
Electronic Distribution Version

Release Notes

This is version 4.02.101 of the Diamond Windows 95 Drivers disk, with InControl Tools 95 version 4.02.244. This driver currently supports the following Diamond display adapters:

EDGE 3D 2000 and 3000 PCI

Section 1 of these instructions apply if version 1.00 of the EDGE 3D release drivers are presently installed on your system. If version 1.00 is not already installed, please refer to Section 2 of this README.

New EDGE 3D Applications

This release of EDGE 3D CDROM contains two new items to help you understand the EDGE technology.

The first application is the EDGE Wizard. This application sets up the \WINDOWS\DOSSTART.BAT file to reflect the settings you select. DOSSTART.BAT is used by Windows 95 whenever you select the Restart the computer in MS-DOS mode? option from the ShutDown dialog. The option selected with the EDGE 3D Wizard allow you to turn ON or OFF the MSDOS joystick support as well as selecting the MSDOS MIDI port address. In addition, this program tests your system to verify all the drivers (display, multimedia, joystick, and MPU401 for a MSDOS box) are installed. If one of these drivers is not installed then it will appear in a dialog within the EDGE Wizard.

The second new feature of this CDROM is the help file. The file EDGE3D.HLP is placed into your Start menu in Program:InControl Tools folder. You can select it at any time to learn more about the technology of your EDGE 3D adapter.

Section 1

Installing the display driver:

1. Start Windows 95.
2. Right-click on the Desktop and choose Properties.
3. Choose the settings tab and click Change Display Type...
4. Click on Change in the Adapter Type section.
5. Click on Have Disk

6. Type the path to the NV directory on your CDROM.
Example: C:\EDGETEMP\NV\
 7. After the files have been copied, close Display Properties. Choose Yes to restart the computer.
 8. After Windows 95 has restarted, do the following to adjust the display settings:
 - a. Open Display Properties
Start, Settings, Control Panel, Display
 - b. Choose Settings and adjust the color palette, desktop area and font size as you wish.
 - c. Click OK. You may be asked to restart Windows 95 for changes to take effect.

Installing the sound and joystick drivers:

The sound driver provides wave table and MIDI audio under Windows 95. Due to the design of the Plug and Play subsystem of Windows 95, you must install these drivers using the following steps:

1. Right click on the "My Computer" icon and choose Properties.
2. Click on the Device Manager
3. Double-click on Sound, video and game controllers.
4. Double-click on EDGE 3D PCI Multimedia device.
5. Under the Driver tab, click the Change Driver button.
6. Click the Have Disk button.
7. Type the path to the NV directory on your CDROM.
Example: C:\EDGETEMP\NV\
 8. Click OK to approve Diamond EDGE 3D PCI Multimedia Device.
 9. The drivers have been copied to the system directory
 10. Choose Yes when asked to restart the system.
 11. After Windows 95 has restarted, do the following to adjust the joystick settings:
 - a. Open Add New Hardware from the Control Panel
 - b. Click Next.
 - c. When asked if you want Windows to search for new hardware, select No, then click Next.
 - d. From the list of hardware, select Sound, video, and game controllers, then click Next.

- e. From the list of Manufacturers, select Microsoft.
- f. From the Models, select Gameport Joystick, then click Next.
- g. Click Next on the properties screen.
- h. If prompted, provide the path to the Windows 95 CD-ROM.
- i. Click Finish. You may be asked to restart Windows 95 for changes to take effect.

Installing the MPU 401 driver:

The MPU 401 driver provides MPU 401 audio in a DOS session under Windows 95. This driver is a special part of the EDGE 3D system driver set that must be installed separately from the other drivers. The following steps outline the installation of the MPU-401 driver:

1. Open the Control Panel
2. Open Add New Hardware
3. Do not have Windows 95 search for the hardware. Select No
4. Choose "Sound, video and game controllers"
5. Select "Have Disk..."
6. Type the path to the NV directory from the downloaded archive.
Example: C:\EDGETEMP\NV\
7. Enter NVMPU401.INF in the File name: area
8. Select "EDGE 3D MPU401 Driver for General Midi in DOS Shell"
9. Restart Windows 95

Software Installation Overview

The EDGE 3D Multimedia Accelerator provides a wide variety of support software. We recommend that you install the software in the following sequence:

1. EDGE 3D Multimedia Accelerator drivers for Windows 95.
 - a. Please see the below instructions for installing the drivers. There are two sets of instructions, one for installing if Windows 95 is already installed, and one for installing at the same time as Windows 95.
2. Install the Diamond application software.
 - a. Please see the below instructions for installing this software.

Section 2

The following instructions assume that you have another graphics adapter currently installed.

1. Boot Windows 95 on the drivers for the old graphics adapter.
2. Perform one of the following:
 - a. If running from MSDOS then type C:\EDGETEMP\SYSCHK<Enter>
 - b. If running from Windows 95 run C:\EDGETEMP\SYSCHK95\SYSCHK95.
3. SYSCHK/SYSCHK95 will perform the following tasks:
 - a. Install NVINIT.SYS into the user's CONFIG.SYS file. This must be the first line in the file so that the EDGE 3D multimedia accelerator gets a PCI interrupt allocated prior to any other PCI devices being initialized.
 - b. SYSCHK/SYSCHK95 looks for the following and warns the user if any of these conditions are present:

Triton PCI bridge chip set. This PCI bridge chip conflicts with the standard VGA.DRV installed with Windows 95. If this chip set is found then SYSCHK/SYSCHK95 updates VGA.DRV.

SIS 496 bridge chip set. This chip set in combination with the on-board IDE functionality can cause some performance degradation. SYSCHK/SYSCHK95 simply informs the user.

Intel Aries PCI bridge chip set. This chip set in combination with the on-board IDE functionality can cause some performance degradation. SYSCHK/SYSCHK95 informs the user.

PCI to PCI bridge chip. If SYSCHK/SYSCHK95 finds a PCI to PCI bridge chip, it recommends that the EDGE 3D card be installed in the first PCI slot for performance reasons.

Compaq Presario or Prolinea computer's with a motherboard BIOS date of 03/01/95 or earlier. This BIOS does not allocate an interrupt to the EDGE 3D card and the motherboard BIOS must be upgraded before running Windows 95 on these computers.

AMI BIOS with a date of 12/15/93 and Phoenix BIOS 4.02. These BIOS's do not support multifunction PCI devices. If the EDGE 3D is installed into the machine, a blank screen results. The motherboard BIOS must be upgraded before installing the EDGE 3D into the system.

Award BIOS dated January 1995 or earlier and Phoenix BIOS 1.0x. These BIOS's do not allocate an interrupt to the EDGE 3D board and the system will hang at the Windows 95 splash screen. To

solve this run the BIOS setup program using F1, F2, or DEL (whichever key is appropriate to your system) and manually allocate an interrupt to the EDGE 3D card.

4. If the results of SYSCHK/SYSCHK95 were successful then power off the system and install the EDGE 3D board into the system as outlined by the EDGE 3D User's Manual.
5. Restart the system and install the Windows 95 drivers for both video and multimedia:
 - a. Windows 95 displays a dialog box indicating:

"New Hardware Found - PCI VGA Compatible Display Adapter."

Choose to install drivers from a disk provided by the hardware manufacturer.
 - b. Type C:\EDGETEMP\NV. Drivers will be copied to the SYSTEM directory.
 - c. Choose No when asked to restart the system.
 - d. Windows 95 displays a dialog box indicating:

"New Hardware Found - PCI Multimedia Device."

Choose to install drivers from a disk provided by the hardware manufacturer.
 - e. Type C:\EDGETEMP\NV. Drivers will be copied to the SYSTEM directory.
 - f. Choose Yes when asked to restart the system. Some systems experience a long pause after restarting.
 - g. After Windows 95 has restarted, do the following to adjust the setting:
 - a. Open Display Properties
Start, Settings, Control Panel, Display
 - b. Choose Settings and adjust the color palette, desktop area and font size as you wish.
 - c. Click OK. You may be asked to restart Windows 95 for changes to take effect.
 - h. If the joystick was specified to be installed during install, the following steps must be taken to enable the joystick under Windows 95:
 - a. Open Add New Hardware.
Start, Settings, Control Panel
 - b. Click Next.
 - c. When asked if you want Windows to search for new hardware, select No, then click Next.
 - d. From the list of hardware, select Sound, video, and game controllers, then click Next.

- e. From the list of Manufacturers, select Microsoft.
- f. From the Models, select Gameport Joystick, then click Next.
- g. Click Next on the properties screen.
- h. If prompted, provide the path to the Windows 95 CD-ROM.
- i. Click Finish. You may be asked to restart Windows 95 for changes to take effect.

EDGE 3D Multimedia Accelerator Software Application Installation

1. From Windows 95, select Start, then select Run.
2. In the Run dialog box, type in the following:

C:\EDGETEMP\INSTALL <enter>

The following command line switches can be used with INSTALL:

/f	This forces a Full installation (Diamond GT display driver and InControl Tools 95).
/m	This forces a Minimal installation (Diamond GT display driver only).
/d"drive:\path"	This installs InControl Tools 95 into drive:\path. Note that the quotes around the drive and path are required, and that either the /f or /m must be used in conjunction with this switch.
/r	This forces a system reboot after installation. Note that either the /f or /m switches must be used in conjunction with this switch.
/nr	This prevents a system reboot after installation. Note that either the /f or /m switches must be used in conjunction with this switch.
uninstall	This will completely uninstall the Diamond GT display driver and InControl Tools 95.

3. From the Diamond Setup dialog box, select Next.
4. From the Hardware Check dialog box, select Next.
5. A dialog box will appear containing the path where InControl Tools 95 will be installed. The default path is:

C:\Program Files\Diamond

Select Next, or change the path as necessary.

6. The next dialog box selects the installation type. There are three installation types, Minimal, Full, and Custom. They are defined as

follows:

- Minimal: This will install only the Diamond EDGE 3D drivers.
 - Full: This will install both the Diamond EDGE 3D drivers and InControl Tools 95.
 - Custom: This will allow installation of either the Diamond GT display driver or InControl Tools 95. At the minimum, the Diamond EDGE 3D driver must be installed during a first-time installation.
7. If Custom was selected in step 7, a dialog box will appear allowing selection of various items. Select the items to be installed by clicking on them with the left mouse button. When finished, click Next to continue.
 8. At the Select Files to be copied dialog box, click Next to begin the file copy process.
 9. Windows 95 will ask that the computer be restarted. Click on Yes to restart the computer.
 10. After restarting the computer, run C:\EDGETEMP\DIRECTX\DXSETUP.EXE to install Microsoft DirectX. You will be prompted to restart the computer.
 11. After restarting the computer, run C:\EDGETEMP\DVIDEO\SETUP.EXE to install Microsoft DirectVideo.
 12. To complete the installation, run C:\EDGETEMP\INDEO\SETUP to install the Intel Indeo video enhancements.

Selecting A User-Defined Monitor

If your monitor is not listed in the Windows 95 monitor list, you can define your monitor's specifications using the Diamond Monitor Wizard. To run the Wizard, follow the directions below:

1. Double click on the InControl Desktop Manager icon in the tray, or from the Start menu, select Programs, then select InControl Tools 95, then select InControl Desktop Manager.
2. From the Display Properties box, select the Settings tab.
3. Select Change Display Type.
4. Select Change next to the Monitor Type box.
5. Select Show All Devices.
6. Select (User defined monitor types). User defined monitor(InControl Tools 95) should be highlighted in the right side of the dialog box.
7. Click OK.
8. Click Wizard. This will launch the Diamond Monitor Wizard.

Known Limitations

INDEO 3.1 and 3.2 video files show lines and garbage during video playback with DirectVideo installed when the frame buffer is in High color mode. This is a known bug but there is a very easy work around. You can install the Intel Indeo video enhancements to fix this problem. Change to the Indeo directory on your CDROM where the EDGE 2.0 CDROM resides and then double click on the Setup.exe program.

Papyrus NASCAR for Windows 95 - If the joystick is not calibrated correctly, use ALT-J to bring up the joystick calibration function.

The EDGE 3D PCI Multimedia Device drivers, the game joystick drivers, and the EDGE 3D MPU401 driver for DOS shell must be installed separately using the Windows 95 Plug and Play subsystem. The Diamond installation is used primarily for ICT 95 and the secondary applications provided.

The color cursor turns into a 2 color black and white cursor when running any DirectDraw games or the NVidia accelerated games like Virtua Fighter, Panzer Dragoon, or Mech Warrior 2.

The Viewports option in the Display Properties panel in the Setting subpanel has been disabled. The current driver does not support InControl Tools 95's Viewport function. We do not plan to support Viewports on the EDGE 3D due to limitations in the underlying NV1 hardware technology.

You cannot execute the InControl Tools Wizard from the DOS command line. Use the Start menu to run the InControl Tools Wizard.

When using the InControl Tools Wizard at a resolution of 640x480 or 800x600, the wizard occludes the Display properties panel. You can fix this by choosing a monitor that supports 1024x768. If your monitor cannot support 1024x768 then the panels will overlap. You can select the Display properties panel to see the high lighted items that are discussed at anytime.

UNIVIBE Support

EDGE 3D is now supported by UNIVBE version 5.2 or later. This support provides you with more games at high resolution in MSDOS, including 7th Guest and 11th Hour. There is a fee for this software. To order UNIVBE 5.2 or later please contact SciTech Software at:

SciTech Software, Inc.
5 Governors Lane, Suite D
Chico, CA 95926 USA

Phone: 800-486-4823 or 916-894-8400
Fax: 916-894-9069
Web: www.scitechsoft.com

Contacting DIAMOND

Diamond can be reached through a number of ways:

Postal Service : Diamond Multimedia Systems, Inc.
2880 Junction Avenue
San Jose, CA 95134
Voice (Main) : (408) 325-7000
Voice (TechSppt): (408) 325-7100 [M-F 6-7; Sat 8-4 Pacific]
[plus 24hr automated help]
FAX (Main) : (408) 325-7070
FAX (Support) : (408) 325-7171
BBS (to 14400) : (408) 325-7080
BBS (to 28800) : (408) 325-7175
CompuServe : GO DMNDONLINE
America Online : GO DIAMOND

All product names listed are trademarks or copyrights of their
respective owners.

=====

Diamond Multimedia Systems, Inc.	(c) 1993-95
(408) 325-7000	All Rights Reserved

=====