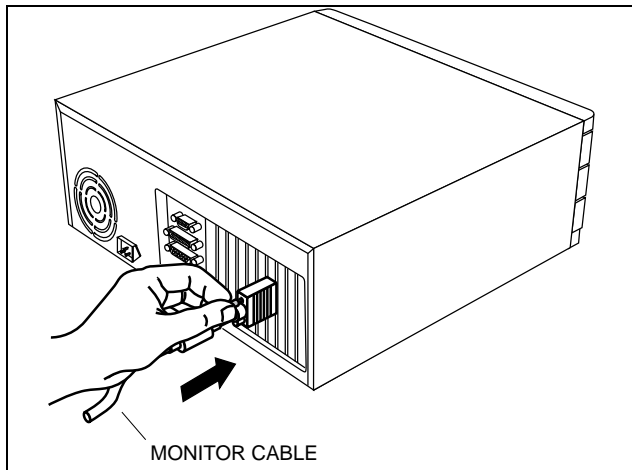


- 5 Replace the screw to fasten the card in place, and replace the computer cover.

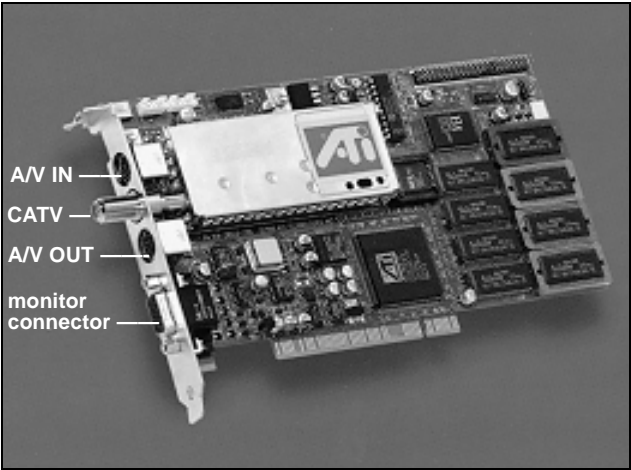


- 6 Plug the monitor into your card, then turn on the computer and monitor.

*Make sure  
your monitor  
cable is  
securely  
fastened.*

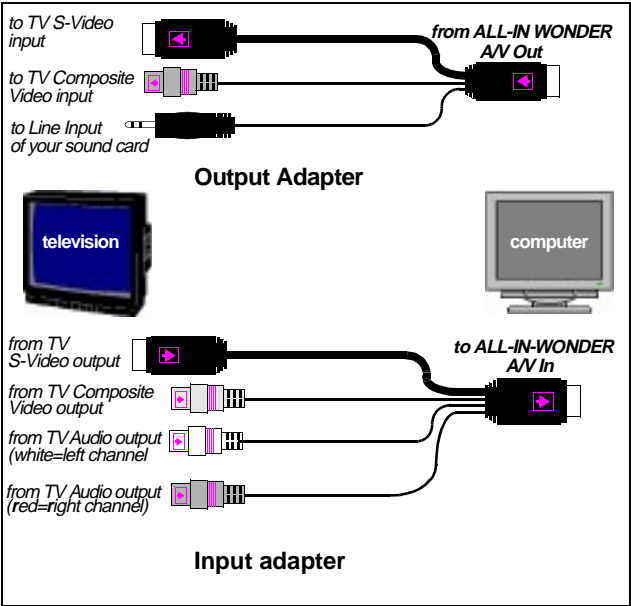


*This illustration indicates the audio/video input and output connectors on your ALL-IN-WONDER card*



*Use the supplied Input and output adapters to connect your ALL-IN-WONDER card to your television, VCR, camcorder, etc.*

*The direction of the arrows indicates inputs and outputs*



You are now ready to proceed to Chapter 3 and install ATI's enhanced Windows 95 software.

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## CHAPTER 3

# Installing ATI's Enhanced Windows 95 Software

ALL-IN-WONDER is designed to function fully under Windows 95. When running under other operating systems, ALL-IN-WONDER behaves as a graphics card only.

Your computer uses programs called graphics drivers to display information on the screen. ATI's enhanced drivers give you enhanced speed, resolution, color depth, graphic utilities, and 3D features.

In addition, the ATI VIDEO PLAYER program completes the functionality of ALL-IN-WONDER.

This chapter explains how you install ATI's enhanced software.



### IN THIS CHAPTER...

- **Installing Windows 95 Enhanced Drivers on page 16**
- **Installing ATI VIDEO PLAYER for Windows 95 on page 17**
- **Using VESA BIOS Extensions for DOS Gaming on page 18**

## Installing Windows 95 Enhanced Drivers

You need to install ATI's enhanced driver for Windows 95 to take advantage of your card's higher performance, resolutions, and special features.



When you restart your system following installation of your ALL-IN-WONDER card, Windows 95 will detect the new hardware and attempt to install a *mach64* driver from its system registry. At the System Settings Change dialog box, when prompted to "Restart the computer now", select **NO**. Then follow the normal installation procedure below.

Selecting 'NO' to the initial restart prompt is a necessary step since Windows 95 may load an older *mach64* display driver that is incompatible with your new graphics card. Always use the *mach64* driver available on the ATI Installation CD-ROM, or an applicable driver update.

### To install the *mach64* enhanced driver for Windows 95

- 1 Insert ATI's Installation CD-ROM into your CD-ROM drive.

*If Windows 95 runs the ATI INSTALLATION CD-ROM automatically, proceed to step 5.*

- 2 Click Start.
- 3 Select Run.
- 4 Type the following:

**D:\ATISSETUP**

(If **D** is not your CD-ROM drive, substitute **D** with the correct drive letter.)

- 5 Click on Display Drivers.
- 6 Follow the online screen instructions to complete the installation.



## Installing ATI VIDEO PLAYER for Windows 95

Now that you have installed ATI's *mach64* enhanced driver for Windows 95, you can install the ATI VIDEO PLAYER.

**You must install ATI's *mach64* enhanced driver before installing the ATI VIDEO PLAYER.** The ATI VIDEO PLAYER must be installed to enable all features of the ALL-IN-WONDER.

### To install the ATI VIDEO PLAYER for Windows 95

- 1 Insert ATI's Installation CD-ROM into your CD-ROM drive.  
*If Windows 95 runs the ATI INSTALLATION CD-ROM automatically, proceed to step 5.*
- 2 Click Start.
- 3 Select Run.
- 4 Type the following:  
**D:\ATISSETUP**  
(If **D** is not your CD-ROM drive, substitute **D** with the correct drive letter.)
- 5 Click ATI VIDEO PLAYER.
- 6 Follow the on-screen instructions to complete the installation.

### To open the ATI VIDEO PLAYER for Windows 95

- 1 Click Start.
- 2 Select Programs.
- 3 Select ATI Multimedia.
- 4 Click ATI VIDEO PLAYER.

For information about using the controls of the ATI VIDEO PLAYER, see the online help.

## Using VESA BIOS Extensions for DOS Gaming

The VESA BIOS Extensions (VBE) feature supports software using modes compatible with VESA standards.

To ensure that VBE works correctly, you can load a DOS TSR (terminate-and-stay-resident) program called M64VBE. If your software and/or games conform to the VBE standard, you should load M64VBE first.

### To install the M64VBE.COM program

- 1 Insert ATI's Installation CD-ROM into your CD-ROM drive.
- 2 Type **D:** (If **D** is not your CD-ROM drive, substitute **D** with the correct drive letter).
- 3 Type **CD UTILITY**.
- 4 Type **INSTALL**.
- 5 Select Utilities Installation from the Main Menu.
- 6 Press ENTER to select the default destination directory.
- 7 When prompted, let the INSTALL program make changes to your Autoexec.bat file.
- 8 Press ESC to exit the INSTALL program.
- 9 Restart your computer.

*You are now ready to load M64VBE.*

### To load M64VBE

- 1 At the command prompt, type **M64VBE**.

### To remove M64VBE from your system

- 1 At the command prompt, type **M64VBE U**.
  - For more information, see your DOS documentation for conditions on unloading TSRs.

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## CHAPTER 4

# Using Your ALL-IN-WONDER

You can take advantage of the special features that your ALL-IN-WONDER has to offer.



### IN THIS CHAPTER...

- **Using ATI VIDEO PLAYER**
- **Intelligent TV Tuner**
- **Playing Media Files**
- **Playing Audio CDs**
- **Capturing Video and Audio**
- **Attaching Your TV to the ALL-IN-WONDER card**
- **Setting up ALL-IN-WONDER**

## Using ATI VIDEO PLAYER

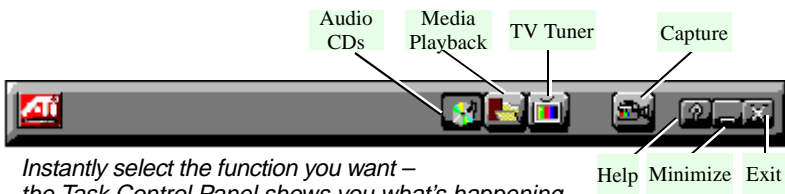
### In Windows 95

- 1 Click **Start**.
- 2 Select **Programs**.
- 3 Select **ATI Multimedia**.
- 4 Click the **ATI PLAYER**.

*For information about using the controls of the ATI VIDEO PLAYER, see the online help.*

### The Task Control Panel





The Task control panel indicates what mode the player is in and what it's doing. (Your Task control panel may not look exactly like the illustration—only installed or available features will have controls.)



*Instantly select the function you want – the Task Control Panel shows you what's happening.*

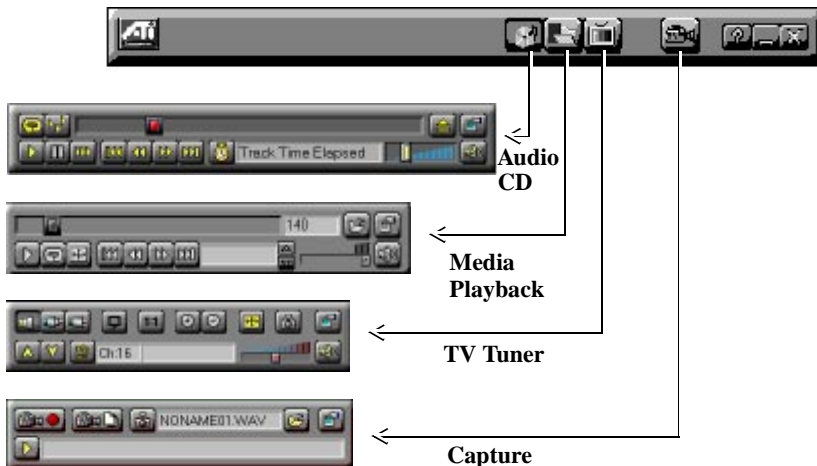
## Switching Modes

Use the Task control panel buttons to switch between Media Playback, Audio CD, TV, and Capture modes.




	<b>Media Playback</b>	Play MPEG and AVI video files.	See <i>Playing Media Files</i> on page 25
	<b>Audio CD</b>	Play standard audio CDs.	See <i>Playing Audio CDs</i> on page 26
	<b>TV</b>	Display live video sources, such as television programs.	See <i>Intelligent TV Tuner</i> on page 31
	<b>Capture</b>	Capture still images, video sequences, or audio-only.	See <i>Capturing Video and Audio</i> on page 28

## ALL-IN-WONDER—The Control Panels

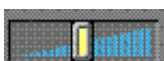
When you select a mode in the Task control panel or press a shortcut key, the Control panel changes to the appropriate control panel for that mode. All modes provide context-sensitive help; see *Online Help* on page 24.



You can also use the following shortcut keys to start playback, TV Tuner or Capture.

	Media Playback	Press F5
	TV Tuner	Press F6
	Capture	Press F8

### Controlling the audio volume



The TV Tuner and Audio CD panels have a volume control slider. Use the mouse to move the slider to increase and decrease the audio volume.

### Muting the audio volume

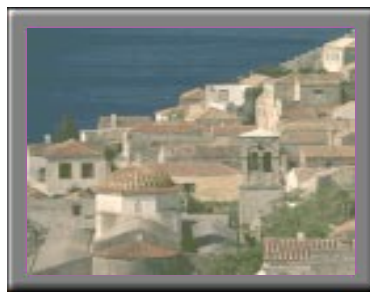


The TV Tuner and Audio CD panels have a Mute button that you can click to temporarily turn off the audio. Clicking the button again or moving the volume control slider turns off muting.

## The Display Panel

The Display panel is the “screen” where your media plays. It’s a familiar, TV-style display that you can resize, place on top of other windows, and position automatically in one of nine locations on the screen.




The F2 key hides/shows the control panel, to save desktop space.



*Move the Display panel, zoom it to full-screen, and minimize it as an icon.*

## Sizing the Display panel

You can resize the Display panel using the mouse, the Control panel buttons, or CTRL key combination:

	Increase size of Display Panel	CTRL + Up Arrow
	Decrease size of Display Panel	CTRL + Down Arrow
	Play full-screen	CTRL + F

In **TV mode**, when you play full-screen video, the Playback panel becomes “thin”, so that you can move it to the top or bottom of your screen. To show/hide the thin Playback panel, press **Alt+Space bar**.

You can also use the CTRL key to display these preset sizes:

160x120 pixels.	CTRL+1
240x180 pixels.	CTRL+2
320x240 pixels.	CTRL+3
640x480 pixels.	CTRL+4
Toggle between full screen and current size.	CTRL+F ALT+F

## Attaching and Detaching Panels

You can detach ALL-IN-WONDER Control panels from the Display panel, move them to any location on your screen, and re-attach them. Panels attached to the Display panel share the Display panel's **snap window to:** and **always on top** settings (For more information, see *Display* in [Setting up ALL-IN-WONDER on page 39](#)).

When you display closed-captioned text in a window, you can attach and detach the closed-captioned window.

### To detach a panel

**While holding down the Shift key, click** the panel where the panel edges meet, then **drag** it away.

### To attach a panel

**Drag** it near the Display panel until its outline changes, then **release** the mouse button. The panels will snap back together.

## Online Help

**Context-Sensitive Help.** Context-sensitive help is always available in each panel. Just press the F1 key.

**Bubble Help.** Simply move the mouse cursor over a control to see a description of its purpose. As you become familiar with ALL-IN-WONDER, you may want to turn off help — click the **Show Bubble Help** checkbox in the **Display** configuration dialog (for more information, see *Display* in [Setting up ALL-IN-WONDER on page 39](#)).



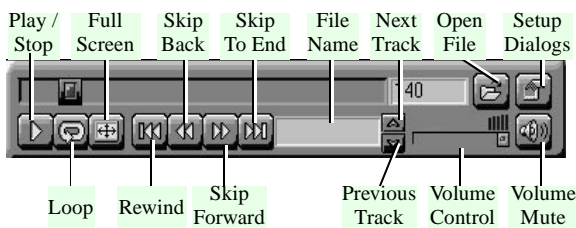
## Playing Media Files

Click the Media Playback button in the Task control panel to switch to playback mode.



*The Control panel changes to the Playback panel.*



To view/hide the Playback panel in Full Screen mode, press F2.



You can use the Media Playback panel to play the following media files:

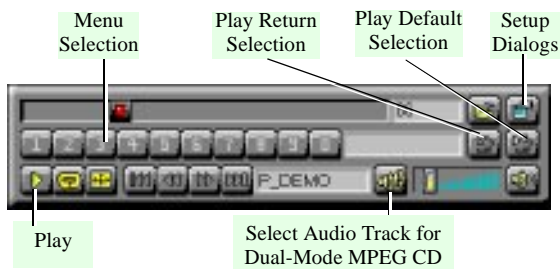
- MPEG-1 digital audio and video, including Karaoke—including dual-channel audio, CDi, Games, and reference application titles
- .AVI video files

### To play a file

- 1 In the Playback panel, click the File Open button. 
- 2 Select a file from the list.
- 3 Click Add, then click OK.
- 4 Click the Play button. 
- 5 The file plays in the Display panel.

## Playing Interactive Discs (Video CD 2.0)

When playing Video CD 2.0 discs, the Control panel changes to this interactive panel.

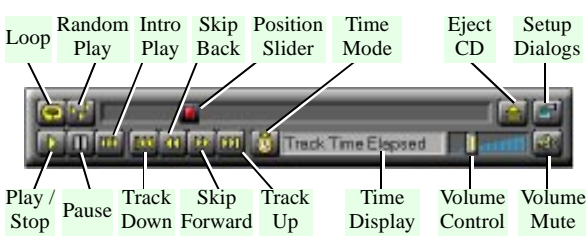


## Playing Audio CDs

Click the Audio CD button in the Task control panel to switch to Audio CD mode.

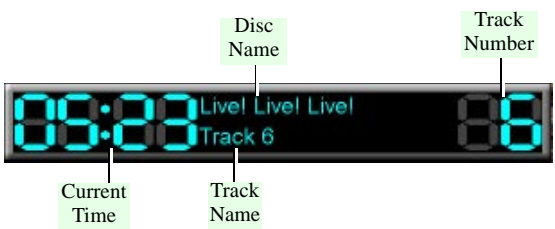


*The Audio CD player has its own control panel for controlling the audio CD playback.*





You can use the Audio CD panel to play standard audio CDs. Advanced features such as Random play, Intro play, which plays the first ten seconds of each track, and Loop play are available.

The Audio CD player has its own display window.



## To play an audio CD

- 1 Insert the audio CD into your CD-ROM drive.
- 2 In the Audio CD panel, click the Setup Dialogs button. 
- 3 Click the Disc Info tab.
- 4 From the Available Tracks list, add or remove tracks as desired. The Play List displays your current selections.
- 5 Click OK.
- 6 In the Audio CD panel, click the Play button. 

The Audio CD player uses Windows 95's standard INI file to store disc names, track names, and the play list. You can use the Setup dialog to enter the name of the artist and the disc.

*For more information on using the Audio CD controls and features, see the on-line help.*

## Capturing Video and Audio

**Still images.** You can capture full-color, 24-bit-per-pixel still images from your camcorder or television, save them on your computer's hard disk, and print them. The images are placed on the clipboard, or you can display them in their own window as "thumbnails" (miniature images).

ALL-IN-WONDER saves still images as Windows-standard bitmaps (.bmp). It also supports most industry-standard graphics file formats, so you can insert the images into reports, presentations, letters, and other documents, to add impact to training applications and presentations.

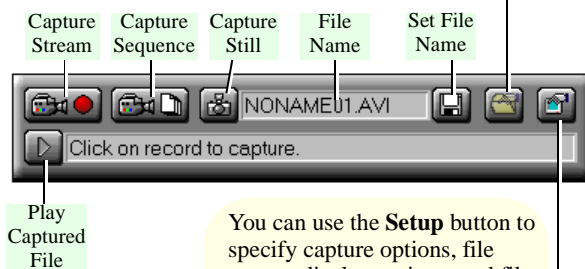
**Full-motion video.** You can capture a stream of full-motion video plus audio from your video source and save it as an .AVI file on your computer's hard disk. You also have the option of capturing only audio — uncheck the **Capture Video** box in the **Capture** dialog (see *Capture* in [Setting up ALL-IN-WONDER on page 39](#).)

Click the Capture button in the Task control panel to switch to capture mode.



*The Control panel changes to the Capture panel.*

You can use the **Save As...** button to compress your captured video and save it in one of several industry-standard formats. See the on-line help for more information on this feature.



You can use the **Setup** button to specify capture options, file names, display options, and file handling for captured video (see *Capture* in [Setting up ALL-IN-WONDER on page 39](#).)

## Capturing Still Frames

For information on setting up capture files, see *Still Capture* in [Setting up ALL-IN-WONDER on page 39](#).

### To capture still frames

Click the camera button  to capture the current frame.

### To review captured images

Click the image's thumbnail.

- If the selected image has **not** been saved, the thumbnail has a red border. If it **has** been saved, the border is green.
- If an unselected image **has** been saved, its border is grey. If it has **not** been saved, there is no border.

You can use the buttons at the top of the still capture window to **save** the captured image, **delete** it, **print** it, or make it into a **desktop pattern**.

If you try to delete an unsaved still frame, ALL-IN-WONDER prompts you to save it before deleting.

## Capturing Video

You can capture video in two ways:

- As a **stream of video and audio** that you save as an .AVI file.
- As a **sequence of still frames** that you save in an .AVI file.

The quality of the video that you capture depends on the following conditions:

- speed of your system (CPU)
- amount of system memory (RAM)
- performance of your Hard Disk (HDD)
- size of the video capture window


For information on setting up capture files, see *Capture and Advanced* in [Setting up ALL-IN-WONDER on page 39](#).

### To capture a stream of video and audio

Click the Record Stream button  in the Capture panel.

ALL-IN-WONDER starts recording video and audio.

### To capture a sequence of frames

Click the Capture Sequence button  in the Capture panel.

ALL-IN-WONDER starts recording a sequence of frames.

**Note that audio is not captured in this mode.**

## Playing Captured Video and Audio

### To play captured video and audio

Click the Play  button in the Capture panel.

ALL-IN-WONDER plays your captured file.

## Intelligent TV Tuner

Now you can watch TV, videos, or games on your computer!

ALL-IN-WONDER lets you watch up to 125 cable television channels and 70 antenna channels in smooth, full-motion video on the whole screen or in a window.

You can capture still frames and movie clips, channel surf, or create your own TV transcripts.



*Get real-time information when you want it. Move the TV window, zoom it to full-screen, and capture video.*

## Features

- **Television quality** video in a window and full screen.
- **Composite video and S-Video inputs** for VCR, video camera, laser-disc player, video game consoles, etc.
- **Still image and live video capture** with a simple mouse click.
- **Live motion video desktop**, using your favorite TV show as wallpaper.
- **Channel scan** through all available stations in seconds.
- **Zoom-in** to any part of the screen.
- **Closed captioning** (NTSC only) support including **transcript** creation and **Hot Words** that alert you when the ALL-IN-WONDER is receiving information that you want to watch.

## Using the TV Tuner

The TV Tuner displays cable or broadcast television and smooth, full-motion video on the whole screen or in a window. You can use the TV Tuner to:

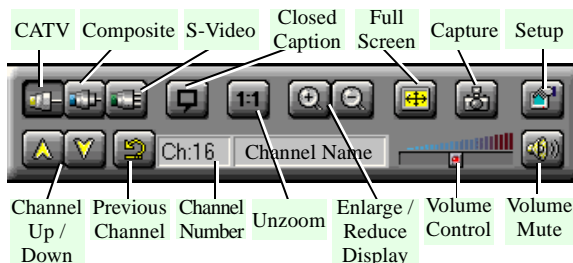
- Watch television on your computer as you work in another software application.
- Watch a videotape or laser disk movie on your computer.
- Capture, save, and print TV and video images.
- Display and record closed-captioned text.
- Replace your desktop with live TV display.

The ALL-IN-WONDER accepts a wide range of video inputs — from just about any device that has a VIDEO OUT connector: TV antenna or cable, VCR, Video camera, laser disk, and video games.

Click the TV Tuner button in the Task control panel to switch to TV mode.



*The Control panel changes to the TV control panel (in this illustration, CATV is selected).*



You can use the **Setup** button to adjust color, select the broadcast standard, add and delete channels, and set closed-caption options (see [Video, Tuner, and Closed Caption](#) in [Setting up ALL-IN-WONDER on page 39](#).)



## Validating TV Channels

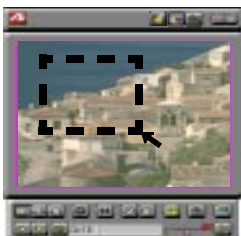
When you click the **Auto Scan** button in the Tuner setup dialog (see **Tuner** in *Setting up ALL-IN-WONDER on page 39*), the TV Tuner scans for all available channels and stores them.

When scanning is complete, you can type in a name for each channel. Before scanning, use the drop-down list box to select the broadcast format and the cable standard.

If you want to change channel assignments, you can use the slider that appears at the top of the dialog. For example, you could assign the actual channel 5 to the ALL-IN-WONDER's channel 2.

- Double-clicking the slider returns the current channel's assignment to normal; for example, selecting channel 2 tunes in channel 2.
- Clicking the **Auto Scan** button returns all the channel assignments to normal.


## Zooming and Unzooming



Select and enlarge a portion of the display by dragging the mouse across the Display Panel

### To select and enlarge a portion of the display

- 1 Click within the display panel.
- 2 Hold down the mouse button and draw a rectangle around the area you want to zoom.


To return your display to normal, click the **Unzoom** button  in the Control panel.

## Using Hot Words

Have your computer watch TV for you! When you turn on Closed Captioning, you can specify words and phrases that ALL-IN-WONDER will detect in the closed-captioned text. You set Hot Words to begin transcribing the text or to maximize the TV Tuner when the Hot Words appear.

You specify words using the Hot Words configuration dialog. (see *Hot Words* in [Setting up ALL-IN-WONDER on page 39](#)).

### To select Hot Words

- 1 Click the Setup button  in TV Tuner mode.
- 2 Click the Hot Words configuration dialog.
- 3 Type in the Hot Words that you want.
- 4 Choose the type of match you want:
  - **Always** Takes effect when the Hot Word occurs.
  - **With** Takes effect when the Hot Word occurs, and is immediately followed by a Second Word.
  - **Without** Takes effect when the Hot Word occurs, if it is not immediately followed by a Second Word.
  - **Within** Takes effect when the Hot Word occurs, if it is within a definable number of words of a Second Word.
- 5 Type in a Second Word where required, then click Add.
- 6 To allow the ALL-IN-WONDER to maximize from a minimized state, click the **Enable Hot Words** box.
- 7 To enable the Hot Word to trigger transcription, click the **Enable Transcribing on match** box.

### To enable/disable specific Hot Words

Select the Hot Word from the list and click the Enable/Disable button

- + appears before enabled Hot Words
- appears before disabled Hot Words


The Closed Caption button  in the TV Tuner panel must be enabled for Hot Words to function.

## Using Channel Lockout

Channel Lockout prevents anyone without the correct password from viewing selected TV channels. The first time you lock out a channel, a Channel lockout dialog box prompts you for a four character password.

**If you forget your password, you will have to uninstall and re-install your ALL-IN-WONDER software to view password-protected channels.**


### To lock out a channel

- 1 Click the Setup button  in TV Tuner mode.
- 2 Click the TV Tuner configuration dialog.
- 3 Select the channel you want to lock out, and click the box to the right of the channel name.
- 4 Type in a four-character password.
- 5 Retype the password.

*The box to the right of the channel name turns into a padlock.*

- 6 Click OK.
- The channel up and channel down buttons in the TV Tuner panel skip locked-out channels. The only way to select a locked-out channel is to enter the channel name or number, and type the password when prompted.
  - When a password is active, you will be prompted to enter it when you select the TV Tuner dialog. If you do not enter the password, the TV Tuner dialog will open, but all controls will be disabled. This prevents anyone from changing tuner settings if they do not have the correct password.

### To unlock a channel

- 1 Click the Setup button  in TV Tuner mode.
- 2 Click the TV Tuner configuration dialog.
- 3 Type in your four-character password.
- 4 Select the channel you want to unlock, and click the padlock to the right of the channel name.

## Creating a Video Desktop

**To replace your desktop pattern with live TV display when you minimize the ATI Video Player**

- 1 Click the Setup button .
- 2 Click the **Video Desktop** checkbox in the **Display** configuration dialog (see *Display* in [Setting up ALL-IN-WONDER on page 39](#)).

## Displaying Closed-Captioned text


You can display closed-captioned text that's broadcast with NTSC television programming. ALL-IN-WONDER also displays closed-captioned text in NTSC videotapes that contain closed-captioned material.

- In full-screen, the text overlays the video, as in standard TV.
- When you play video in a window, you can display the text in a separate window.

### To display closed-captioned text

Click the Closed Caption button  in the TV Tuner panel.

### To display the text overlaid on the video

- 1 Click the Setup button .
- 2 Click the **Display over video** checkbox in the **Closed Caption** configuration dialog (see *Closed Caption* in [Setting up ALL-IN-WONDER on page 39](#)).

### To create a closed-captioned transcript

Click the **Create Transcript in File...** checkbox in the **Closed Caption** configuration dialog (see *Closed Caption* in [Setting up ALL-IN-WONDER on page 39](#)).

## Attaching Your TV to the ALL-IN-WONDER card

You can use your ALL-IN-WONDER card to connect a television set as your computer's display.

You can use your ALL-IN-WONDER card to do the following:

- View computer output directly on your television in either NTSC or PAL formats
- Enhance your system with advanced flicker reduction and artifact suppression circuitry
- Connect using Composite or S-Video output capabilities
- Display images on both the TV and PC monitor simultaneously
- Provide a big-screen experience for entertainment PCs which is ideal for playing games, giving presentations, watching movies, and browsing the Internet

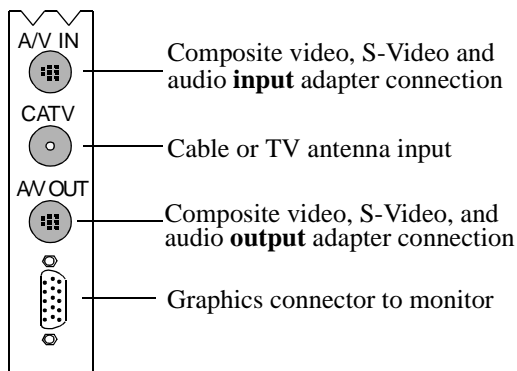
To connect your computer to a television, simply attach a connector cable (S-Video or Composite) from the television to your ALL-IN-WONDER. S-Video will produce the best results. You can also connect a VCR to your ALL-IN-WONDER card to record presentations (for example) on videotape.

### **To connect your graphics card to a television**

- 1 Turn off your computer and your television.
- 2 Determine if your television has an S-Video connection or an RCA video-in connection.

- 3 Looking at the back of your computer, locate your graphics card (see diagram below).

### *ALL-IN-WONDER Connectors*



- 4 Connect the supplied output cable adapter to the A/V OUT connector on the ALL-IN-WONDER.
- 5 Using a cable with either S-Video or RCA connectors, attach one end of the cable to the output cable adapter and the other to your television.
- 6 Turn on your computer and your television.

*If there is no display, you may need to enable the television output capability.*


### **To enable the television display**

- 1 Click Start.
- 2 Point to Settings.
- 3 Click Control Panel.
- 4 Double-click Display.
- 5 Click the Settings tab.
- 6 Check the Television checkbox to enable the television display.

*For more information about television display, click Help.*

## Setting up ALL-IN-WONDER

ALL-IN-WONDER's default settings should work well for most uses. You can also use the Setup dialogs to fine-tune the settings for your particular purposes.

When you click the Setup button  in the Task control panel, you can choose a dialog to set up the following (some dialogs only appear in certain modes):

<b>Display</b>	<b>Sets up the display's general appearance and functions.</b> <ul style="list-style-type: none"> <li>• Adjust panel size.</li> <li>• Set panel snap-to grid location and always-on-top.</li> <li>• Turn bubble help on/off.</li> <li>• Turn fixed aspect ratio on/off.</li> <li>• Assign a Hotkey to hide the player.</li> <li>• Replace your desktop pattern with live TV.</li> </ul>
<b>Still Capture</b>	<b>Controls how still frames are captured. Where applicable, you can specify where to store them.</b> <ul style="list-style-type: none"> <li>• Capture still frames to the clipboard, to a numbered file (for example, image01.bmp, image02.bmp, etc.), or to a window.</li> <li>• Specify printer options for the captured images.</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>• Adjust color, tint (NTSC only), contrast, and brightness.</li> <li>• Select input connector (TV, composite, or S-Video).</li> <li>• Select broadcast standard. (NTSC, PAL, SECAM). (Feature enabled only on selected boards.)</li> <li>• Display one field, both fields, or interlaced.</li> </ul>
<b>TV Tuner</b>	<ul style="list-style-type: none"> <li>• Autoscans for active channels and add them to a list.</li> <li>• Add, delete, and name channels in the list.</li> <li>• Select antenna or cable input and cable standard.</li> <li>• Use slider to change channel assignments.</li> <li>• Lock out selected channels.</li> </ul>
<b>Closed Caption (NTSC video only)</b>	<ul style="list-style-type: none"> <li>• Display closed captioned text over live video, in its own window, or not at all.</li> <li>• Select solid or shaded background for text.</li> <li>• Transcribe closed captioned text to a text file.</li> </ul>
<b>Hot Words</b>	<ul style="list-style-type: none"> <li>• Enable/disable Hot Words in the Closed Captioning.</li> <li>• Add or change Hot Word selection.</li> <li>• Set Hot Words to start transcribing automatically.</li> </ul>

<b>Capture</b>	<ul style="list-style-type: none"><li>• Select frame rate.</li><li>• Select video format and video compression type.</li><li>• Capture audio and select audio format.</li></ul>
<b>Advanced</b>	<ul style="list-style-type: none"><li>• Capture to memory or disk.</li><li>• Limit capture to pre-set amount of time.</li><li>• Pre-allocate maximum file size.</li></ul>
<b>MPEG</b>	<ul style="list-style-type: none"><li>• Select scale in frames or time.</li><li>• Update the slider position.</li><li>• Play CD automatically if present.</li></ul>
<b>Audio CD</b>	<ul style="list-style-type: none"><li>• Display the disc tracks and the current Play List.</li><li>• Add or remove tracks in the Play List.</li><li>• Enter the artist's name and disc title.</li></ul>

If you need additional information about these Setup dialogs, click the Help button. If you experience any difficulty setting up or running ALL-IN-WONDER, please refer to *[Troubleshooting Tips on page 42](#)*.



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## CHAPTER 5

# Reference

This chapter contains troubleshooting tips and specifications about your ALL-IN-WONDER.



### IN THIS CHAPTER...

- [Running Diagnostics](#)
- [Troubleshooting Tips](#)
- [ATI Multimedia Channel](#)
- [Memory Upgrade](#)
- [Specifications](#)
- [Video Mode Table](#)
- [Compliance Information](#)

## Running Diagnostics

You can run diagnostics to test the hardware on your card. All installed graphics modes can be viewed and tested. **You cannot run the diagnostics program inside a Windows MS-DOS Box.**

### To copy and run the diagnostics program in MS-DOS

- 1 Start your computer in MS-DOS mode.
- 2 Insert the *ATI Installation CD-ROM* into the CD-ROM drive.
- 3 At the MS-DOS prompt, type the following:  
**XCOPY D:\UTILITY\M64DIAG.EXE c:\mach64\ /Y**  
(If **D** is not your CD-ROM drive, substitute **D** with the correct drive letter.)  
*If you have not installed the ATI VIDEO PLAYER, you will need to use the DOS Make Directory command (MD) to create the mach64 directory.*  
*This copies the M64DIAG.EXE program to your hard disk.*
- 4 Type **CD C:\MACH64**.
- 5 Type **M64DIAG**.
- 6 Press ENTER to run the program.
- 7 Select Diagnostics.
- 8 Type the number of times you would like to run the tests.

## Troubleshooting Tips

The following troubleshooting tips may help you if you experience problems. Contact your dealer for more advanced troubleshooting information.

### Basic Troubleshooting Tips

- Check that the card is seated properly in its expansion slot. If the problem still exists, try a different PCI expansion slot.
- Ensure the monitor cable is securely fastened to the card.
- Make sure that the monitor and computer are plugged in and receiving power.
- Disable any built-in graphics capabilities on your mainboard. For more information, see your computer documentation.
- Make sure that you selected the appropriate monitor when you installed your enhanced driver.

## Windows 95 Troubleshooting Tips

For Windows 95 troubleshooting tips, right-click the ATI icon in the taskbar and select Troubleshooting.

If you have problems during start-up, load Windows 95 in Safe Mode.

### To load Windows 95 in Safe Mode

- 1 Turn on your computer.
- 2 Press the F8 key when **Starting Windows 95** appears on the screen.
- 3 Select Safe Mode.
  - Disable any programs that launch automatically when you start Windows 95.
  - Check that you have the correct monitor and display driver selected in the Display Properties. For more information, click on Help in the Start menu.
  - Check for the existence of memory managers and ensure they are configured properly.
  - Refer to additional information in the Windows 95 README file located in the root directory on the ATI Installation CD-ROM.

### To remove the ATI VIDEO PLAYER

- 1 Click Start.
- 2 Select Settings.
- 3 Click Control Panel.
- 4 Double-click Add/Remove Programs.
- 5 Select **ATI VIDEO PLAYER** from the list.
- 6 Click on Add/Remove...
- 7 Click OK.

## ATI Multimedia Channel

While the AMC provides VGA Feature Connector (VFC) compatibility, it also provides enhanced features for new multimedia devices including serial control and provision for audio.



The AMC connector shares the same footprint with the VFC but it adds pins for supporting additional multimedia modes. Great caution should be taken when connecting a ribbon cable to the AMC/VFC connector. Some of the pins carry power and any improper use can result in damage both to the graphics card and the upgrade board.

## Memory Upgrade

If you only have 2MB of video memory on your card, you may be able to upgrade it by adding memory chips in the empty memory sockets. You may be able to add 2MB of memory, to a maximum capacity of 4MB.

To determine the type and amount of memory you have on your card, do the following:

- 1 Right-click My Computer, then click Properties.
- 2 Click the Device Manager tab.
- 3 Click the plus sign to the left of Display Adapters.
- 4 Double-click ATI ALL-IN-WONDER.
- 5 In the dialog that appears, click Diagnostics.
- 6 Click the Status button.

The Video Memory line displays the type and amount of memory on your ALL-IN-WONDER card.

Additional memory will give you smoother video playback, more colors, and higher screen resolutions. Please consult your monitor's specification to determine which resolutions are available with your display.

You will need the following information when upgrading your video memory:

**Memory Type** (256 Kbits x 16) — You need to use the same memory chip type to ensure compatibility with your card. Record the name of the manufacturer, the serial number, and the part number of the memory chips on your card. (See the diagram on the following page to determine your memory chip location.)

**Package** — EDO

**Speed** — 16 nanosecond cycle time or faster

**Quantity** — 4 chips (to add 2MB)

To order additional memory chips, please contact your dealer.

### To install additional memory



Discharge your body's static electric charge by touching a grounded surface — e.g., the metal area of the computer chassis — before performing any hardware procedure.

The manufacturer assumes no liability for any damage, caused directly or indirectly, by improper installation of any components by unauthorized service personnel. If you do not feel comfortable performing the installation, consult a qualified computer technician.

Damage to system components, the accelerator card, and injury to yourself may result if power is applied during installation.

- 1 Power-off the computer and monitor, then disconnect the monitor cable from the back of the computer.
- 2 Remove the computer cover. If necessary, consult your computer system manual about removing the cover.
- 3 If your card has been previously installed, remove it from the computer.
- 4 Place your card on a flat surface.
- 5 Find pin 1 on the memory chip using the following three diagrams as a guide:



*The chip may have a beveled edge.*

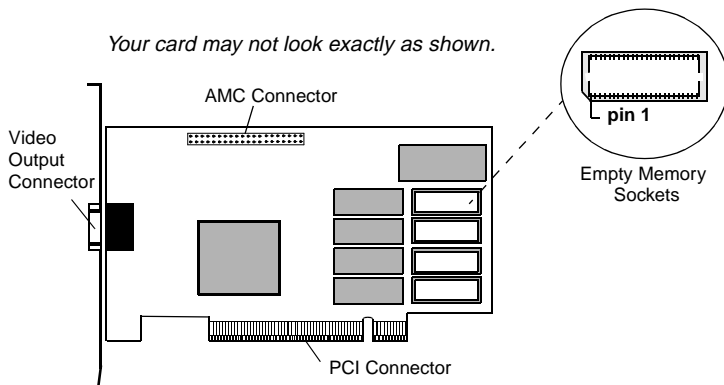


*The chip may have a notch.*



*The chip may have a dot.*

- 6 Find pin 1 in the empty memory socket on your card. Use the following diagram as a guide



When installing memory chips, use care to ensure that every pin is properly seated in the socket and that pin 1 is correctly oriented. If you are unsure of this procedure, please contact a professional technician to aid in the installation.

- 7 Align pin 1 of the memory chip with pin 1 in the empty memory socket. Insert the chip into the socket and seat it firmly to ensure good contact.
- 8 Repeat steps 5 to 7 to install the other memory chips.
- 9 Re-install the card and the computer cover. For more information, see **Hardware Installation** on page 9.
- 10 Plug the monitor into your card, then turn on the computer and monitor.
- 11 To test that your video memory is working properly, run the diagnostics program and select Configuration. For more information, see **Running Diagnostics** on page 42.

# Specifications

System Requirements — Pentium/Pentium Pro, or compatible systems with PCI Local Bus.

## ***Operating Environment***

- Windows 95  
*Only graphics features are supported under DOS 5.0 or higher, Windows 3.1x, Windows NT, OS/2 2.1 or OS/2 Warp*

## ***Video Display Buffer***

- 2 MB non-upgradable, 2 MB upgradable to 4 MB, or 4 MB

## ***Sync Signals***

- Separate horizontal and vertical sync at TTL levels

## ***Video BIOS***

- PCI 2.1 compliant

## ***Video Output Connector***

- 15-pin D shell (Female), IBM standard.

## ***AMC Connector***

- 2x20 pin header. Shares the same footprint with the 2x13 pin VGA Feature Connector, VGA Out only, VESA standard.

## ***Video interrupt (Reserved for future use):***

- PCI — system auto-configurable.

## ***Power***

- +5V  $\pm 5\%$ , @ 1.3A typical.

## ***Ambient Temperature***

- Operating — 50° to 122° F (10° to 50° C).
- Storage — 32° to 162° F (0° to 70° C).

## ***Relative Humidity***

- Operating — 5% to 90% non-condensing.
- Storage — 0% to 95%.

## ***MTBF***

- 120,000 hours.

# Video Mode Table

ALL-IN-WONDER												
Display Screen Resolution	Refresh Rate (Hz)	Hor. Scan (kHz)	Pixel Clock (MHz)	Colors (Bits Per Pixel)								
				2 MB				4MB				
				8	16	24	*32	8	16	24	*32	
640x480	60	31.5	25.1	√	√	√	√	√	√	√	√	
640x480	72	37.4	32.0	√	√	√	√	√	√	√	√	
640x480	75	37.5	31.5	√	√	√	√	√	√	√	√	
640x480	85	43.3	36.0	√	√	√	√	√	√	√	√	
640x480	90	48.0	39.9	√	√	√	√	√	√	√	√	
640x480	100	52.9	44.9	√	√	√	√	√	√	√	√	
640x480	120	63.7	55.0	√	√	√	√	√	√	√	√	
640x480	160	84.1	70.0	√	√	√	√	√	√	√	√	
640x480	200	100.2	81.0	√	√	√	√	√	√	√	√	
800x600	48	33.8	36.0	√	√	√	√	√	√	√	√	
800x600	56	35.2	36.0	√	√	√	√	√	√	√	√	
800x600	60	37.8	39.9	√	√	√	√	√	√	√	√	
800x600	70	44.5	44.9	√	√	√	√	√	√	√	√	
800x600	72	48.0	50.0	√	√	√	√	√	√	√	√	
800x600	75	46.9	49.5	√	√	√	√	√	√	√	√	
800x600	85	53.7	56.2	√	√	√	√	√	√	√	√	
800x600	90	57.1	56.6	√	√	√	√	√	√	√	√	
800x600	100	62.5	67.5	√	√	√	√	√	√	√	√	
800x600	120	76.0	81.0	√	√	√	√	√	√	√	√	
1024x768	43	35.5	44.9	√	√	-	-	√	√	√	√	
1024x768	60	48.4	65.0	√	√	-	-	√	√	√	√	
1024x768	70	56.5	75.0	√	√	-	-	√	√	√	√	
1024x768	72	58.2	75.0	√	√	-	-	√	√	√	√	
1024x768	75	60.0	78.8	√	√	-	-	√	√	√	√	
1024x768	85	68.7	94.5	√	√	-	-	√	√	√	√	
1024x768	90	76.2	100.0	√	√	-	-	√	√	√	√	
1024x768	100	79.0	110.0	√	√	-	-	√	√	√	√	
1024x768	120	96.7	130.0	√	√	-	-	√	√	√	-	
1152x864	43	45.9	65.0	√	√	-	-	√	√	√	√	
1152x864	47	44.9	65.0	√	√	-	-	√	√	√	√	
1152x864	60	54.9	80.0	√	√	-	-	√	√	√	√	
1152x864	70	66.1	100.0	√	√	-	-	√	√	√	√	
1152x864	75	75.1	110.0	√	√	-	-	√	√	√	√	
1152x864	80	76.4	110.0	√	√	-	-	√	√	√	√	
1152x864	85	77.1	121.5	√	√	-	-	√	√	√	-	
1152x864	100	90.2	135.0	√	√	-	-	√	√	-	-	



ALL-IN-WONDER											
Display Screen Resolution	Refresh Rate (Hz)	Hor. Scan (kHz)	Pixel Clock (MHz)	Colors (Bits Per Pixel)							
				2 MB				4MB			
				8	16	24	*32	8	16	24	*32
1280x1024	43	50.0	80.0	√	-	-	-	√	√	√	-
1280x1024	47	50.0	80.0	√	-	-	-	√	√	√	-
1280x1024	60	64.0	110.0	√	-	-	-	√	√	√	-
1280x1024	70	74.6	126.0	√	-	-	-	√	√	√	-
1280x1024	74	77.9	135.0	√	-	-	-	√	√	√	-
1280x1024	75	80.0	135.0	√	-	-	-	√	√	√	-
1280x1024	85	91.2	157.5	√	-	-	-	√	√	-	-
1600x1200	52	68.0	135.0	√	-	-	-	√	√	-	-
1600X1200	58	75.0	135.0	√	-	-	-	√	√	-	-
1600x1200	60	76.2	156.0	√	-	-	-	√	√	-	-
*32 - 24bpp color data is processed using a 32bpp data format.											

## Compliance Information

### FCC Compliance Information

ALL-IN-WONDER complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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:

- Re-orient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- The use of shielded cables for connection of the monitor to the graphics card is required to ensure compliance with FCC regulations.
  - Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

### Industry Canada Compliance Statement

ICES-003 This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B Respecte toutes les exigences du Règlement sur le matériel brouiller du Canada.

## CE Compliance Information

EMC Directive 89/336/EEC and Amendment 92/31/EEC, Class B Digital Device

EN 5008-1, Generic Emissions Standard for Residential, Commercial and Light Industrial Products

(EN 55022/CISPR 22, Limits and Methods of Measurement of Radio Interference Characteristics Information Technology Equipment)

*Warning: This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.*

EN 50082-1, Generic Immunity Standard for Residential, Commercial and Light Industrial Products

(IEC 801-2, IEC 801-3, IEC 801-4)

Directive EMC 89/336/CEE et amendement 92/31/CEE, dispositif numérique de Classe B

EN 50081-1, Norme sur les émissions génériques pour les produits domestiques, commerciaux et industriels légers

(EN 55022/CISPR 22, Limites et méthodes de mesure des caractéristiques d'interférences radiophoniques, Matériel des technologies de l'information) *Mise en garde: ceci est un produit de Classe B. Il risque produire des interférences radiophoniques dans un environnement domestique auquel cas l'utilisateur peut se voir demandé de prendre des mesures adéquates.*

EN 50082-1, Norme sur l'immunité générique pour produits domestiques, commerciaux et industriels légers.

(CEI 801-2, CEI 801-3, CEI 801-4)

EMC Richtlinie 89/336/EEC und Änderung 92/31/EEC, Digitales Gerät der Klasse B

EN 50081-1, Allgemeiner Emissions-Standard für Haushalt- und kommerzielle Produkte sowie Erzeugnisse der Leichtindustrie

(EN 55022/CISPR 22, Beschränkungen und Verfahren der Messung von informationstechnischen Ausrüstungen mit Funkstörmerkmalen)

*Warnung: Dies ist ein Erzeugnis der Klasse B. Dieses Erzeugnis kann Funkstörungen im Wohnbereich verursachen; in diesem Fall können entsprechende Maßnahmen seitens des Benutzers erforderlich sein.*

EN 50082-1. Allgemeiner Unempfindlichkeits-Standard für Haushalt- und kommerzielle Produkte sowie Erzeugnisse der Leichtindustrie

(IEC 801-2, IEC 801-3, IEC 801-4)