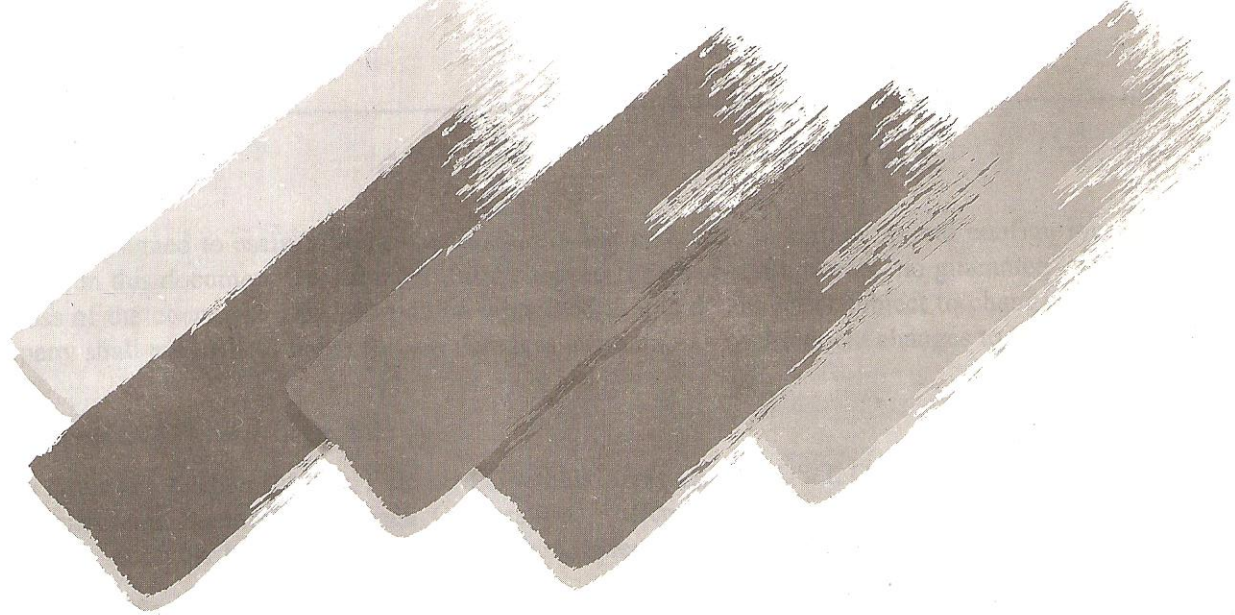


ExpertColor

DSV 2302P

VIDEO ACCELERATION

True Value of Quality and Performance



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About this manual

This user's manual is designed to assist system manufacturers and end users in setting up and configuring the adapter. Information in this document has been carefully checked for accuracy; however, no guarantee is given as to the correctness of the contents. The information contained in this document is subject to change without notice. The company shall not be held liable for any damages attributable to subsequent changes to the contents of this document.

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This product is intended for use in normal commercial applications. Use in an environment other than that listed here is not recommended.

The company assumes no responsibility for the use of any circuitry other than the circuitry in this product. No other circuits, patents, or licenses are implied.

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REQUEST FOR TECHNICAL SUPPORT

QUICK INSTALLATION (for experienced users)

This section is intended for experienced users who are familiar with the installation of VGA adapters, graphics software drivers for a quick installation. There are only two steps required to finish the hardware installation.

Many installation steps are omitted in this sections. If you are not experienced or familiar with installing procedures, it is recommended to read the following chapters before installation.

INSTALLING DSV2302P

1. Turn off the power of computer and related devices. Remove the computer cover and find an empty expansion card slot.
2. Insert the DSV2302P adapter into the open slot. Secure the adapter and put the cover back. Reconnect any previously removed cables.

Now, the DSV2302P is installed and ready to run!

NOTE!

It requires a little more force to properly seat the card into the slot. Be careful to apply firm and even pressure to insure the card goes into the slot straight

INSTALLING DSV2302P DRIVERS FOR WINDOWS 3.1

1. You must have Windows 3.1 installed before you install the DSV2302P Windows drivers.
2. Insert the DSV2302P Windows 3.1 Drivers Disk in the floppy drive, make that drive current, and Run win setup from the File menu in the Windows Program Manager.
3. Use Video Master to select other resolutions, color depths, and refresh rate.
4. Click on [Change or Restart Windows] to activate them.
5. *ExpertColor* utilities screen controls icon to launch the VideoMaster resolution changing program.

INSTALLING DSV2302P DRIVERS FOR DOS APPLICATIONS

All DOS Applications can be easily installed from the main menu of the DSV2302P DOS driver disk.

1. Insert the DSV2302P DOS Driver Disk into the floppy drive and type setup then press [Enter].
2. The installation program prompts for the application for which you wish to install drivers.
3. Execute the DOS application as normal following the screen instructions.

INTRODUCTION

DSV2302P is an all purpose single-chip graphics controller based adapter which excels in GUI, CAD and DOS application environments. It delivers high speed, high resolution display with true color support at 16.7 million colors. It is a cost effective and ideal graphics solution for desktop PC user. To take full advantage of the DSV2302P hardware functions, it comes with a complete set of software drivers such as for MS Windows 3.1, AutoCAD, and more.

DSV2302P is fully backward compatible with the IBM and Hercules video standards(ie.IBM MDA, CGA, EGA, VGA and Hercules). It protects users of their early software investment. DSV2302P is designed to work with PCI BUS platforms with high speed support. DSV2302P is the graphics solution which offers you quality, performance and advanced features all in one card.

DSV2302P FEATURES

- Simple installation - no switches, jumpers, complex hook-ups, or TTL logic
- Supports 0-Wait State Burst Mode
- Supports Auto-configuration
- Supports 4-bit, 8-bit, and 16-bit wide DRAMs

- Full 32-bit operation - both bus and memory
- High-performance operation - Write cache subsystem
- GUI acceleration - BitBlt, Raster Ops, area fill, polygon, line draw
- Hardware cursor
- Intel PCI Local Bus compliance
- Supports the EPA Green PC requirements and VESA DPMS power savings
- Fully IBM VGA, EGA, CGA, MDA, and Hercules compatible
- Graphics display resolutions from 1280 x 1024 with 16 colors to 640 x 480 with 16.7 million colors using one megabyte of DRAM or up to 1280 x 1024 with 256 colors using two megabytes of DRAM
- Up to 75 hertz vertical scan refresh rate
- Software utilities and drivers included
- Easily upgraded from graphics DSP 2302P only to video and graphics *DSV 2302P* by replacing the ALG1300 with an ALG1301
- The DSV2302P provides high-quality video windowing independent of the graphics display with video resolutions up to 1024 x 768 with 16.7 million colors using one megabyte of DRAM
- The DSV2302P supports most popular video formats - Motion Picture Expert Group (MPEG), Motion Joint Photographers Expert Group (JPEG), Indeo, CinePak, and Quicktime

HARDWARE INSTALLATION

2.1 PRECAUTIONS

This display adapter is easily damaged by static electricity. Observe the following precautions while unpacking and handling the board.

Before handling the board, discharge static electricity from your body by touching an unpainted area of the system's metal chassis. While installing the board, ground yourself frequently to discharge any static electricity that may accumulate in your body.

After removing the board from the anti-static bag, place it on a grounded surface with the components facing up.

Check the board for damage. If any socketed component appears loose, press firmly but carefully to seat the chip in its socket. Otherwise, avoid touching the components on the board. Always handle the board by the edges.

Chapter

2

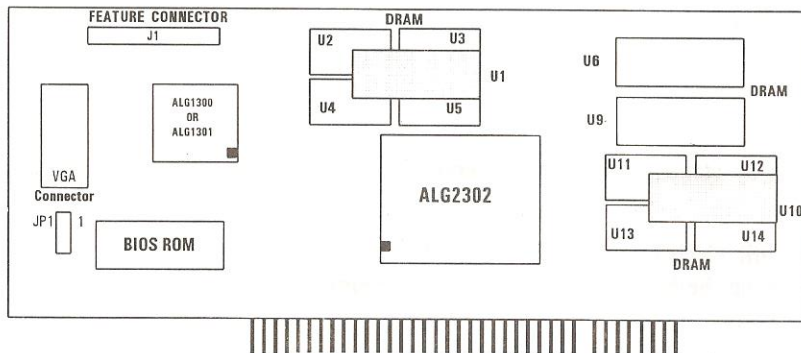


Figure 1: DSV2302P Board Layout

1. JP1: 1-2 short: with Regulator (Q1)
2-3 short: Normal Mode (without Q1)
2. U6 and U9 are Optional for 2MB upgrade use

NOTE !

If any other VGA controllers have been previously installed in the target system, please remove or disable all drivers that were installed with those cards before continuing.

2.2 DSV2302P INSTALLATION

1. Power OFF the computer system and connected devices before removing or installing any cards!
2. Remove the cover from the computer and remove any VGA controller boards that had been installed previously in the system.
3. Locate an empty PCI slot and install the board firmly into the slot and secure the board.
4. Connect the monitor cable to the 15 pin monitor connector on the DSV2302P VGA Card.
5. Graphics/video mode applications for the following monitors are supplied in the "Extended Mode/Monitor Compatibility Table" on page 31.
 - IBM PS/2 MONITORS 8503,8512, 8513 and 8514.
 - Multisync monitors that support both analog and TTL operations (i.e. NEC Multisync II or compatible monitors)
6. The Memory Address Systems are shown as the following Table:

ITEM	SPECIFICATION
RAM	A0000h-BFFFFh
ROM	C0000h-C7FFFh
I/O Address	3B0h-3DFh (IBM standard)
DMA	NO DMA channels exist
Interrupt	Interrupt 9 is used to indicate vertical retrace in some modes (software programmable)

NOTES I

The DSV2302P Card is 100% compatible with the Intel PCI Automatic Configuration registers. There are no special settings required on the PCI motherboard.

The VGA card must be removed when DSV2302P VGA Card is installed.

2.3 COMPONENT DESCRIPTIONS

2

ALG2302:

PCI Graphics Controller - A module containing the circuitry to provide a high-performance 32-bit graphics controller with GUI acceleration.

ALG1300:

CLKDAC - A module containing the circuitry to provide the clock frequencies for a high resolution display and the true-color RAMDAC that delivers 16.7 million simultaneous colors to the display.

ALG1301:

CLKDAC + Video Accelerator - A module containing the same circuitry as the ALG1300 plus the circuitry to provide video playback functions.

BIOS ROM:

A ROM containing the BIOS that interacts between the components of the VGA Card and the software applications.

DRAM:

Up to two megabytes of memory with additional 256K x 16 DRAM Added.

2.4 CARD SPECIFICATIONS

2

ITEM	SPECIFICATION
System Supported	PCI Local Bus: IBM PS/2 or compatible system with an expansion slot in compliance with the Intel PCI Local Bus 2.0 specifications.
Bus Speed/CPU	33 MHz/Intel 486, Pentium, or compatible CPU
VGA Connector	Analog DB-15
Card Size	5.94 inches wide by 3.3 inches high
Raw Card Stock	Standard thickness with no internal planes
Bus Connector	PCI Local Bus
Memory	Up to two megabytes with additional 256K x 16 DRAM added
Operating Temperature	0 to 50°C
Storage Temperature	-25 to 90°C
Operating Humidity	15 to 90%
Storage Humidity	0 to 90%

VIDEO WIZARD™ DESCRIPTION

The ALG2302-ALG1301 (Video Wizard™) DSV2302P card delivers 24-bit true-color video in 1024 x 768 resolution using one megabyte of DRAM. The Video Wizard™ is compatible with most popular video formats such as MPEG, Motion JPEG, Indeo, and others making it a plug-and-play feature.

3.1 MINIMUM HARDWARE REQUIREMENTS

FRAME RATE	VIDEO TECHNOLOGY	PROCESSOR (NOTE 1)	CD SPEED	SOUND
15 fps (Note 2)	AVI(Note 3)	486 DX2	2X	16-bit
Up to 30 fps	AVI	486 DX4	4X	16-bit
Up to 30 fps	MPEG	Pentium	4X	16-bit
Up to 30 fps	Motion JPEG	Pentium	4X	16-bit
Up to 30 fps	Digital Video	Pentium	4X CD-i Drive	16-bit
Up to 30 fps	VideoCD	Pentium	4X	16-bit

Chapter

3

NOTES !

1. Higher speed CPUs are preferred for better frame rates.

2. Frames per second (fps)

3. Audio Video Interleave (AVI)

3.2 MINIMUM SOFTWARE REQUIREMENTS

OPERATING SYSTEM	SOFTWARE DRIVERS	VIDEO APPLICATION PROGRAM	DECODER
MS Windows 3.1/3.11	ALG S/W Drivers for MS Windows 3.1 and WFW (Contains Avance Logic's DCI driver)	MS Video for Windows Version 1.1D (Note 1)	MPEG 1 or Motion JPEG (Note 2)

NOTES !

The video application program, MS Video for Windows, must be at Version 1.1D. Older Microsoft Home CD titles will overwrite MS Video for Windows Version 1.1D with an earlier version causing the video quality to be degraded.

Must be obtained from a third-party developer.

3.3 MPEG SOFTWARE DECODERS

Avance Logic's Video Wizard™ technology is designed to work with MPEG software decoders available from third-party software providers. The MPEG decoder works with Avance Logic's Display Control Interface (DCI) driver that is bundled with Avance Logic's MS Windows drivers and the Video Wizard™ hardware.

MPEG software decoders are designed to work on Pentium class machines and require video acceleration chips like the Video Wizard™ to function properly. When all three technologies work together and depending on the speed of the CPU, up to 30 frames per second full-motion video can be experienced.

MPEG software decoders in conjunction with the Video Wizard™ are much more cost-effective than currently available 10.5 hardware boards. MPEG hardware is not only expensive but is not necessary for Pentium class machines. Fewer problems in the operation of MPEG and AVI titles can be expected when using the Video Wizard™ and MPEG software.

3.4 MPEG CD TITLE FORMATS

There are hundreds of CD ROM titles available to be played with the Video Wizard™. Most newer titles have MPEG video while older titles support the AVI format. Both may be enjoyed with the Video Wizard™

3.5 SOFTWARE INFORMATION

Several pieces of software are required, in addition to the Video Wizard™ hardware, to playback video on a PC. The ALG S/W Drivers for MS Windows 3.1 and WFW diskette contains the MS Windows drivers and the DCI driver. Additionally, MS Video for Windows Version 1.1D is required as the playback application is not supplied with the ALG S/W Drivers for MS Windows 3.1 and WFW diskette, but is available from Microsoft.

Chapter 3 VIDEO WIZARD™ DESCRIPTION

If the system has MS Video for Windows installed, determine its version number by using File Manager to locate MSVIDEO.DLL in the C:\WINDOWS\SYSTEM directory and there find the date of the installed version. The date of MS Video for Windows Version 1.1D is 9/2/94; any earlier date does not support the DCI.

MPEG titles require a software decoder that is available from a number of third-party suppliers, while AVI files require AVI decoders usually bundled within the title itself and do not require any special installation procedures to operate. MPEG decoders are installed as required by the individual installation programs contained within the software package.

The Avance Logic DCI driver is required for video playback and is installed automatically when the MS Windows drivers are installed. Correct installation can be verified by double clicking on the Avance Logic ALG2229/ALG2302 icon in the Avance Logic ALG2229/ALG2302 - Resolution window. This launches the Video Master resolution changing program. In the Video Wizard™ status area located in the lower left-hand corner of the Video Master dialog box (Refer to Figure 2, "Video Master Dialog Box."), verify that Video Wizard™ is On. This indicates that the DCI driver has been correctly installed. If Video Wizard™ is Off, either the driver was not installed with the MS Windows drivers or there is an installation problem. Refer to "Troubleshooting Guide" on page 17 for additional information.

NOTE I

Many older AVI compatible CD ROM titles contain a run-time version of MS Video for Windows Version 1.0 or 1.1. These products will overwrite any later version of MS Video for Windows and cause the improper operation of the playback functions.

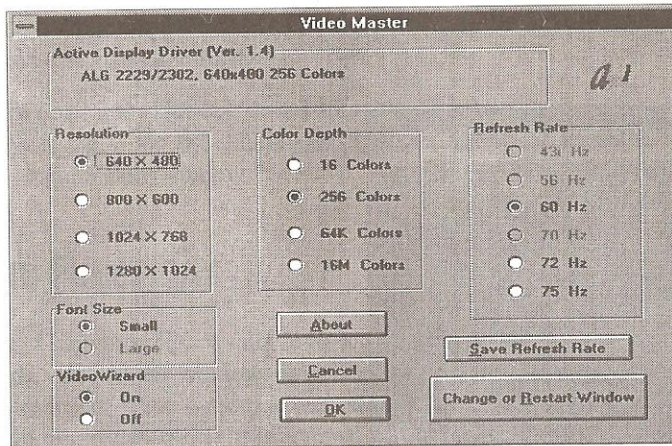


Figure 2: Video Master Dialog Box

3.6 VIDEO WIZARD™ OPERATION

Perform the following procedure to initiate video playback.

1. Launch the Media Player (MS Video for Windows Version 1.1D) program by double clicking on the Media Player icon in either the Video for Windows window or the Accessories window.

Chapter 3 VIDEO WIZARD™ DESCRIPTION

- Click on [Device] on the menu bar of Media Player. Refer to Figure 3, "Media Player and Video Window".

NOTE !

The MPEG Software Decoder will have the name of the third-party decoder selected for evaluation with the ALG2302-ALG1301 DSV2302P Card.

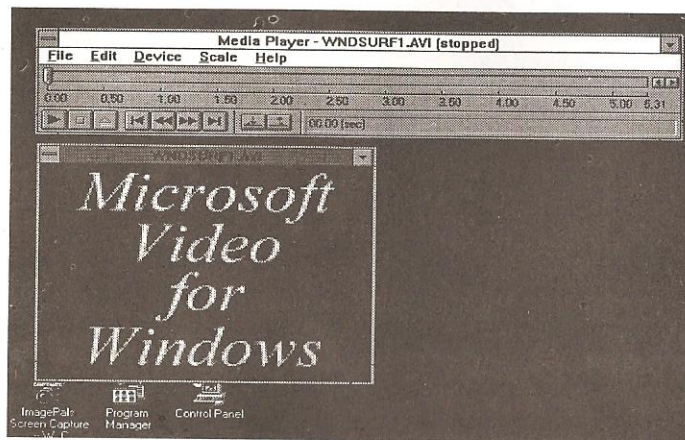


Figure 3: Media Player and Video Window

- Select either Video for Windows (for file playback) or the MPEG Software Decoder (for MPEG playback) from the device pull-down menu.

4. Select the desired AVI or MPEG file for viewing from the Open dialog box. The file can be on either the fixed disk or a CD ROM.
5. Once a file is selected, a video window will appear on the screen with the first frame of the video displayed. Start the video by clicking on the start button of Media Player. Refer to Figure 3, "Media Player and Video Window."

NOTE !

When playing AVI or MPEG multimedia titles from a CD ROM, this procedure is not necessary as the title is launched by double clicking on the CD ROM ICON. With this type of titles, the appropriate drivers are selected automatically by the software.

3.7 SCALING FUNCTIONS

The Video Wizard™ supports 320 x 240, 640 x 480, and 1024 x 768 video window sizes through keyboard commands. The video window can also be sized by selecting its edge and then clicking and dragging to the desired size. When sized this way, the aspect ratio is not maintained and the window's X, Y coordinates could be distorted. If this happens, use the keyboard commands to return the video window to a correct aspect ratio.

The default video window size is 320 x 240. The following keyboard commands are supported by the Media Player:

Ctrl-w	Minimize Media Player
Ctrl-1	SIF Resolution (320 x 240)
Ctrl-2	Double SIF (640 x 480)
Ctrl-3	Full Screen (1024 x 768)

3.8 VIDEO/MENU INTERFERENCE

If a menu is pulled down into the video window while a video is playing, the video window will go black. This is a normal function of the Video Wizard™. The video will continue to run at its normal rate while the video window is black and will reappear when the menu is removed.

3

3.9 VIDEO AT THE WINDOW BORDER

If the video window is moved to the border of the desktop, the video window will go black. To return to normal viewing, move the video window away from the border. This will sometimes happen if the keyboard command Ctrl-3 is used to scale the window to full screen. If this occurs, use keyboard command Ctrl-1 to return the video window to a smaller size and then reposition the video window close to the upper left-hand corner of the screen.

3.10 TROUBLESHOOTING GUIDE

EXTENDED MEMORY MANAGERS

Avance Logic is experiencing some conflict with MS VIDEO for Windows Version 1.1D when using EMM386.EXE. The start-up files must be changed to temporarily remove EMM386.EXE. When running MS Video for Windows Version 1.1D, Avance Logic is investigating this situation with Microsoft.

AUTOEXEC.BAT

To avoid conflicts with MS Video for Windows Version 1.1D, SMARTDRV.EXE and MSCDEX.EXE must be in the following order in AUTOEXEC.BAT.

1. C:\DOS\SMARTDRV.EXE
2. C:\WINDOWS\MSCDEX.EXE

SOFTWARE INSTALLATION

The DSV2302P is 100% VGA compatible and as such needs no special display drivers to run application software correctly at standard VGA resolutions and color depths. However, enhanced display drivers are supplied with the DSV2302P because they provide accelerated performance, deeper color depths and higher resolutions to supported software application packages. The DSV2302P supports resolutions as high as 1600x1200 pixels, and color depths of up to 24 bits per pixel. Higher graphics resolutions and deeper color depths provide greater clarity and detail when using the supplied drivers in graphics-based programs. When configuring your software to work with the board, it may help to bear in mind that drives compatible with the DSV2302P fall into four general categories:

ENHANCED DISPLAY DRIVERS

At this time enhanced display drivers for the DSV2302P are provided for Microsoft Windows 3.1x, Windows NT, IBM OS/2, Autodesk products such as 3D Studio and AutoCAD, as well as others. These drivers take full advantage of the DSV2302P advanced architecture and provide many additional features. Note that drivers for the DSV2302P are revised and added periodically - you should consult your dealer, local user support groups or on-line services from time to time to ensure you have the latest driver releases.

GENERIC CHIPS DRIVERS

The DSV2302P is also compatible with most drivers written for earlier generations of graphics controllers from Avance Logic. In addition, a growing number of applications and operating environments, such as OS/2 and Windows NT, provide native support for graphics controllers from Avance Logic. When used with the DSV2302P, these native Avance Logic drivers operate transparently at all resolutions and standard 16- and 256-color depths, but because they are written to work with earlier generations of graphics controllers from Avance Logic, they may not take full advantage of the latest features and performance enhancements designed into the new DSV2302P.

VESA DRIVERS

The DSV2302P features full support for a wide range of VESA generic display modes, at the BIOS level or by loading a small supplied program into memory, which makes it compatible with the growing number of DOS applications and environments that provide a VESA-compliant driver, such as DESQview/X, Autodesk Animator, WordPerfect 6.0 and Geoworks Ensemble. These generic VESA drivers can typically drive your application to higher resolutions and deeper color depths, but because they are written to interact with a wide range of graphics controllers from disparate manufacturers, they do not call the DSV2302P hardware acceleration features into play.

STANDARD VGA DRIVERS

Finally, the DSV2302P is fully compatible at both the register and BIOS level with the original IBM VGA display adapter. In addition, the DSV2302P provides full register-level CGA and EGA backwards compatibility, allowing you to run virtually any application in its native, default display mode. The DSV2302P also supports improved text resolutions of up to 132x43 columns and rows, and text drivers are provided on the software installation diskette for a number of popular DOS applications. Higher text resolutions allow terminal emulation and provide greater clarity and readability when using the supplied drivers.

4.1 INSTALLATION

To facilitate the smooth installation of the enhanced display device drivers and utility software, you should read the instructions in this chapter carefully prior to attempting installation. The enhanced display drivers for the DSV2302P are located on the software installation diskette. You must install most of the drivers and utility software by using the supplied SETUP program under DOS and/or OS/2; Microsoft Windows drivers are installed by using the Windows-based WINSETUP program.

Before you begin, it is important to note that most display drivers need to have the relevant software application already installed prior to installing the enhanced display drivers. In addition, many of the installation procedures assume that you are familiar with both the relevant software application and certain operating system commands.

NOTE !

Files on the software installation diskette are compressed. Do not attempt to install drivers by copying the files manually. You must use the supplied SETUP and WINSETUP programs to install the drivers (except in the case of windows NT which can read the compressed NT files on the software installation diskette directly).

Chapter 4 SOFTWARE INSTALLATION

Please review the relevant operating system commands and the pertinent sections of your application software's user manual before performing the installation.

To install the enhanced display drivers and utilities, follow these steps:

1. If you have not already done so, make a backup copy of the software installation diskette and store the original in safe place. Refer to your operating system manual for details on how to duplicate a diskette. You should use the backup copy you have made for all subsequent steps. (Alternatively, you can copy all the files on the software installation diskette to your hard disk and install the drivers from there - the steps which follow assume you are installing from a diskette. The distribution diskette is not copy-protected.
2. Insert the backup copy of the software installation diskette in drive A: or B:
 - *DOS and OS/2* - If you are installing a DOS application or OS/2 drivers, run the SETUP program from the DOS command line by typing A:SETUP [Enter] (or B:SETUP [Enter] as appropriate). You will be presented with a list of options similar to the one illustrated below.

>	VGA Utilities
	Autodesk Device Interface 4.2
	Lotus Applications
	Microsoft Windows 3.1
	Microsoft Windows NT
	Microsoft Word
	WordPerfect

- *Microsoft Windows* - If you are installing drivers and utilities for Microsoft Windows, run the WINSETUP program from the Windows Program Manager. (MOUSE REQUEST)
3. Scroll through the list of options by using a mouse or the cursor keys until you come to the option you wish to install. Click on the left mouse button or press [Enter] to select the option, or press [F1] to obtain, information on the option. Depending on the option you have selected, you may be presented with relevant application notes, similar to the screen illustrated below. Read these additional instructions carefully. (If you have a printer connected to LPT1 and it is on-line, you can print the instructions by pressing [PrtScr].)

LOTUS INSTALLATION INSTRUCTIONS

- The Lotus Release drivers must be installed to your Lotus program directory, e.g., C:\123R23, C:\123R3 or C:\SYMPHONY.
- After exiting this program, run the Lotus INSTALL program and follow the instructions on screen, choosing "Advanced Options" and then "Add New Drivers to the Library".
- After adding the new drivers to the library, select "Modify Current Driver Set" and change the graphics and/or text driver.

Press any key to continue

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4. After reading the application notes (if any), click the left mouse button or press [Enter] to continue with the installation procedure. The SETUP program will search your environment path in an attempt to locate the installed application, and you will be prompted to confirm a directory where the files should be copied (normally the application's directory). You also have the option of entering a drive and directory of your choice. If the directory you choose does not exist, it will be created for you and the relevant files will be copied there or to appropriate sub-directories.
5. Finally, if an application specific setup program or procedure is required in order to configure the software to recognize the new driver(s), and the SETUP program has been able to locate the application specific program, you will be given the option of running the relevant program to configure the application at this time.

If you are using the WINSETUP program to install drivers and utilities for Microsoft Windows, you will be asked if you wish to select a new driver at this time.

6. After the installation procedure has completed, you will be returned to the SETUP program. Select another option for installation as required. To exit SETUP, click on the right mouse button or press [Esc]. You will be prompted for confirmation before returning to the DOS command prompt.

4.2 APPLICATION NOTES

AUTODESK ADI

After using SETUP to install the ADI driver(s) for Autodesk products, be sure to run the appropriate batch file to configure your environment so that your Autodesk product can locate the ADI driver. These batch files are created automatically for you when you install the ADI driver(s) from the software installation diskette, and must be run before you load your Autodesk product.

3D STUDIO

If you plan to use the ADI driver with Autodesk 3D Studio, you must delete the 3DS.CFG file and make the following changes to the 3D.SET file in your 3D Studio directory:

- Change the line that start with RENDER-DISPLAY=VGA320X200 to read RENDER-DISPLAY=RCPADI.

- Change the line that reads `MAIN-DISPLAY=` to read `MAIN-DISPLAY=RCPADI`. Delete any leading semicolon(;) that may be present.
- Change the line that reads `MATERIAL-DISPLAY=VGA320X200` to read `MATERIAL-DISPLAY=RCPADI`. Delete any leading semicolon that may be present.

MICROSOFT WINDOWS

After using WINSETUP to install the enhanced display drivers for Microsoft Windows, you can switch among supported display modes in the conventional manner by using the native Windows Setup program. When Windows notifies you that the requested display driver is already present on the system, and asked if you want to use the current driver or install a new one, answer [Current]. If you need to re-install the drivers, run the WINSETUP program on the software installation diskette supplied with the DSV2302P. The Windows setup program cannot read the compressed files on the DSV2302P software installation diskette.(MOUSE REQUEST)

WINDOWS NT

To install the enhanced display drivers for windows NT, you must be running NT and follow Microsoft standard display driver installation procedure as documented in the NT user manual. From the NT Program Manager, double-click on the NT Setup program icon in the Main program folder. Then select Options/Change System Settings from the Setup menu to change the display driver. Select a supported display mode from the drive and directory containing the NT drivers, e.g., A:\, A:\WINNT31 or A:\WINNT35. If separate drivers are provided on the software distribution diskette for different versions of NT, be sure to enter the drive and directory where the appropriate NT drivers are located. Refer to your NT user manual for full instructions.

WINDOWS 95

The Windows setup program install and modifies all of the necessary files. Follow these steps to install the Windows 95 driver

- Step 1 Start Windows 95.
- Step 2 Click the "Start > Run" button.
- Step 3 Key-in "A:\WIN95UL.EXE" and click "OK" button.
- Step 4 Double-click on the Display icon in the "Start > Setting > Control Panel" folder.
- Step 5 Click the "Setting" tab

Chapter 4 SOFTWARE INSTALLATION

- Step 6 Click the "Change Display Type..." button
- Step 7 Under "Adapter Type" click the "Change" button.
- Step 8 Click the "Show all devices".
- Step 9 Select "Avance Logic" under "Manufacturers" and "Avance Logic 2302/1301 PCI" under Models.
- Step 10 Click the "Close" button.
- Step 11 Select the appropriate resolution using the Desktop Area and Color Palette options.
- Step 12 Click the "apply" button and restart your PC

ALG[®] XING[™] - MPEG[™] DRIVER

INSTALLATION SOFTWARE MPEG DRIVER FOR DSV2302P

Preparing to Install the XingMPEG Player

Before installing the XingMPEG Player, make sure the following hardware and software is installed and working:

- IBM PC 486/Pentium or compatible computer
(a Pentium with at least 8MB of RAM is recommended);
- Microsoft Windows v3.1 or higher;
- a hard disk drive with at least 3MB of free space;
- a CD-ROM drive is optional;
- a sound card with a Windows wave audio driver is optional.

INSTALLING THE XINGMPEG PLAYER FOR WINDOWS 3.X

1. Turn on your computer and start Windows.
2. Insert the XingMPEG Player Diskette into your diskette drive.
3. Open the Windows Program Manager and choose the "Run" command from the "File" menu; the "Run" dialog will appear.
4. Type "A:\SETUP" (substitute the drive letter of your diskette drive for "A", if necessary), and click the "OK" button; the XingMPEG Player setup program will start.
5. Follow the setup program's on-screen instructions.

Chapter

5

INSTALLING THE XINGMPEG PLAYER FOR WINDOWS 95

1. Install VGA Windows 95 Driver.
2. Launch Windows 95.
3. Insert the Xing Native-MPEG driver diskette in the appropriate diskette drive.
4. Click "Start>Run" button.
5. Key-in "A:\SETUP.EXE" and click "OK".

USE XINGMPEG PLAYER

1. Double click on the "XingMPEG Player" icon in the XingMPEG Player Group.
2. Use File/Open to select an MPEG file.

5

XINGMPEG PLAY

XINGMPEG DRIVER (XMDRIVER.DRV)

- Installation of the XingMPEG Driver now registers two MCI device TYPES
- In addition to the "MpegVideo" device type, the device type "CDIVideo" is registered to provide direct access to CD-i and VideoCD titles.

- The XingMPEG Driver's configuration dialog contains a new option "Crop to fit in standard window" that affects the driver's behavior when playing CD-i movies. When this option is selected, CD-i movies whose horizontal dimension is greater than 352 pixels are cropped to fit in the standard 352 pixel wide Video Display window. This feature is provided because some DCI-compliant Windows display systems suffer degraded video playback performance when video frames' horizontal dimension exceed 352 pixels. If you notice slower video playback when playing CD-i titles, try enabling this feature.

XINGMPEG PLAYER (XMPLAYER.EXE)

- The XingMPEG Player's "File" menu now contains the entry "Open CD-i Movie". When this item is chosen, the XingMPEG Player automatically locates and opens all readable MPEG files on a mounted CD-i or VideoCD disk.
- The File Information window's "File Duration" field now displays the correct SMPTE formatted value; previously, calculation of this value failed to account for the loaded file's frame rate and assumed 30 frames/second.
- Clicking on the Track Bar now moves the current position indicator in increments equal to approximately 1/16 the total duration of the current file. In previous versions, clicking on the Track Bar moved the current position indicator in 1 second increments.

APPENDIX A: STANDARD VGA MODE TABLE

Appendix

A

Mode (Hex)	Type	Alpha Size	Screen Size	Colors	Box Size	H Sync (KHz)	V Sync (Hz)	Screen Start (Hex)	Freq (MHz)	DRAM Size Supported
0,1	Text	40×25	320×200	16	8×16	31.5	70	B8000	28	256K
2,3	Text	80×25	640×200	16	8×16	31.5	70	B8000	28	256K
0,1	Text	40×25	320×350	16	8×14	31.5	70	B8000	28	256K
2,3	Text	80×25	640×350	16	8×14	31.5	70	B8000	28	256K
0,1	Text	40×25	360×400	16	8×16	31.5	70	B8000	28	256K
2,3	Text	80×25	720×400	16	8×16	31.5	70	B8000	28	256K
4,6	Graph	40×25	320×200	16	8×8	31.5	70	B8000	25	256K
6	Graph	80×25	640×200	16	8×8	31.5	70	B8000	25	256K
7	Text	80×25	720×350	2	9×14	31.5	70	B8000	28	256K
7	Text	80×25	720×400	2	9×16	31.5	70	B8000	28	256K
D	Graph	40×25	320×200	16	8×8	31.5	70	A0000	25	256K
E	Graph	80×25	640×200	16	8×8	31.5	70	A0000	25	256K
F	Graph	80×25	640×350	2	8×14	31.5	70	A0000	25	256K
10	Graph	80×25	640×350	4	8×14	31.5	70	A0000	25	256K
11	Graph	80×30	640×480	2	8×16	31.5	60	A0000	25	256K
12	Graph	80×30	640×480	16	8×16	31.5	60	A0000	25	256K
13	Graph	40×25	320×200	256	8×8	31.5	70	A0000	25	256K

(I) Interlaced

(NI) Non-Interlaced

APPENDIX B: EXTENDED MODE TABLE

Appendix

B

Moe (Hex)	Type	Alpha Size	Screen Size	Colors	Box Size	H Sync (KHz)	V Sync (Hz)	Screen Start (Hex)	Freq (MHz)	DRAM Size Supported
20	Text	132×25	1188×350	16	8×14	31.5	70	B8000	42.5	512K
21	Text	132×30	1188×480	16	8×16	31.5	60	B8000	42.5	512K
22	Text	132×43	1188×473	16	8×8	31.5	60	B8000	42.5	512K
23	Text	132×60	1188×480	16	8×8	31.5	60	B8000	42.5	512K
24	Text	80×30	720×480	16	9×16	31.5	60	B8000	28	256K
25	Text	80×43	720×473	16	9×8	31.5	60	B8000	28	256K
26	Graph	80×60	720×480	16	9×8	31.5	60	B8000	28	256K
29	Graph	80×25	640×400	16	8×16	31.5	70	A0000	25	256K
2A	Text	80×30	640×480	256	8×16	31.5	60	A0000	25	512K
	Text	80×30	640×480	256	8×16	37.5	72	A0000	31.5	512K
	Graph	80×30	640×480	256	8×16	37.5	75	A0000	31.5	512K
2B	Graph	100×75	800×600	16	8×16	35.5	56	A0000	36	256K
	Graph	100×75	800×600	16	8×16	37.5	60	A0000	40	256K
	Graph	100×75	800×600	16	8×16	48	72	A0000	50	256K
	Graph	100×75	800×600	16	8×16	48	75	A0000	50	256K
2C	Graph	100×75	800×600	256	8×8	35.5	56	A0000	36	512K
	Graph	100×75	800×600	256	8×8	37.5	60	A0000	40	512K
	Graph	100×75	800×600	256	8×8	48	72	A0000	50	512K
	Graph	100×75	640×350	256	8×8	48	75	A0000	50	512K

(I) Interlaced

(NI) Non-Interlaced

(Table continued on next page.)

APPENDIX B: EXTENDED MODE TABLE (CONTINUED)

Moe (Hex)	Type	Alpha Size	Screen Size	Colors	Box Size	H Sync (KHz)	V Sync (Hz)	Screen Start (Hex)	Freq (MHz)	DRAM Size Supported
2D	Graph	96×64	768×1024	16	8×16	38	35/70	A0000	45	512K
2E	Graph	96×64	768×1024	256	8×16	38	36	A0000	45	1MB
30(I)	Graph	128×48	768×1024	16	8×16	35.5	43/86	A0000	45	512K
30(NI)	Graph	128×48	1024×768	16	8×16	48	60	A0000	65	512K
	Graph	128×48	1024×768	16	8×16	56	70	A0000	75	512K
	Graph	128×48	1024×768	16	8×16	58	72	A0000	79	512K
	Graph	128×48	1024×768	16	8×16	60	75	A0000	79	512K
31(I)	Graph	128×48	1024×768	256	8×16	35.5	43/86	A0000	45	1MB
31(NI)	Graph	128×48	1024×768	256	8×16	48	60	A0000	65	1MB
	Graph	128×48	1024×768	256	8×16	56	70	A0000	75	1MB
	Graph	128×48	1024×768	256	8×16	58	72	A0000	79	1MB
	Graph	128×48	1024×768	256	8×16	60	75	A0000	79	1MB
32			Reserved							
34			Reserved							
35			Reserved							
36	Graph	160×64	1280×1024	16	8×16	48	45/90	A0000	65/75	1M
37	Graph	160×64	1280×1024	256	8×16	48	45/90	A0000	75	2M
42*	Graph	80×25	640×400	64K	8×16	31.5	70	A0000	50	1M

(I) Interlaced

(NI) Non-Interlaced

(Table continued on next page.)

APPENDIX B: EXTENDED MODE TABLE (CONTINUED)

Moe (Hex)	Type	Alpha Size	Screen Size	Colors	Box Size	H Sync (KHz)	V Sync (Hz)	Screen Start (Hex)	Freq (MHz)	DRAM Size Supported
43*	Graph	80×30	640×480	64K	8×16	31.5	60	A0000	50	1M
	Graph	80×30	640×480	64K	8×16	37.5	72	A0000	63	1M
	Graph	80×30	640×480	64K	8×16	37.5	75	A0000	63	1M
44*	Graph	100×75	800×600	64K	8×16	35.5	56	A0000	72	1M
	Graph	100×75	800×600	64K	8×16	37.5	60	A0000	80	1M
45(I)	Graph	128×48	1024×768	64K	8×16	35.5	43/86	A0000	90	1M
48	Graph	N/A	640×480	16M	8×16	31.5	60	A0000	75	1M

* 64K simultaneous colors support

(I) Interlaced

(NI) Non-interlaced

APPENDIX C: EXTENDED MODE/MONITOR COMPATIBILITY TABLE

Moe (Hex)	Type	Alpha Size	Screen Size	H Sync (KHz)	V Sync (Hz)	8503	8512	8513	8514	Multisync
20	Text	132×25	1188×350	31.5	70	Yes	Yes	Yes	Yes	Yes
21	Text	132×30	1188×480	31.5	60	Yes	Yes	Yes	Yes	Yes
22	Text	132×43	1188×473	31.5	60	Yes	Yes	Yes	Yes	Yes
23	Text	132×60	1188×480	31.5	60	Yes	Yes	Yes	Yes	Yes
24	Text	80×30	720×480	31.5	60	Yes	Yes	Yes	Yes	Yes
25	Text	80×43	720×473	31.5	60	Yes	Yes	Yes	Yes	Yes
26	Text	80×60	720×480	31.5	60	Yes	Yes	Yes	Yes	Yes
29	Graph	80×25	640×400	31.5	70	Yes	Yes	Yes	Yes	Yes
2A	Graph	80×30	640×480	31.5	60	Yes	Yes	Yes	Yes	Yes
	Graph	80×30	640×480	37.5	72	Yes	Yes	Yes	Yes	Yes
	Graph	80×30	640×480	37.5	75	Yes	Yes	Yes	Yes	Yes
2B	Graph	100×75	800×600	35.5	56	No	No	No	Yes	Yes
	Graph	100×75	800×600	37.5	60	No	No	No	No	Yes
	Graph	100×75	800×600	48	72	No	No	No	No	Yes
	Graph	100×75	800×600	48	75	No	No	No	No	Yes
2C	Graph	100×75	800×600	35.5	56	No	No	No	Yes	Yes
8×8	Graph	100×75	800×600	37.5	60	No	No	No	No	Yes
	Graph	100×75	800×600	48	72	No	No	No	No	Yes
	Graph	100×75	640×350	48	75	No	No	No	No	Yes

(I) Interlaced
(NI) Non-interlaced

Appendix

C

Appendix C EXTENDED MODE/MONITOR COMPATIBILITY TABLE

APPENDIX C: EXTENDED MODE/MONITOR TABLE (CONTINUED)

Moe (Hex)	Type	Alpha Size	Screen Size	H Sync (KHz)	V Sync (Hz)	8503	8512	8513	8514	Multisync
2D	Graph	96×64	768×1024	38	35/70	No	No	No	No	Yes
2E	Graph	96×64	768×1024	38	36	No	No	No	No	Yes
30(I)	Graph	128×48	768×1024	35.5	43/86	No	No	No	Yes	Yes
30(NI)	Graph	128×48	1024×768	48	60	No	No	No	No	Yes
	Graph	128×48	1024×768	56	70	No	No	No	No	Yes
	Graph	128×48	1024×768	58	72	No	No	No	No	Yes
	Graph	128×48	1024×768	60	75	No	No	No	No	Yes
31(I)	Graph	128×48	1024×768	35.5	43/86	No	No	No	Yes	Yes
31(NI)	Graph	128×48	1024×768	48	60	No	No	No	No	Yes
	Graph	128×48	1024×768	56	70	No	No	No	No	Yes
	Graph	128×48	1024×768	58	72	No	No	No	No	Yes
	Graph	128×48	1024×768	60	75	No	No	No	No	Yes
32			Reserved							
34			Reserved							
35			Reserved							
36	Graph	160×64	1280×1024	48	45/90	No	No	No	No	Yes
37	Graph	160×64	1280×1024	48	45/90	No	No	No	No	Yes
42*	Graph	80×25	640×400	31.5	70	Yes	Yes	Yes	Yes	Yes

(I) Interlaced

(NI) Non-interlaced

(Table continued on next page.)

APPENDIX C: EXTENDED MODE/MONITOR TABLE (CONTINUED)

Moe (Hex)	Type	Alpha Size	Screen Size	H Sync (KHz)	V Sync (Hz)	8503	8512	8513	8514	Multisync
43*	Graph	80×30	640×480	31.5	60	Yes	Yes	Yes	Yes	Yes
	Graph	80×30	640×480	37.5	72	Yes	Yes	Yes	No	Yes
	Graph	80×30	640×480	37.5	75	Yes	Yes	Yes	No	Yes
44*	Graph	100×75	800×600	35.5	56	No	No	No	Yes	Yes
	Graph	100×75	800×600	37.5	60	No	No	No	No	Yes
45(I)	Graph	128×48	1024×768	35.5	43/86	Yes	Yes	Yes	Yes	Yes
48	Graph	100×75	640×480	31.5	60	Yes	Yes	Yes	Yes	Yes

* 64K simultaneous colors support

(I) Interlaced

(NI) Non-interlaced

DESIGN NOTICE

PCI AVANCE 2302 VGA Chipset:

This is to state that the DSP2302P PCI VGA or DSV2302P Video Playback PCI VGA cannot be installed on the INTEL 430FX Chipset manufactured from INTEL in KOREA due to timing incompatibility issue. The DSP2302P PCI VGA or DSV2302P Video Playback PCI VGA has been tested and functioning without any incompatibility problem on the INTEL 430FX chipset manufactured from INTEL in U. S. A. or other countries.

The PCI AVANCE 2302 Chipset design does not support the "PCI Bursting" function for the P54C INTEL 430FX chipset. Set the option for the "PCI Bursting" on the BIOS as "Disabled". Incorrect setting of this option will cause abnormal display when loading Windows 3.1x or Windows 95.

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