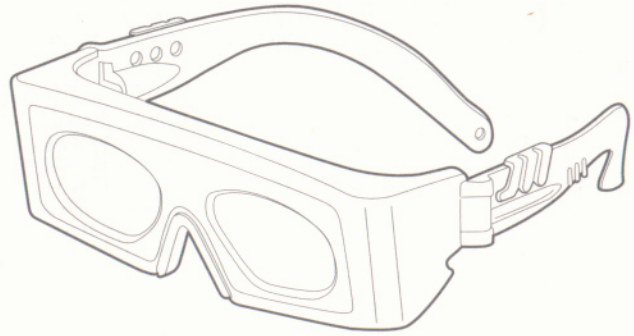
3-D SPEX™

USER'S GUIDE

NuVision
TECHNOLOGIES, INC.

3-D SPEX™

User's Guide



Wicked 3D realism
like nothing you've ever been into!

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Software Licensing Agreements are binding between the user and the respective manufacturers. Please review each individual Licensing Agreement on the CD-ROM as you install the game.

FCC Regulation

Electromagnetic Compatibility Notice (USA)

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 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into 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.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment. The customer is responsible for ensuring compliance of the modified product.

Limited 90-Day Warranty

WHAT IS COVERED

NuVision Technologies, Inc. assures you, the original purchaser of NuVision Technologies, Inc. 3-D SPEX, that the 3-D SPEX are free of defects in materials and workmanship under normal use.

NuVision Technologies, Inc. also warrants that installation software and game interface manufactured by NuVision Technologies, Inc. and distributed with the 3-D SPEX will perform substantially in accordance with the specifications set forth in the documentation provided with the 3-D SPEX.

These limited warranties are the only warranties made to you by NuVision. They are made only to you and are subject to certain limitations and conditions described here and in the documentation accompanying the 3-D SPEX. No one is authorized to change or add to these warranties.

These warranties give you specific legal rights. You may also have other rights which vary from state to state.

WHAT IS NOT COVERED

NuVision Technologies, Inc. does not warrant that the 3-D SPEX will meet your specific requirements, that they will operate without interruption or error, or that they are compatible with software or hardware products manufactured by others, including any game software distributed with the 3-D SPEX ("Third Party Products"). Warranties (if any) for Third Party Products must be obtained from the original author or manufacturer of such products. You expressly release NuVision Technologies, Inc. from all liability for loss or damages sustained as a result of the failure of the Third Party Products to perform properly.

NuVision Technologies, Inc. 3-D SPEX must be used with care. If the 3-D SPEX are not used properly or if the warnings contained in the documentation are not followed, injury may result. Accordingly, NuVision Technologies, Inc. does not warrant that your use of the 3-D SPEX will be free from injury. You agree to assume all responsibility for your use of the 3-D SPEX.

NuVision Technologies, Inc. makes every effort to ensure the accuracy of our manuals and quick install guides, but we assume no responsibility for errors in documentation. This and all information can change without notice.

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FOR HOW LONG

The above limited warranties extend for 90 days from the date the 3-D SPEX are delivered to you as the original purchaser.

WHO IS COVERED

The above limited warranties are made to you if you are the original purchaser of the 3-D SPEX. No warranty is made to any other person and you may not transfer these warranties to another person.

WHAT WE WILL DO

We will, without charge, replace on an exchange basis any 3-D SPEX which prove defective in materials or workmanship. In addition, if our installation or interface software does not perform substantially as set forth in the documentation, we will either repair or replace it, without charge to you.

If we are unable to replace the defective 3-D SPEX or if we are unable to provide corrected software within a reasonable time, we will at our sole option refund the purchase price of the 3-D SPEX.

These are your sole and exclusive remedies for any breach of warranty.

Although the limited warranties do not apply to game software, we will replace any game CD we include with the 3-D SPEX if it proves defective during the warranty period and has not been mishandled or tampered with, or shows evidence of damage by water, dirt, or corrosion by chemicals.

WHAT WE WILL NOT DO

The warranty provided to you by NuVision Technologies, Inc. will be voided if the 3-D SPEX have been mishandled or tampered with, or show evidence of damage by water, dirt, or corrosion by chemicals. It will also be voided by using the 3-D SPEX contrary to instructions or warnings in the owner's manual, or if the 3-D SPEX have incurred damage through repair (or attempted repair) by anyone other than us. We also caution you that any changes or modifications not expressly approved by us, will void your warranty.

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WHAT YOU MUST DO

You must inspect your NuVision Technologies, Inc. 3-D SPEX for damage before using them. If the 3-D SPEX have been damaged in shipping, please return them immediately to the place of purchase for replacement.

If, during the 90-day warranty period, you discover that your NuVision Technologies, Inc. 3-D SPEX are not as warranted you may be eligible for warranty service. To be eligible for warranty service, you must return the 3-D SPEX within 90 days of purchase accompanied by proof of purchase to: ATTN: RMA Department, NuVision Technologies, Inc., 1815 NW 169th Place #3060, Beaverton, OR 97006.

Before returning the 3-D SPEX for repair, you must obtain a Return Material Authorization (RMA) number by contacting our Technical Support staff at (503) 614-0567. Please pack the 3-D SPEX carefully, showing the RMA# on the outside of the box. Prepay and insure them, because we are not responsible for them while en route to us. If you do not insure the 3-D SPEX, you assume the risk of loss or damage in transit. We will pay return shipping.

OTHER CONDITIONS

The warranties set forth above are in lieu of all other implied and express warranties, whether oral or written. The agents, employees, distributors, and dealers of NuVision Technologies, Inc. are not authorized to make modifications to the warranties, nor are any additional warranties binding on NuVision. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by NuVision Technologies, Inc. and should not be relied upon as a warranty of NuVision Technologies, Inc.

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Ouch!

WARNING!

Carefully read all the following warnings in this User's Guide before you or your child begin using 3-D SPEX.

May Cause Epilepsy and Seizures

Some people have a condition that can cause them to experience epileptic seizures or lose consciousness momentarily while viewing certain kinds of flashing lights or patterns. These persons may have seizures while watching some kinds of television pictures or playing certain video or computer games. Players who have not had any previous seizures may still have an undetected seizure condition.

If you or anyone in your family has experienced symptoms linked to a seizure condition (e.g., having a seizure or a loss of awareness), consult your physician before using 3-D SPEX or any computer game.

We recommend that parents observe their children while they play computer games. DISCONTINUE USE IMMEDIATELY AND CONSULT YOUR PHYSICIAN if you or your child experience any of the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, unconsciousness, disorientation, or seizures.

Not for Use by Young Children

This product is not designed for use by children under seven years of age. Artificial stereo vision may not be safe for very young children and may cause serious, permanent damage to their vision.

Choking Hazard: Keep Out of Reach of Small Children

Babies and young children could choke on the removable nose piece. Keep the 3-D SPEX out of the reach of small children.

Stereoscopic Viewing May Cause a Slight After-Effect in Your Vision

Your eyes change to accommodate viewing through stereoscopic glasses. Wait a few moments after you remove the 3-D SPEX for your eyesight to return to normal before resuming your regular activities.

Don't Use 3-D SPEX Where Loss of Balance or Limiting Your Field of Vision May be Dangerous to You

Do not use near staircases, ledges or balconies. You may risk falling during or after use.

Never use 3-D SPEX if you already feel tired or ill.

Repetitive Stress Injury: Avoid Prolonged Usage

Some people may experience fatigue or discomfort after playing for long periods. Regardless of how you feel, it's always a good idea to take a 10–15 minute break during every hour of play.

If you experience discomfort, tingling, or numbness in your hands or arms, stop and rest. If the problem persists, consult a physician. Failure to do so could result in long-term injury. If your hands, wrists, or arms have been injured or strained in other activities, playing 3D computer games could aggravate the condition. Before playing, consult a physician.

Supervise Your Child's Use of 3-D SPEX

We recommend that you observe your children while they play computer games. Children may not always recognize physical signs of stress or injury.

3-D SPEX Are Intended for Use Only With a Desktop Computer System

Any other use could result in serious injury or death. Do not wear 3-D SPEX as sunglasses or safety glasses. Never wear 3-D SPEX while driving, swimming, or operating machinery.

Electric Shock Hazard

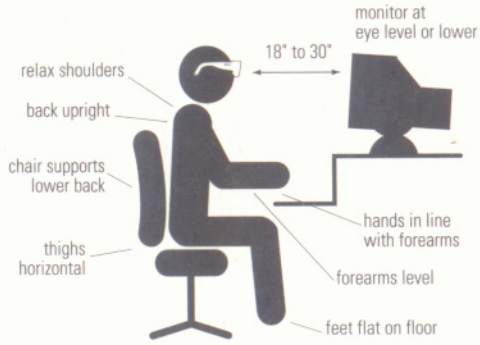
Do not use 3-D SPEX near water. You risk electric shock to yourself, as well as damage to the 3-D SPEX.

Ergonomics Guide

To fully enjoy immersive 3D action and reduce fatigue, personalize your gaming environment:

- Choose a chair that supports your back.
- Place your monitor at eye level or somewhat lower, about 18"–30" away.
- Sit with your feet flat on the floor or on a footrest.
- Keep your hands in line with your forearms and keep your forearms parallel to the floor.
- Take frequent breaks: at least 15 minutes per hour of play. Use this time to stretch, get a snack, or talk to your cat.
- If you feel queasy or experience motion sickness, try slowing down the action in the game.
- Alternate between games with key commands and games requiring a joystick.
- Shake out your wrists frequently to avoid straining them.
- Darken the room, or place the monitor perpendicular to the light source.
- Turn down the brightness on your monitor and increase the contrast.

- Keep your computer screen clean. The pictures you draw in the dust may be cute, but it sure cuts down on your 3D viewing accuracy.
- Blink your eyes frequently to keep them moist.
- 3-D SPEX are designed to fit over your regular glasses. You can try removing the nosepiece for a better fit.
- Most of all, pay attention to what your body is telling you. When you are tired or tense, take a break.



What It Takes

System Requirements

3-D SPEX provide startling 3D visualization for serious gamers. The more powerful your system, the better the 3D effect. You need a desktop system: the 3-D SPEX were not designed for use with laptops.

Minimum

- IBM™ PC compatible 486-DX2/66 or faster, 8 MB of RAM, DOS 5.0 or later (including MS DOS only mode of Microsoft® Windows® 95)
- 2X CD-ROM
- 30 MB free hard disk space
- VGA video card and monitor

- Parallel (printer) port
- Household electrical outlet (120 V @ 60 Hz)
- Games that support LCDBios version 1.21

Optimum

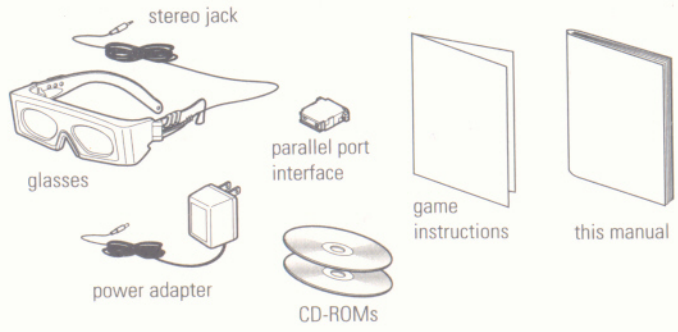
Since the 3-D SPEX work best with a fast, powerful computer, here's what we recommend:

- Pentium™-class processor with 16 MB of RAM
- SVGA color monitor that supports 100 Hz vertical refresh rate
- Video card that supports VESA 1.2 Bios in ROM or a VBE emulator.
- 80 MB of free hard disk space
- 4X CD-ROM or faster

Plug It In

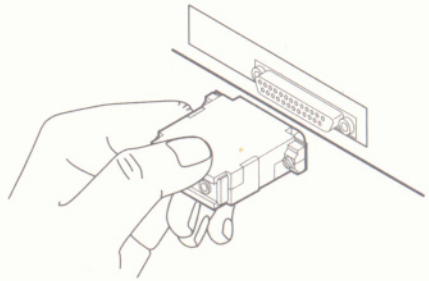
Installing the Hardware

Before hooking everything up, make sure you have the following items:

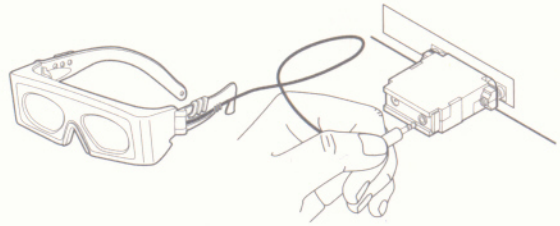


Installation

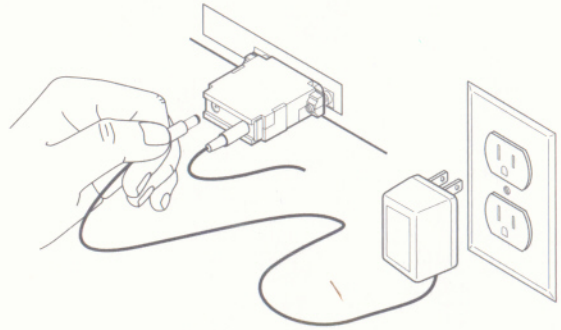
1. Turn off your computer.
2. Plug the parallel port interface into a parallel port on your computer.



3. Plug the 3-D SPEX into the glasses jack on the back of the parallel port interface.

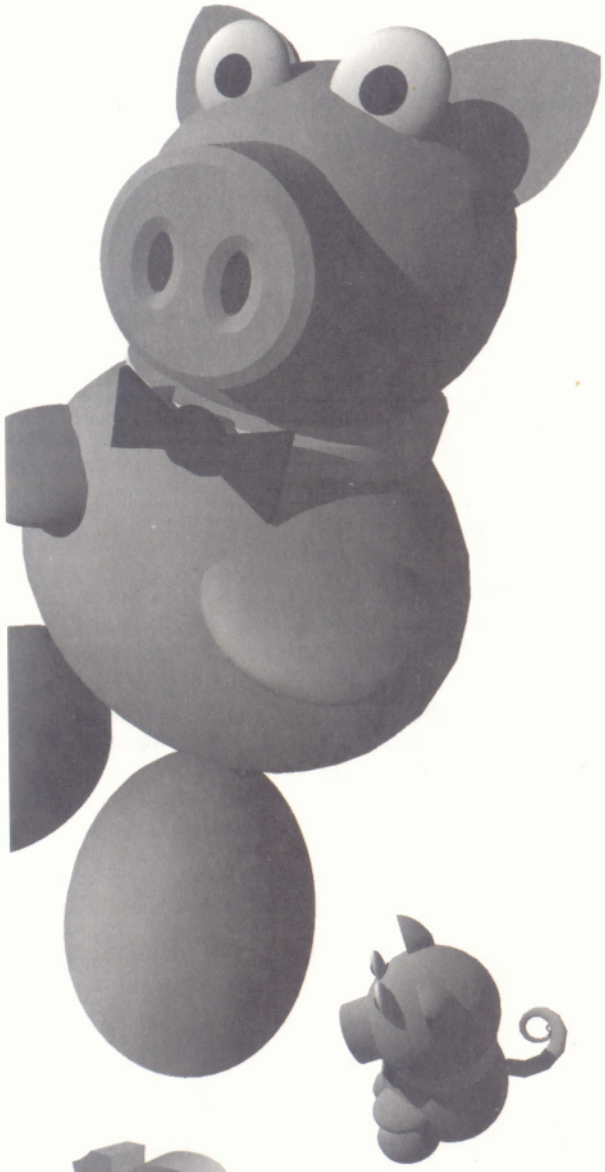


4. Plug the power adapter into the parallel port interface and into a live electrical outlet (120 V @ 60 Hz).



5. Turn on your computer.

The 3-D SPEX may have a mottled appearance for about 5–10 seconds when the software starts up. This looks odd, but it's normal. The 3-D SPEX are just warming up. The same thing happens when the power is turned off or the 3-D SPEX are unplugged. However, if they sprout legs and start walking away, you know you've really got problems. Stop feeding them potato chips!



Play It

Installing the Game Software

Your 3-D SPEX come with cool 3D games. The instructions below are for installing Interplay's™ *Descent II™: Destination Quartzon* game.

For best results, do not run the game under Microsoft Windows. It is strongly recommended that you install and run *Descent II: Destination Quartzon* under DOS.

1 Insert the *Descent II: Destination Quartzon* CD into your CD-ROM drive.

DOS:
1. At the DOS prompt, type D: (or whichever letter corresponds to your CD-ROM drive) and press ENTER.
2. Type INSTALL and press ENTER.

Windows 95: Click on the Install button on the Autorun dialog box that pops up. Or, click on the install icon on the CD.

2 The *Descent II: Destination Quartzon* Installer will first play a test movie to determine the abilities of your system. When the test is completed, it will suggest either high- or low-resolution movies.

Warning: If you choose high-resolution movies when the Installer has recommended low-resolution, you will probably experience sound and video problems during playbacks.

3 The Installer will give you the choice of several install options, and the disk space required based on your movie resolution. These options are:

- **No Movies**: Copies all game-related data to the hard drive, leaving the cinematics on the CD. This is the recommended level of installation.
- **Small Movies**: Copies all game-related data and level cinematics to the hard drive. The introduction and endgame movies remain on the CD.
- **All Movies**: The mega-install! All game files and cinematics are installed to your hard drive. However, you will still need to insert the *Descent II: Destination Quartzon* CD to run the game.

Note: If the Installer recommends low-resolution movies, you may try switching to High Resolution and using All movies install. This will install the movie files to your hard drive, which may improve the movie playback to an acceptable level.

4 Choose a hard drive in the dialog box (the amount of free space on each hard drive will be displayed).

5 The installer will install the game in the subdirectory \GAMES\DESCENT2. You can install the game in a different location by entering a new subdirectory name.

6 When the game is finished installing, the *Descent II: Destination Quartzon* setup screen will appear. This screen lets you customize the sound and music setup. If you are not sure about these options, you may choose Auto-Detect Sound Hardware. The Installer then detects your hardware setup and chooses the options it thinks are best.

7 Use the Test Digital and Test Music options to make sure your sound card is set up correctly.

Warning: If you are installing *Descent II: Destination Quartzon* and there is a hardware conflict, Auto-Detect may lock up your computer. If this happens, reset your computer and set up your sound card manually.

8 To choose a VR device, select "Choose VR device", then select 3-D SPEX and choose 1 of the 4 video resolutions.

Running the Games

We recommend that you run the games from DOS. If you have less than 16 MB of memory on your system, you have no choice: you must run the games from DOS.

1 Insert the *Descent II: Destination Quartzon* CD into your CD-ROM drive (if you haven't already).

DOS:

1. At the DOS prompt, change to the *Descent II: Destination Quartzon* drive and directory. For example, type: CD C:\GAMES\DESCENT2 and press ENTER.
2. Type D23D and press ENTER.

Windows 95:

1. Open the Explorer.
2. Click on the *Descent II: Destination Quartzon* directory. For example, click C:\GAMES\DESCENT2.
3. Double-click the D23D.BAT icon.

2 *Descent II: Destination Quartzon* will play the introductory movie (this is in 2D). The movie gives background information and narrative concerning events following the conclusion of *Descent 1: First Strike*.

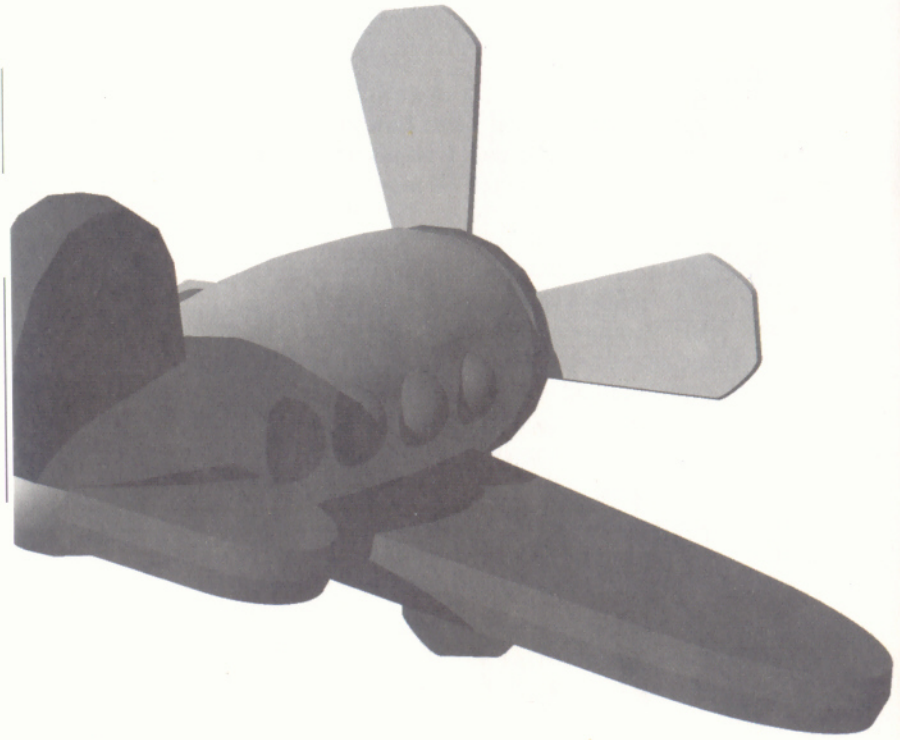
If this is the first time you've started *Descent II: Destination Quartzon*, you'll be asked to enter your pilot name. This name is used to save your settings and to identify yourself during multiplayer games.

You will then be asked to choose an input device. Use the up and down arrow keys on your keyboard to highlight an option and press ENTER to select it.

You will now be at *Descent II: Destination Quartzon's* Main Menu. Once you start the game, the screen displays the message "PREPARE FOR DESCENT". After this, a 3D scene appears on the screen and the lenses of the 3-D SPEX turn gray, indicating that they are working properly. If they do not, see "Troubleshooting" on page 35. You will know there is a 3D image on the screen if there appears to be two images when you view the screen without the 3-D SPEX. If you see three images, and they start talking back at you, well.....

Hint: To avoid flicker, turn off all fluorescent lights when playing the games. If your 3-D SPEX still flicker, see "Minimize Flicker" on page 22.

Hint: Playing instructions for some games are located on the CD in the manual directory.



Howzit Work?

Stereoscopic Vision and 3D

When you see the world through both eyes, you are actually looking at two pictures merged into one. Your right eye and your left eye each deliver a separate image to your brain, which meshes these two images into one three-dimensional picture.

Most video games in the past were only able to provide one image on the screen. So 3D effects had to be simulated by other means. Games manufacturers drew scenes in which distant objects appeared smaller and out of focus, while nearby objects were sharper and overlapped the distant objects.

Your 3-D SPEX, however, are able to provide a different view for each eye, more closely simulating true 3D vision.

How the 3-D SPEX Work

Each scene of your 3D game has two images, one drawn from a right-eye view and the other from a left-eye view. The game displays these alternating views so fast that your eyes cannot see the change.

Your 3-D SPEX are equipped with shutters in each lens. So, when the right-eye image is displayed on the screen, the left lens of your 3-D SPEX is closed, allowing only the right eye to see the image. When the left-eye image is displayed, the process is reversed and only the left eye can see the image. These images alternate so quickly that the eye sees only one smooth picture, making it look like you are actually inside a really cool 3D environment.

Zowie!

Optimizing Performance

Now that you are hooked up and plugged in, you can customize your gaming environment so that it is most comfortable for you.

Use the Best Equipment

Your 3-D SPEX run best on fast, powerful machines. To take the best advantage of this 3D technology, your system should include the following:

- Games that support LCDBios version 1.21 and VESA 1.2 video modes. (This should be indicated on the game package.)

- A video card that supports VESA 1.2 Bios in ROM. Or you can use an emulator that supports VBE 1.2, such as the UniVBE 5.1a by SciTech Software. You can reach their sales department at (916) 894-8400. Their web site also contains information on the latest video cards (www.scitechsoft.com).
- A computer monitor that supports the resolution of your video card and vertical refresh rates of 100 Hz or higher.
- Use the video card's vertical refresh rate utility to select the highest vertical refresh rate that your monitor can handle for each resolution, up to 120 Hz.

Create the Best Environment

- Avoid playing directly under fluorescent lights.
- Decrease your monitor's brightness and increase the contrast until the image is comfortable to look at. (See the manual that came with your monitor for instructions on adjusting these controls.)

Minimize Flicker

In some cases, the 3-D SPEX may have a noticeable flicker, which may cause eye strain. If this bothers you, follow the instructions on the next page.

What Causes Flicker

The largest factor in whether the 3-D SPEX flicker is the vertical refresh rate of your video card. This is the number of times in a second that the screen is redrawn from top to bottom. Because some monitors can handle higher vertical refresh rates and others cannot, video card manufacturers generally set the vertical refresh rates low to accommodate a wider variety of monitors.

With your 3-D SPEX, the range of vertical refresh rates provide varying degrees of comfort. In dim light, a vertical refresh rate of 70 Hz may be comfortable for some people, but in harsh light (i.e. fluorescent lighting) 70 Hz could cause flicker and eventually eye strain. Vertical refresh rates of 100 Hz or higher are generally comfortable to most people and do not cause noticeable flicker.

Note: Some people are more sensitive to flicker than others. If you find you are sensitive to flicker, follow the instructions below to optimize your system. If you do not notice a flicker or if it does not cause you discomfort, you are better off NOT changing the default settings for the vertical refresh rates.

How to Minimize the Flicker

1. Reduce ambient lighting, especially fluorescent lights.
2. Make sure you are using the recommended equipment listed on page 21.
3. Choose a higher vertical refresh rate. You can do this through the software utility that came with your video card. (If you no longer have that utility, you can generally

find it on the video card manufacturer's Web site or BBS, etc.)

- Set the vertical refresh rate as high as your monitor can handle for each resolution.
- Optimum performance is in the range of 100–120 Hz.
- Do not set your refresh rates above 120 Hz. These higher refresh rates have no effect on the flicker and will reduce your image quality.

Warning: Setting a vertical refresh rate higher than your monitor can handle can cause permanent damage to your monitor. Be sure to read your monitor's specifications before setting the vertical refresh rate.

Choosing a Different Parallel Port

The game installation uses LPT1 as the default parallel port. To change this to a different port:

1. At the DOS prompt, change to the appropriate game directory on your hard drive. For example, C:\GAMES\DESCENT2.
2. Type SETLCDLP and press ENTER.

This will run a quick test of the three LPT ports and determine which one the glasses are plugged into. It will then set the environmental variable LCDPORT to the correct parallel port (LPT1, LPT2, or LPT3) and can set this variable in the AUTOEXEC.BAT file on the C:\ drive.

You only have to run the SETLCDLP utility once: you do not have to run it each time you play a game. However, if the LCDPORT variable is changed through some other program, you will then have to run SETLCDLP to reset it to the correct LPT port.

If you wish to boot from your A:\ drive, copy the following line in the C:\AUTOEXEC.BAT file to the appropriate place in the A:\AUTOEXEC.BAT file:

```
SET LCDPORT=LPTX
```

(where LPTX represents the parallel port: LPT1, LPT2, or LPT3).

Increasing Game Speed

There are two ways to increase the game speed. You can edit the game's batch file to adjust the *Interrupt Frequency* or the *LockFlip*.

Note: Both of these adjustments increase the game's speed, but may decrease the image quality. You may find that the original settings work best.

Caution: We recommend you preserve the original settings by first copying the batch file to a new name before editing it. Or you can restore the original settings by re-installing the game.

Adjusting the Interrupt Frequency

The Interrupt Frequency determines how often the 3-D SPEX check that it is time to switch lenses. The more frequently the 3-D SPEX check, the slower the game runs. Reducing the Interrupt Frequency will increase the speed of the game, but decrease the accuracy of the 3D viewing.

To change the Interrupt Frequency, edit the game's batch file that runs the LCDBios driver.

1. At the DOS prompt, change to the directory that contains the game you wish to adjust. For example, type: CD C:\GAMES\DESCENT2 and press ENTER.
2. Type EDIT and then the name of the batch file for the game. To edit the batch file for *Descent II: Destination Quartzon* for example, type EDIT D23D.BAT and press ENTER.
3. Add the /FASTINT:X switch at the end of the line that begins with "CALL LCDGLASS", where X is a whole number from -2 to 2. The higher the number, the more often the 3-D SPEX check when to switch lenses, and the slower the game runs.
4. Press ALT F, then S to save your changes.
5. Press ALT F, then X to exit.

Changing the LockFlip

The LockFlip forces the 3-D SPEX to switch only when the raster scan is moving back to the top of the screen to draw the new image. By turning this setting off, your game will run faster, but there will be a flickering black band at the bottom of the screen.

To change the LockFlip, edit the game's batch file that runs the LCDBios driver.

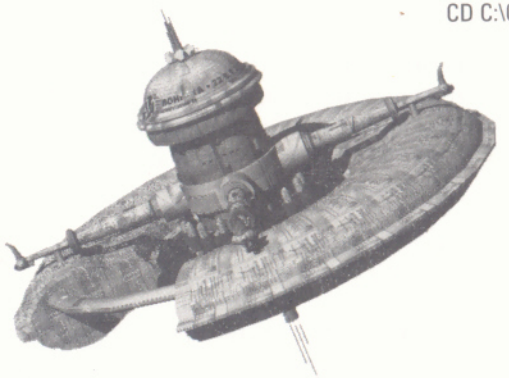
1. At the DOS prompt, change to the directory that contains the game you wish to adjust. For example, type: CD C:\GAMES\DESCENT2 and press ENTER.
2. Type EDIT and then the name of the batch file for the game. To edit the batch file for *Descent II: Destination Quartzon* for example, type EDIT D23D.BAT and press ENTER.
3. Add /LOCKFLIP- at the end of the line that begins with "CALL LCDGLASS" to turn it off:

lockflip on:	lockflip off:
/LOCKFLIP	/LOCKFLIP-

4. Press ALT F, then S to save your changes.
5. Press ALT F, then X to exit.

If a black band appears, you can change its location by adding the DelayFlip switch in the batch file that runs the LCDBios driver.

1. At the DOS prompt, change to the directory that contains the game you wish to adjust. For example, type:



CD C:\GAMES\DESCENT2 and press ENTER.

2 Type EDIT and then the name of the batch file for the game. To edit the batch file for *Descent II: Destination Quartzon* for example, type EDIT D23D.BAT and press ENTER.

3 Type /DELAYFLIP:ZZ at the end of the line that begins with "CALL LCDGLASS".

- To move the band down, replace the "zz" with positive numbers.
- To move the band up, replace the "zz" with negative numbers.

4 Press ALT F, then S to save your changes.

5 Press ALT F, then X to exit.

3D Funzies

NuViewer™

One of the CDs that came with your 3-D SPEX includes NuVision Technologies, Inc. NuViewer software that allows you to view 3D images on your screen. This CD also contains sample reels that display the images in sequence like a slide show. You can run NuViewer directly from the CD. You do not need to install it onto your hard drive.

For a full description of the NuViewer DOS commands, see the README.TXT file on the NuViewer CD (in the \NUVIEWER directory).

Using NuViewer

1 Go to DOS.

Windows 95: Restart in DOS mode.

Windows: Exit Windows.

2 Insert the NuViewer CD.

3 Type D: (or whichever letter corresponds to your CD-ROM drive) and press ENTER.

4 Type CD/NUVIEWER and press ENTER.

5 If the 3-D SPEX are plugged into a parallel port other than LPT1, run the SETLCDLP utility, as described in "Choosing a Different Parallel Port" on page 24.

6 Type DIR *.BAT and press ENTER to list the sample image reels.

7 Type the name of the image reel you wish to view and press ENTER. For example, if you want to view the STILLLIFE.BAT reel, type STILLLIFE and press ENTER.

A series of 3D images will be displayed on the screen. Each image contains a left-eye and right-eye view. For example, here are two images prepared with a left and right view. Note their subtle differences.

Copying NuViewer to the Hard Drive (Optional)

If you wish to copy the NuViewer files to your hard drive, you can do this either in DOS or Windows 95:

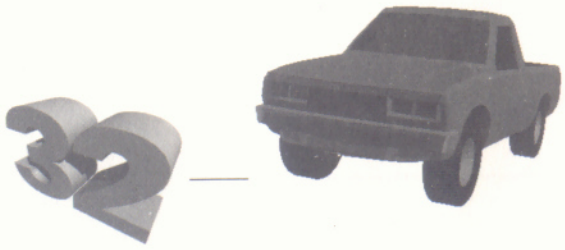
1 Insert the NuViewer CD.

2 Copy the entire NUVIEWER directory to your hard drive:

Windows 95: In the Explorer, click on the CD-ROM icon, then select the NuViewer folder. Drag and drop the folder to wherever you want it on your hard drive.

DOS: Type
XCOPY D:\NUVIEWER *target directory* /S

(where D:\ represents your CD-ROM drive and *target directory* represents the directory on your hard drive you want to copy the files to)



Care and Feeding

3-D SPEX Maintenance

Your NuVision Technologies, Inc. stereoscopic 3-D SPEX represent the state of the art in high-speed optical switching technology. With proper care they should give you many years of trouble-free operation and hours of wicked fun.

Handling

As with any optical device, use a little care to prevent damage to the optical elements of your 3-D SPEX.

- Don't leave your 3-D SPEX unprotected in your briefcase or backpack. For minimal protection, you can put them in a tube sock.
- Store the 3-D SPEX away from dust and moisture.

- Avoid stressing the 3-D SPEX, frames, and wiring. Do not stretch or bend the frames.
- Do not scratch the lenses.

Cleaning

Do not use harsh solvents such as acetone when cleaning the lenses. Use a little distilled water and a soft cloth to buff the lenses lightly.

Troubleshooting

I can't access my CD-ROM drive when I boot into MS-DOS only mode

CD-ROM drivers used by Windows 95 are different from those used by MS-DOS only mode. To load the CD-ROM driver for MS-DOS only mode, follow the instructions in the MS-DOS help file on your Windows 95 CD. To access this information:

1. Run Windows 95 and insert the Windows 95 CD into your CD-ROM.
2. In the Windows 95 window, click "Browse this CD."
3. Double-click the OTHER folder.
4. Double-click the OLDMSDOS folder.

5 Double-click HELP.COM.

6 Click MSCDEX in the list of commands. The Notes, Syntax, and Examples sections provide instructions for loading the CD-ROM driver.

The 3-D SPEX do not appear to be switching

If the lenses are not gray when a 3D image is on the screen, check that:

- a stereoscopic image is displayed on the screen (when viewed without the 3-D SPEX, this will look like a double image).
- you are using a game that supports LCDBios version 1.21 and VESA 1.2 video modes (this should be indicated on the game package).
- the power adapter and 3-D SPEX jack are connected to the parallel port interface.
- the power adapter is plugged into a live outlet (120 V @ 60 Hz).
- the parallel port interface is securely connected to the computer parallel port.
- the parallel port is working (i.e., your printer worked fine before you unplugged it to plug in the 3-D SPEX).
- the printer is not active (if it is attached through a splitter to the same parallel port as your 3-D SPEX).

- the batch file that loads LCDBios specifies the correct parallel port: /LPT1, /LPT2, or /LPT3. (See "Choosing a Different Parallel Port" on page 24.)
- LCDPORT is set to the correct port. To do this, run SETLCDLP as described in "Choosing a Different Parallel Port" on page 24.

The printer goes wild when I run the 3-D SPEX

Make sure:

- the parallel port doesn't have an interrupt conflict with another device.
- the printer is not active (if it is attached through a splitter to the same parallel port as your 3-D SPEX).
- the batch file that loads LCDBios specifies the correct parallel port: /LPT1, /LPT2, or /LPT3. See "Choosing a Different Parallel Port" on page 24.

The 3-D SPEX seem to flicker

- See "Minimize Flicker" on page 22.
- If possible, avoid using 3-D SPEX under fluorescent lights.
- Use 3-D SPEX in a dimly-lit room. If there is glare, try to reduce it. Be innovative: use a hat or create a tent around your monitor to block the glare.
- Turn up the contrast on your monitor.
- Turn down the brightness on your monitor.

I can't use any of the higher resolutions

Make sure:

- your monitor supports higher resolutions.
- your game supports higher resolutions.
- your video card supports higher resolutions.
- your video card supports VBE 1.2 or higher. If not, load a VBE emulator, such as UniVBE. (See "Use the Best Equipment" on page 21.)

Warning: Some video cards are not supported by UniVBE. Check the SciTech Web site (www.scitechsoft.com) to see if your video card is supported.

The 3-D SPEX seem to stutter

This is caused when the computer is working on something else and is too busy to switch the 3-D SPEX when it should. This happens most noticeably when running a game in the MS-DOS box under Windows or Windows 95. To correct the problem:

1. Quit Windows or Windows 95.
2. Run the game from DOS.

Note: The 3-D SPEX work best when you run the games in DOS only mode.

I have a problem that is not covered in this troubleshooting section

There is a troubleshooting section for some games in the on-line manual on the CD-ROM. Please consult the appropriate document.

Technical Support

NuVision Technologies, Inc. provides technical support for the 3-D SPEX. If you have trouble with the game you are playing, see the Quick Install Card for that game or the on-line documentation that came with the game.

For problems with the 3-D SPEX

Call NuVision Technologies, Inc. at (503) 614-0567 or fax us at (503) 614-0867.

Technical support hours are Monday through Friday, 8:00 AM to 5:00 PM (PST).

You can also reach us by email at: support@nuvision3d.com.

For Net surfers, NuVision Technologies, Inc. can also be reached at: http://www.nuvision3d.com.

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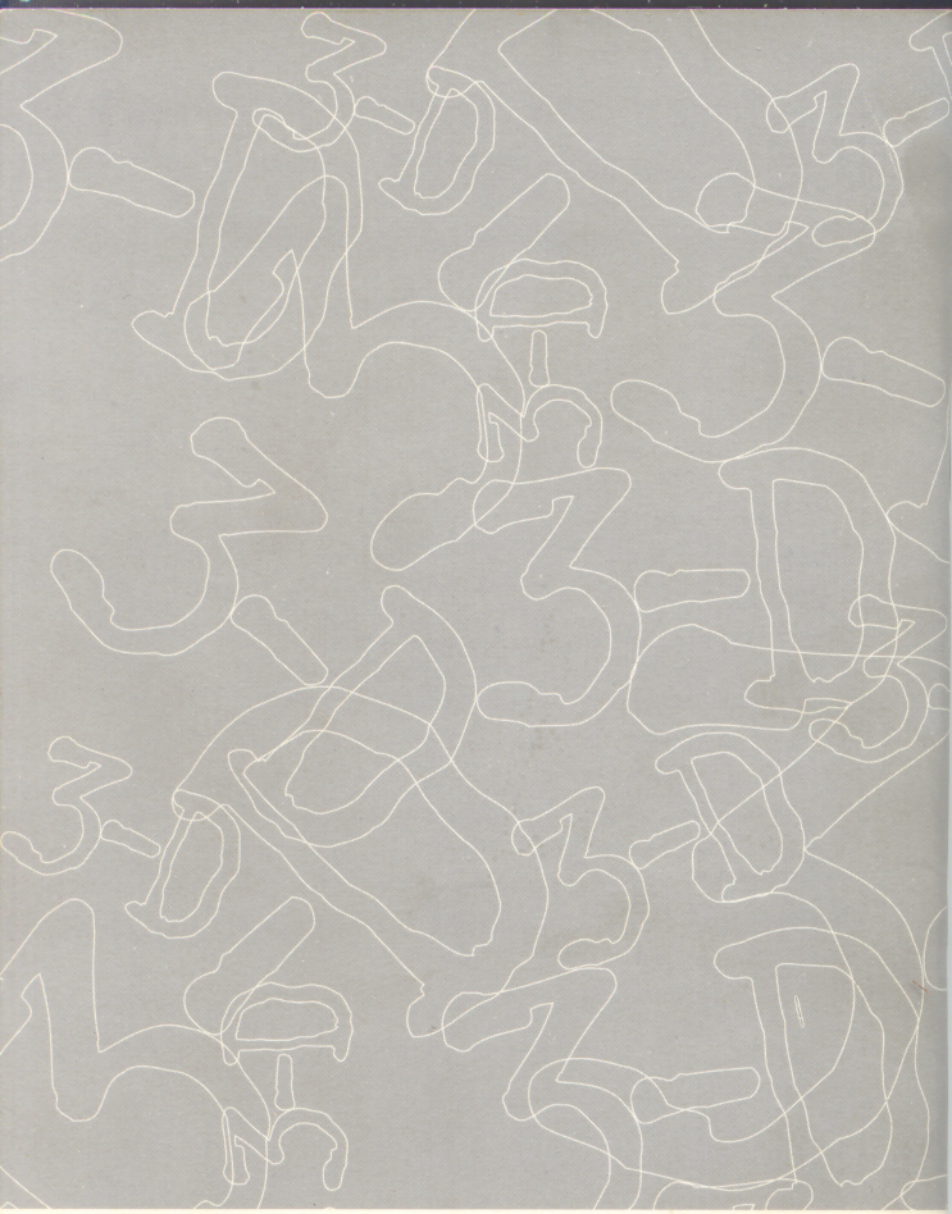

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