

# **VideoLogic Apocalypse 3Dx for Windows 95**

October 14th 1997

## **Contents**

1. Introduction
2. Updates in this driver release
2. Installing Apocalypse 3Dx
3. Upgrading the drivers
4. Removing Apocalypse 3Dx
5. Hints and tips
6. Troubleshooting

## **1. Introduction**

This file contains late-breaking information, detailed installation and removal instructions, hints and tips, system details and troubleshooting information for Apocalypse 3Dx.

You can print this file by clicking the File menu at the top of the window, then Print. The page setup is for US Letter sized paper, but will also print to A4 size.

## **2. Updates in this driver release**

### **Version 4.0.1**

The following has changed in v4.0.1:

- New method of translucency sorting. Translucency sorting can be set to 'High Quality' 'Medium' and 'Fast sorting' on a per-application basis.
- The following 3D controls have been added: Vertex Fog and Gouraud Specular Highlights.
- The Apocalypse page in Display Properties has been redesigned and now gives access to the new 3D controls and the translucency sorting. The PowerVR HAL and bi-linear control is now on a per-application basis.
- 430FX chipset problems with certain graphics cards have been fixed.
- Performance increase

## 3. Installing Apocalypse 3Dx

### Installing the hardware

1. Switch off your computer, monitor, and any hardware devices such as printers connected to your computer. Leave the power cable connected to the power outlet so that your computer is grounded.

**Warning: Always switch off your computer before removing the cover and observe the warnings specified in the manufacturer's documentation.**

2. Remove the computer's cover. You may need to refer to the documentation supplied with your computer for instructions on how to do this.
3. Locate an empty PCI bus expansion slot and remove the slot cover. Keep the screw, you will need it later to secure the card.
4. Touch the bare metal chassis of your computer with the back of your hand to discharge any static that may have built up on you or your clothes.
5. Align Apocalypse 3Dx with the slot you have chosen. Firmly press it into the slot. You will need to use some pressure to push the card into position, but do not use excessive force.
6. Secure the card using the screw that you removed previously.
7. Replace the cover of your computer and switch on your computer and your computer monitor.

### Installing the software

We strongly recommend that you install the software with the Interactive Installation Guide, as described in the User Guide, as it is quicker, easier and more comprehensive than the standard Windows Plug and Play feature. However, if you want to install Apocalypse 3Dx with Plug and Play, follow the instructions below.

### Installing the software with Windows Plug and Play

Follow these instructions to find out which build of Windows 95 you are using, then follow the instructions for that version:

1. Click the Start button, point to Settings and click Control Panel.
2. Double-click the System icon to open the System Properties Window.
3. Click the General tab. The build number is located in the System section, under the 'Microsoft Windows 95' line.

### Software installation for Windows 95 build 4.00.950 or 4.00.950a

1. When your computer has restarted, insert the VideoLogic Software Library CD-ROM into your CD-ROM drive.
2. A window is displayed saying that Windows has found new hardware. Select Driver from Disk provided by Hardware Manufacturer, and click OK.

3. A window is displayed asking for the location of the software. Browse to the apoc3dx\win95 folder on the CD-ROM. After browsing, click OK.
4. Click OK to install the drivers.
5. When the drivers have been installed, a message is displayed asking whether you want to restart Windows. Click Yes.

When your computer has restarted, Apocalypse 3Dx is ready to use.

### **Software installation for Windows 95 build 4.00.950b (otherwise known as OSR2)**

1. When your computer has restarted, the Update Device Driver Wizard is displayed, saying that a PCI Multimedia Device has been detected, and asking whether you want Windows to search for the drivers. Insert the VideoLogic Software Library CD-ROM into your CD-ROM drive, and click Cancel.
2. Click the Start button, point to Settings and click Control Panel.
3. Double-click the Add New Hardware icon.
4. The Add New Hardware Wizard is displayed. Click Next.
5. You are asked if you want Windows to search for the hardware. Select No, and click Next.
6. From the list of devices, click Sound, game and video controllers, and click Next (you might have to scroll down the list to find Sound, game and video controllers).
7. To locate the drivers, click Have Disk, and browse to the apoc3dx\win95 folder on the CD-ROM. When you have browsed, click OK.
8. At the Install from Disk window, click OK.
9. At the Select Device window, click OK.
10. At the Add New Hardware Wizard, click Next.
11. Click Finish.
12. Restart your computer.
13. When your computer has restarted, a message is displayed saying that Windows has detected Apocalypse 3Dx.

The System Settings Change window is displayed asking whether you want to restart your computer. Click Yes.

When your computer has restarted, Apocalypse 3Dx is ready to use.

## 4. Upgrading the drivers

From time to time, VideoLogic may issue upgrades to the drivers.

### Upgrading from the World Wide Web

The latest drivers are always available through the Software pages of our web site at <http://www.videologic.com>, or directly through our ftp site at <ftp://ftp.videologic.com>. Full instructions on finding out which driver version you are running, and downloading and upgrading the drivers, are available through the Technical Support pages of the web site.

### Upgrading from a disk

If you are upgrading the drivers from a disk after downloading the files from the ftp site, follow the instructions in the section 'Installing the Software with Windows Plug and Play' of this readme to find out which build of Windows you are using, then follow the instructions for that version.

### Upgrading from a disk for Windows 95 build 4.00.950 or 4.00.950a

To upgrade the drivers from a disk in Windows 95 build 4.00.950 or 4.00.950a:

1. Click the Start button, point to Settings and click Control Panel.
2. From the Control Panel, double-click the System icon.
3. In the System Properties dialog box, click the Device Manager tab. A list of devices available on your computer is displayed.
4. From the list, double-click Sound, video and game controllers (you might have to scroll down the list to find Sound, game and video controllers).
5. From the Sound, video and game controllers list, double-click Apocalypse 3Dx.
6. In the PCI Properties dialog box, click the Driver tab.
7. From the list of driver files, click Change driver.
8. If upgrading from a removable disk, insert the disk into the disk drive. If you are upgrading from a CD-ROM that automatically runs, it may run at this point. If it does, exit the CD-ROM.
9. In the Select Device dialog box, click Have Disk.
10. In the Install from Disk dialog box, browse to the directory of the disk containing the updates. When you have browsed, click OK.
11. At the Install from Disk dialog box, click OK.
12. At the Select Device dialog box, click OK.
13. At the PCI Properties dialog box, click OK. The drivers are upgraded on your computer.
14. When the drivers have been upgraded, a message is displayed asking whether you want to restart Windows. Click Yes. When your computer has restarted Apocalypse 3Dx is ready to use.

## Upgrading from a disk for Windows 95 build 4.00.950b (otherwise known as OSR2)

Upgrading from a disk in OSR2 is much easier if the drivers are in the root directory of a floppy disk, rather than in a separate folder, or on your hard disk. We recommend copying the driver updates onto the root directory of a floppy disk before you upgrade in OSR2.

To upgrade the drivers from a disk in OSR2:

1. Click the Start button, point to Settings and click Control Panel.
2. From the Control Panel, double-click the System icon.
3. In the System Properties dialog box, click the Device Manager tab. A list of devices available on your computer is displayed.
4. From the list, double-click Sound, video and game controllers.
5. From the Sound, video and game controllers list, double-click Apocalypse 3Dx.
6. In the Apocalypse 3Dx dialog box, click the Driver tab.
7. Click the Update Drivers button. This starts the Update Device Driver Wizard.
8. You are asked whether you want Windows to search for the drivers. If upgrading from a removable disk, insert the disk into the disk drive. If you are upgrading from a CD-ROM that automatically runs, it may run at this point. If it does, exit the CD-ROM.

Select Yes, and click Next.

- If the drivers are located in the root directory of the floppy disk, continue from step 13 below.
  - If the drivers are not located in the root directory of the floppy disk or CD-ROM, continue from step 9 below.
9. A window is displayed asking you to give the location of the drivers. Click Other Locations.
  10. In the Select Other Locations window, browse to the folder on the disk containing the updates. When you have browsed, click OK.
  11. At the Select Other Location window, click OK.

If you are already running the latest drivers, a message is displayed saying that the location you have browsed to does not contain updated drivers. Click Cancel to quit upgrading the drivers.

12. Click OK.
13. Click Finish.
14. A window is displayed asking you to insert the disk. Click OK.
15. At the Copying Files window, browse to the folder on the disk containing the updates. When you have browsed, click OK.
16. The System Settings Change window is displayed, asking whether you want to restart your computer. Click Yes.

When your computer has restarted, Apocalypse 3Dx is ready to use.

## 5. Removing Apocalypse 3Dx

To remove Apocalypse 3Dx from your system:

1. Open the Control Panel window by clicking the Start button, pointing to Settings and clicking Control Panel.
2. Double-click the System icon to open the System Properties Window.
3. Click the Device Manager tab.
4. Double-click Sound, video and game controllers.
5. Click Apocalypse 3Dx, and click Remove.
6. A dialog box is displayed asking you if you want to restart Windows. Click No.
7. Shut down Windows 95.
8. Switch off your computer, monitor, and any hardware devices such as printers connected to your computer. Leave the power cable connected to the power outlet so that your computer is grounded.
9. Disconnect the monitor cable from your computer.

**Warning: Always switch off your computer before removing the cover and observe the warnings specified in the manufacturer's documentation.**

10. Remove the computer's cover. You may need to refer to the documentation supplied with your computer for instructions on how to do this.
11. Remove the Apocalypse 3Dx card from its PCI slot.
12. Replace the cover of your computer.
13. Switch on your computer and your computer monitor.
14. When Windows 95 is running you can delete the following files from the disk on which you are running Windows 95:

### **PowerSGL files**

\windows\sgl.dll  
\windows\sglmid5.dll  
\windows\system\vsgl.vxd  
\windows\inflapoc3dx.inf  
\windows\pvros.dll  
\windows\pvrmid5.dll  
\windows\apoc3dx.bmp  
\windows\pcx2help.hlp

### **Direct3D files**

\windows\system\pvrhal32.dll  
\windows\system\pvrint.exe  
\windows\system\pvrs3d.dll

## 6. Hints and Tips

### Introduction

This section gives late-breaking information on how to get the most out of your Apocalypse 3Dx.

### Installing games

Some DirectX games currently on the market are supplied with DirectX 2. If the game's installation forces DirectX 2 to be installed, you should reinstall DirectX 3a or a later release.

### Microid Research BIOS

Some PCs with an MR BIOS can give a much lower frame rate with Apocalypse 3Dx. Switching to another BIOS can greatly enhance performance.

### PCI Burst

Some PC BIOSes enable you to alter the settings for 'PCI Burst'. Enabling this feature enhances Apocalypse 3Dx's performance.

### PCI Latency

Some PC BIOSes enable you to alter the settings for 'PCI Latency'. Other typical names for this feature are:

- |                              |  |
|------------------------------|--|
| 'Latency Timer (PCI Clocks)' | A term used with AMI BIOS, usually found in the 'Advanced chipset configuration' menu. |
| 'PCI Latency Timer'          | A term used with AWARD BIOS, usually found in the 'PNP and PCI setup' menu.            |

Setting this to 80 PCI clocks can enhance Apocalypse 3Dx's performance.

### 16-bit Color

To avoid problems with the Start menu and Windows menus containing corrupted text, or missing text, you should set your display mode to a high-color palette, of at least 65,536 colors (16-bit).



## 7. Troubleshooting

### Introduction

This section describes common problems you may encounter when installing or running Apocalypse 3Dx.

**Problem:** The application display is corrupted.

**Solution:** Your graphics system may not support the required DirectX version.

Reinstall DirectX 5 by running the program `/directx\dx5\dx5eng.exe` on the Apocalypse 3Dx CD-ROM.

If the problem persists, contact your graphics card vendor.

**Problem:** The Start menu and Windows menus contain corrupted text, or text is missing.

**Solution:** After playing a game in 8-bit display mode, your computer has changed from 8-bit to 16-bit display mode automatically, which your display driver may not be able to support.

Restart your computer in 16-bit mode. Refer to the documentation supplied with your graphics card if you need help with this.

To avoid this problem in future, you should always be in a 16-bit display mode before playing a game.

**Problem:** When running an application that uses PowerSGL or Direct3D, the system freezes or restarts.

**Solution:** You may have installed Apocalypse 3Dx into a PCI bus slot that does not have bus-mastering capability.

Install the card into a slot that supports bus-mastering.

**Solution:** Try changing '3D Acceleration' to 'Standard' from the Apocalypse 3Dx Property page.

**Problem:** I am not given the D3D Hal option with the D3D demos.

**Solution:** Ensure that you have the DirectX 3a graphics drivers installed, and that your computer is in a display mode greater or equal to 16 bits per pixel (65,536 colors).

**Solution:** If your system received an Invalid Page Fault or a General Protection Fault, restart your system.

**Problem:** When running an application that uses PowerSGL the system restarts.

**Solution:** The display driver may not support buffer flipping. To support flipping the amount of free off-screen memory must be greater than the current on-screen memory.

A lower screen resolution may free up sufficient memory, however, due to other graphics memory requirements (e.g. hardware cursors), 1 MB cards may not support flipping even in a resolution of 640x480 pixels with 16-bit (65,536) colors. This is why we recommend a minimum graphics memory of 2 MB.

**Problem:** The Use Hardware Accelerator option within an application is grayed out.  
**Solution:** The application is currently set to run in a graphics resolution that cannot be accelerated by Apocalypse 3Dx. Setting the application's graphics mode to a lower resolution mode makes the check-box available.

**Solution:** Apocalypse 3Dx is not being recognized by the system. Check that it is in System Properties, check the BIOS, IRQ allocations etc.

**Problem:** Some textures within the game are corrupt

**Solution:** Try adding an 'Application setting' for the application and enable 'Automatic MIP Mapping'.

**Problem:** All game menus are displayed correctly but when playing a game, it fails to display the screen correctly.

**Solution:** Try adding an 'Application setting' for the application and enable 'Render Overlap'

**Problem:** Some textures within the game appear to have joining marks on the edges of the tiles.

**Solution:** Try adding an 'Application setting' for the application and disable the 'Bilinear Mode'.

**Problem:** Mouse control in D3D applications is very jerky.

**Solution:** Try changing '3D Acceleration' to 'Standard' from the Apocalypse 3Dx Property page.

**Problem:** When using Apocalypse 3Dx with AWARD BIOS and the S3 968 or 868 chipset the system crashes.

**Solution:** Try changing the memory allocation for the Apocalypse 3Dx card to a range outside the 64 MB used by your graphics card.

**To change the memory allocation:**

1. Click the Start button, point to Settings and click Control Panel.
2. Double-click the System icon.
3. In the System Properties dialog box, click the Device Manager tab.
4. Double-click Sound, video and game controllers.
5. Click Apocalypse 3Dx.
6. Click Properties.
7. In the Apocalypse 3Dx dialog box, click the Resources tab.
8. Clear the Use automatic settings check box.
9. In the Resource settings list, double-click the first (top) Memory Range.
10. In the Value box of the Edit Memory dialog box, type in the range FFBE0000 - FFBEFFFF, and click OK.
11. In the Resource settings list, double-click the second (bottom) Memory Range.
12. In the Value box of the Edit Memory dialog box, type in the range FF400000 - FF7FFFFF, and click OK.
13. At the Apocalypse 3Dx dialog box, click OK.

14. At the System Properties dialog box, click OK.
15. Restart your PC.

You should not have to reconfigure the memory settings again as Windows 95 will remember the new settings every time it starts up and reallocate the memory automatically.

### **Memory Allocation Conflicts**

The above steps assume that there is no memory allocation conflict due to devices present at the addresses you specified. To ensure there is no conflict, follow steps 1 to 7 above. If, in the Resources tab, the Conflicting devices list says 'No conflicts.', your Apocalypse 3Dx is ready to use. If a conflict is indicated, contact our technical support team via one of the contact points given in the User Guide.

**Problem:** When using a Matrox display card, my computer hangs when a Direct3D game goes into full screen.

**Solution:** Update your Matrox display drivers to v3.63 or later.

**Solution:** If using earlier drivers, set the '3D Acceleration' section of the Apocalypse 3Dx Property Page to 'Standard'.

**Problem:** When deleting an entry from the Application Hints list, clicking the OK button has no effect.

**Solution:** After confirming the deletion on the selected application hint, select another application hint from the list prior to clicking the OK button.

**Problem:** When running MageSlayer parts of the introduction screens are corrupted.

**Solution:** To work around this, add an application hint for MageSlayer and disable Render Overlap. The executable for MageSlayer is called mageslay.exe. Disabling Render Overlap will make the MageSlayer gameplay slightly slower.

