

3DVision-I740

User's Manual





FCC & DOC Compliance

Federal Communications Commission Statement

This device 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 the manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in 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 the 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

Warning!! The use of shielded cables for the connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit nor expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.'

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Version 1.1

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3DVision-I740 Package & Product Information

This manual contains all the information you'll need to use the 3DVision card. Please take a moment to familiarize yourself with the design and organization of the manual.

Manual Features

This manual also uses some icons to call your attention to important information. The icons appear in the sidebar and represent the following.

- ☺ Important Information
- 😊 A recommendation or good idea
- ☹ A warning or bad idea
- 💣 Danger warning

Package Contents

The 3DVision-I740 card package contains the following items. Please inspect the package contents and confirm that everything is there. If anything is missing or damaged, call your vendor for instructions before proceeding.

The package includes:

- ☑ One 3DVision-I740 Card
- ☑ One CD Title for DIY Guide, Auto installation, Driver Files & Direct X5,
- ☑ User's Manual
- ☑ CD for 3D game(optional)

Online Manual Format

If the support disk for your AGP Card is a CD-ROM disc, a copy of the printer manual stored on the disc in Adobe Acrobat format. If so, it requires Adobe Acrobat Reader version 3.0 or later to view it. Acrobat Reader for Microsoft Windows95 may also be supplied on the Support Disk. If not, you can obtain a free copy of the Reader software from the Adobe web site which is currently at www.adobe.com as well as other locations.

If you have the online manual, you may want to install Acrobat Reader on your system hard disk. You can copy the manual over as well so that the manual is readily available without having to hunt up the Support Disk when you want to view it.

If you are unfamiliar with Acrobat Reader, please take a moment to view the Reader Online Guide which is available under the Help menu when you run Reader.

Overview

Our top-of-the-line 3DVision-I740 is a high performance AGP graphics card with integrated Intel I740Chipset. It balances high quality 3D polygon and textured graphics asseleration, widows acceleration and state-of-the-art MPEG1/MPEG2 playback with a fast integrated standard VGA and VESA BIOS extension, 220 RAMDAC and video ports. The 3DVision-I740 was designed especially for professional 3D applications and 8MB SDRAM/4MB SGRAM(optional) for 64-bit Synchronous Memory Interface.

Intel 740 Chipset Features

The Intel740 is the main component of the graphics reference design. This component delivers high performance 3D/2D graphics and video capabilities. It supports a FLASH or ROM BIOS. Up to 256Kx8 can be supported. In addition, An integrated DAC provides display resolutions up to 1600x1200. With the use of Direct Memory Execution(DME), the Intel 740 fully utilizes the bandwidth of AGP and memory, benefiting the heavy data demands of 3D.

Key Features

- **Full support for Intel's Accelerated Graphics Port(AGP)**
 - √ Supports AGP 1.0 compliant configuration setting
 - √ Supports AGP 2X mode
- **Built-in a high quality 3D engine**
 - √ Supports solid, flat, and Gouraud shading

- ✓ Supports high quality dithering
- ✓ Supports Z-test, Alpha, and scissors clipping test
- ✓ True-color 3D graphics

■ **System Requirements**

- ✓ Intel or compatible Pentium II systems
- ✓ with AGP(Accelerated Graphics Port) Interface.

■ **Display Support**

- ✓ Register compatible with VGA
- ✓ BIOS compatible with VESA super VGA
- ✓ VESA DPMS support
- ✓ Separate horizontal and vertical sync at TTL Levels

■ **Balanced PC System**

- ✓ Execute Versus DMA / Execute models
- ✓ Building a balanced system

■ **Operating Systems Supported**

- ✓ Windows 95
- ✓ Windows NT4.0

■ **High Performance 2D Accelerator**

- ✓ Built-in 42 double-words hardware command queue
- ✓ Supports Turbo Queue architecture to achieve extra-high performance

■ **8MB 100 MHz SDRAM**

■ **TV-OUT (Optional)**

■ **Video-In (Optional)**

Resolution and frequency

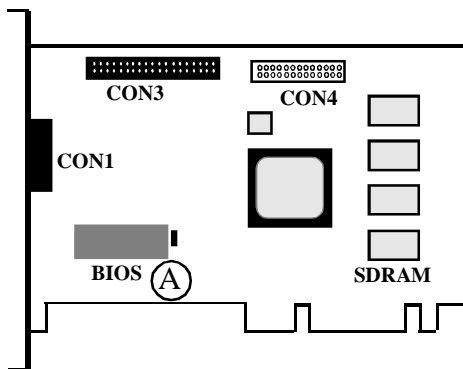
It's for Windows95 setting as the following table.

Resolution	8-bit	16-bit
320x200	60,72,75,85,	60,72,75,85,
320x240	60,72,75,85,	60,72,75,85,
512x384	60,72,75,85,	60,72,75,85,
640x350	85	85
640x480	60,72,75,,85	60,72,75,,85
800x600	56,60,72,75,85	56,60,72,75,85
1024x768	60,70,75,85,	60,70,75,85
1280x1024	60,72,75,85	60,72,75
1600x1200	60,75	-
Resolution	24-bit	
320x200	60,72,75,85,	
320x240	60,72,75,85,	
512x384	60,72,75,85,	
640x350	85	
640x480	60,72,75,,85	
800x600	56,60,72,75,85	
1024x768	60,70,75,85	
1280x1024	-	
1600x1200	-	

Layout

The illustration as the followings shows the connectors, chipset and header of the card.

Note: When your card is running under power on status, please don't touch part (A) of this card because the temperature is so high.



Connector

The illustration as the followings shows the connectors for TV-out(Optional).



3D Engine

The Intel I740 is capable of delivering a high rate of sustained 3D graphics performance with full 3D feature set functionality. This constant high level of performance is delivered through the Intel 740's hyper-pipelined 3D architecture and the incorporation of specific graphics architectural enhancements. With the use of Direct Memory Execution (DME), the Intel 740 fully utilizes the bandwidth of AGP and memory, benefiting the heavy data demands of 3D. DME is a technique that allows the Intel I740 to store and execute textures in system memory instead of local graphics memory. This provides high levels of performance and unlimited texture sizes.

Architectural enhancements within the 3D pipeline ensure that the Intel 740 uses this data in the most efficient way possible. Parallel Data Processing (PDP) allows several commands to be executed at the same time in the graphics pipeline. This translates into consistent high performance contributes to the hyper-pipelined 3D quality with the Intel 740's unique texture engine that delivers precise accuracy in interpolation operations of pixel values and color values. This detailed pixel processing maintains a high level of image quality in every scene.

Installing the Card

Before The Basic Procedure

To install a AGP Card on the mainboard you need to notice the following items.

- ☺ Unplug after switch off power.
- ☹ Make sure your hands dry
- ☺ Do not touch other parts inside computer when using "Screw driver"
- ☺ Hold insulated part when you take the interface card
- ☺ Circuit Short is caused by user's rashness when leaving screws inside computers.

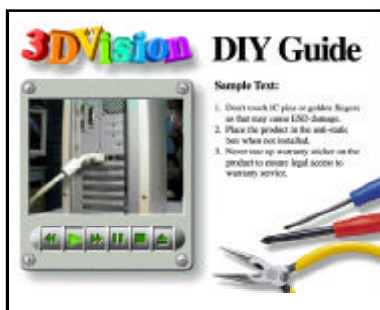
The Basic procedure of the installation

In supported CD, we have a video that teach you how to operate the card, the steps as it follows,

1. Power off the computer and monitor. Disconnect the monitor cable form the back of your computer and remove the computer cover with screw driver.
2. If there is an existing graphincs card, unscrew it from chassis and rock it gently from end to end then pull it straight up to remove it.

3. Align your card with an empty expansion AGP slot, and grasp the card by the top edge and carefully seat it firmly into the selected expansion slot.
4. Replace the screw to fasten the card in place. Replace the computer cover.
5. Plug the monitor back into your card. Make sure your monitor cable is securely fastened then turn on the computer and monitor.

The screen for example as it follows.



Using your card

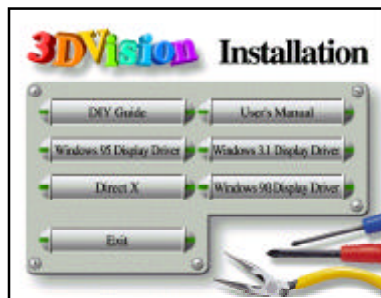
The Standard Computer System Requirements

1. Mainboard with AGP Slot
2. At least 16Mbytes EDO/SDRAM
3. Using the Windows 95(OSR2.1), Windows 98 or NT
4. DirectX 5
5. CD-ROM
6. Speaker or Earphone(Unnecessary)
7. Sound Card(Unnecessary)

(Appendix is for your reference.)

Software Setup

When you insert supported CD, it will autorun the screen, 3DVision installation as it follows, it includes DIY Guide, User's manual, Windows95, Windows98, Direct X.





Besides, we also supply Windows NT and OS/2 installation guide. You can follow the following procedure.

Software Setup

Before installing the 3D Vision Card onto your computer, make sure that the card is properly connected.

MS Windows 95 Installation

1. Start the installation program "instal.exe" on the CD
2. Click on the button "Windows 95 Display Driver"
3. Follow the steps on the screen

MS Windows 98 Installation

1. Start the installation program "instal.exe" on the CD
2. Click on the button "Windows 98 Display Driver"
3. Follow the steps on the screen

Installing Under the Windows NT

Procedure:

1. Run the Windows NT display Setup program located in the Control Panel, Select Display Icon. Double click it. To bring up Display Property page. Select "Settings" Tab on the Display Property page.
2. Click "Display Type..." button from the Display Settings options.
3. Select "Change..." button from the Display Type options.
4. Select "Have Disk..." button from the Select Device options.
5. Windows NT will prompt you for the correct path where the driver is loaded.
6. Choose "3D Vision" from the list of drivers.
7. Then follow the procedures provide by Windows NT to complete installation.
8. Restart Windows NT. Windows NT will start up with default mode using the drivers.

Appendix A :

[Procedure of Installing AGP VGA card]

Before installing AGP VGA driver, you need to setup the Windows 95 environment with installing the following items :

- OSR2.1
- USB supplemental driver
- Direct X5 driver
- VGARTD.VXD (from your mainboard vendor)

HOW TO INSTALL THIS PRODUCT

In order to install Universal Serial Bus support on a PC, Windows 95 version OSR2.0 must be running and you have to download the file "USBSUPP.EXE" from Microsoft web site.

To install this product:

(If you downloaded the file from Microsoft Web site and put file disk in driver A already, you can do the following steps.)

1. Start Windows Explorer.
2. Click on the A: drive(disk to display the contents of the floppy disk.
3. Double click on USBSUPP.EXE

How To uninstall this product

1) Once you have installed the USB Supplement, it can be uninstalled from Control Panel, Add/Remove components. If for any reason you wish to reinstall the USB supplement, you must first uninstall any version currently on your system.

General Information

For the latest information on Supportability and Troubleshooting the USB Supplement, check out <http://WWW.MICROSOFT.COM/KB> for access to our online Knowledge Base.

For USB device specific issues, contact your OEM or Vendor of the device.

These products are manufactured independent of Microsoft Corp.

HOW TO INSTALL "VGARTD.VXD"

For the latest information from your mainboard vendor, they will support VGARTD.VXD for AGP chipset. Different Chipset mainboard vendors will support different VGARTD.VXD file for you. Please install first before you install the Direx 5.