

# QUADRO WORKSTATION APPLICATION ELSA MAXtreme Release Notes

Based on Version 4.00.21

NVIDIA Corporation April 17, 2002 Published by NVIDIA Corporation 2701 San Tomas Expressway Santa Clara, CA 95050

Copyright © 2002 NVIDIA Corporation. All rights reserved.

This software may not, in whole or in part, be copied through any means, mechanical, electromechanical, or otherwise, without the express permission of NVIDIA Corporation.

Information furnished is believed to be accurate and reliable. However, NVIDIA assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No License is granted by implication or otherwise under any patent or patent rights of NVIDIA Corporation.

Specifications mentioned in the software are subject to change without notice.

NVIDIA Corporation products are not authorized for use as critical components in life support devices or systems without express written approval of NVIDIA Corporation.

NVIDIA, the NVIDIA logo, nForce, nView, GeForce, GeForce2, GeForce 256, GeForce3, Quadro, QuadroView, Riva 128, RIVA 128ZX, RIVA TNT, TNT2, and Vanta are registered trademarks or trademarks of NVIDIA Corporation in the United States and/or other countries.

AutoDesk, AutoCAD, AutoCAD Architectural Desktop, and Mechanical Desktop, 3D Studio, 3D Studio MAX, 3D Studio VIZ, and 3ds max are trademarks or registered trademarks of Autodesk.

ELSA GLoria, ELSA Synergy, ELSA MAXtreme, and ELSA POWERdraft are trademarks of ELSA AG.

Windows, Windows logo, Windows NT, and/or other Microsoft products referenced in this guide are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries.

OpenGL is a registered trademark of Silicon Graphics Inc.

Other company and product names may be trademarks or registered trademarks of the respective owners with which they are associated.

# **Table of Contents**

#### 1. About ELSA MAXtreme

ELSA MAXtreme Features2Fog.2MAXtremeStereo2MAXtremeRender2Online Help2Release History3Supported Languages3User Interface3Online Help3System Requirements3Operating System & Disk Space4Hardware: Supported NVIDIA Products4NVIDIA Driver Software5Software Components5
MAXtremeStereo       2         MAXtremeRender       2         Online Help       2         Release History       3         Supported Languages       3         User Interface       3         Online Help       3         Optime Help       3         Optime Help       3         Optime Help       4         MaxtremeRequirements       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
MAXtremeRender2Online Help2Release History3Supported Languages3User Interface3Online Help3System Requirements3Operating System & Disk Space4Hardware: Supported NVIDIA Products4NVIDIA Driver Software5
Online Help2Release History3Supported Languages3User Interface3Online Help3System Requirements3Operating System & Disk Space4Hardware: Supported NVIDIA Products4NVIDIA Driver Software5
Release History       3         Supported Languages       3         User Interface       3         Online Help       3         System Requirements       3         Operating System & Disk Space       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
Supported Languages       3         User Interface       3         Online Help       3         System Requirements       3         Operating System & Disk Space       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
User Interface.       3         Online Help       3         System Requirements.       3         Operating System & Disk Space       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
Online Help       3         System Requirements       3         Operating System & Disk Space       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
System Requirements.       3         Operating System & Disk Space       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
Operating System & Disk Space       4         Hardware: Supported NVIDIA Products       4         NVIDIA Driver Software       5
Hardware: Supported NVIDIA Products 4 NVIDIA Driver Software
NVIDIA Driver Software
Software Components
3D Studio Applications 5
Stereo Requirements
Overview of Resolved Issues by Version 6
Issues Resolved in Version 4.00.21 6
Issues Resolved in Version 4.00.20 6
Issues Resolved in Version 4.00.13 6
Issues Resolved in Version 4.00.09 7
Issues Resolved in Version 4.00.05 7
Issues Resolved in Version 4.00.04 7
Issues Resolved in Version 4.00.03 7
Issues Resolved in Version 4.00.00 7
Other Issues Resolved Between Versions
4.00.00 and 4.00.05
Issues Resolved in Version 3.00.02 8
Known Issues
Spotlight Overshooting
Fog
Stereo
MAXtremeStereo9

# 2. Installation, Configuration, And Uninstallation

Installing ELSA MAXtreme	0
Accessing ELSA MAXtreme Driver Settings 1	0
Accessing ELSA MAXtreme Stereo Settings 1	2
Uninstalling ELSA MAXtreme1	3

#### A. MAXtremeRender for ELSA MAXtreme 3.x



Table 1.1	ELSA MAXtreme Release History	
Table 1.2	Supported NVIDIA Products	



**List of Figures** 

Figure 2.1	ELSA MAXtreme Driver Configuration	1
Figure 2.2	3ds max Preference Settings	2
Figure 2.3	ELSA MAXtreme Stereo Settings	3

### **C** H A P T E R



# **ABOUT ELSA MAXTREME**

This chapter contains the following sections:

- "Overview" on page 1
- "ELSA MAXtreme Features" on page 2
- "Release History" on page 3
- "Supported Languages" on page 3
- "System Requirements" on page 3
- "Overview of Resolved Issues by Version" on page 6
- "Known Issues" on page 8

### Overview

ELSA MAXtreme<sup>TM</sup> is a Quadro<sup>TM</sup> application utility that is designed to work with 3D Studio applications such as 3ds max 4, 3D Studio MAX 3.*x*, and 3D Studio VIZ 3.*x*. (See "3D Studio Applications" on page 5 for details on version requirements.)

The ELSA MAXtreme 3D driver is highly optimized for use with a graphics card based on an NVIDIA<sup>®</sup> Quadro or Quadro2 graphics processing unit (GPU), which enhances the capabilities of the interactive renderer.

You can use the ELSA MAXtreme 3D driver configuration dialog box to customize the driver for display quality and speed. For further details, see "Installation, Configuration, And Uninstallation" on page 10.

# **ELSA MAXtreme Features**

The following sections provide an overview of the key features in ELSA MAXtreme:

- "Fog" on page 2
- "MAXtremeStereo" on page 2
- "MAXtremeRender" on page 2
- "Online Help" on page 3

# Fog

ELSA MAXtreme supports the rendering of Standard fog into the viewports since version 1.01.00. You can enable this feature from the Configuration dialog box. Currently, only one Linear or Exponential Standard Fog is supported; additional Standard Fogs and all Layered Fogs are ignored.

### **MAXtremeStereo**

ELSA MAXtreme supports stereo viewing within viewports through the MAXtremeStereo plug-in software, which can be installed with the ELSA MAXtreme driver software.

To view your drawings and animations in true stereo, in addition to the "System Requirements" on page 3, you need the requirements in "Stereo Requirements" on page 5.

### MAXtremeRender

**Note:** The ELSA MAXtremeRender feature *only* applies to ELSA MAXtreme versions 3.*x*. Since this feature is incorporated in 3D Studio 4.*x* applications, it is not available as a separate feature in ELSA MAXtreme versions 4.*x*. If you are running ELSA MAXtreme Release 3.*x*, see Appendix A "MAXtremeRender for ELSA MAXtreme 3.*x*" on page 14.

### **Online Help**

Within the 3D Studio application, when you have any ELSA MAXtreme dialog box open, press **F1** to display online Help, which provides user information about ELSA MAXtreme features and configuration options.

During ELSA MAXtreme installation, MAXtreme Help (a . chm file) is usually installed in the 3D Studio Help directory. You can also view the Help outside the application, if needed.

# **Release History**

Table 1.1 contains a summary of the ELSA MAXtreme driver releases and the versions associated with them. Some versions listed may not have been released outside of NVIDIA.

 Table 1.1
 ELSA MAXtreme Release History

Release	Version	Comments
Release 4	4.00.00 - 4.00.21	Releases ongoing
Release 3	3.00.00 - 3.00.04	

# **Supported Languages**

#### **User Interface**

The ELSA MAXtreme user interface supports the following languages:

- English
- French

### **Online Help**

The ELSA MAXtreme online Help supports the following languages:

Norwegian
Portuguese (Brazil)
Russian
Spanish
e Swedish
Thai

# **System Requirements**

Before you install and use ELSA MAXtreme, be sure you have the following prerequisites as explained in these sections:

- "Operating System & Disk Space" on page 4
- "Hardware: Supported NVIDIA Products" on page 4
- "NVIDIA Driver Software" on page 5
- "Software Components" on page 5
- "3D Studio Applications" on page 5
- "Stereo Requirements" on page 5

#### **Operating System & Disk Space**

This release of ELSA MAXtreme requires approximately 2.5 MB of disk space and includes drivers for each of the following operating systems:

- Microsoft Windows XP (Home and Professional Editions)
- Microsoft Windows 2000
- Microsoft Windows NT 4.0 (at least, Service Pack 4)

#### Hardware: Supported NVIDIA Products

You need a workstation graphics card based on one of the NVIDIA products *or* an equivalent ELSA graphics card as listed in Table 1.2.

NVIDIA Workstation Product	Equivalent ELSA Graphics Card (distributed by ELSA)
Quadro™ 4 500 GoGL	
Quadro4 900 XGL	
Quadro4 750 XGL	
Quadro4 700 XGL	
Quadro4 550 XGL	
Quadro4 200 NVS	
Quadro4 400 NVS	
Quadro™ DCC	ELSA GLoria DCC
Quadro™ 2 Pro	ELSA GLoria III
Quadro2 MXR	ELSA Synergy III
Quadro2 Go	
Quadro2 EX	ELSA Synergy 2000
Quadro™	ELSA GLoria II

 Table 1.2
 Supported NVIDIA Products

**Note:** ELSA MAXtreme 3.xx and later releases will not run with the ELSA Synergy II graphics card. Older versions (*earlier than Release 3*) of

ELSA MAXtreme can run with the ELSA Synergy II card *and* ELSA driver software.

#### **NVIDIA Driver Software**

You need one of the following NVIDIA Drivers:

- NVIDIA Windows NT 4.0 Display Driver (at least Version 6.46) or
- NVIDIA Windows XP/2000 Display Driver (at least Version 6.46)

#### **Software Components**

The ELSA MAXtreme Setup directory contains the following files:

- Readme.txt file
- Setup.exe installation program for Windows

The ELSA MAXtreme Setup program automatically installs the version of ELSA MAXtreme (Release 3 or Release 4) that is compatible with your installed version of the 3D Studio MAX/VIZ application. For details, see 3D Studio Applications below.

• Other files required for installation

During ELSA MAXtreme installation, MAXtreme Help (.chm file) is usually installed in the 3D Studio Help directory.

### **3D Studio Applications**

You must have *one* of the following 3D Studio applications installed on your computer *before* installing ELSA MAXtreme.

- 3ds max 4
- 3D Studio MAX Release 3
- 3D Studio VIZ Release 3i
- 3D Studio VIZ Release 3

### **Stereo Requirements**

For stereo-viewing, you mst have the following:

- MAXtremeStereo plug-in software installed during the ELSA MAXtreme driver installation
- Stereo shutter glasses

• A display resolution and color depth setting on your computer that is not too high, since twice as much video-memory is required for stereo viewing

# **Overview of Resolved Issues by Version**

This section contains issues that have been resolved for the following releases of ELSA MAXtreme:

- "Issues Resolved in Version 4.00.21" on page 6
- "Issues Resolved in Version 4.00.20" on page 6
- "Issues Resolved in Version 4.00.13" on page 6
- "Issues Resolved in Version 4.00.09" on page 7
- "Issues Resolved in Version 4.00.05" on page 7
- "Issues Resolved in Version 4.00.04" on page 7
- "Issues Resolved in Version 4.00.03" on page 7
- "Issues Resolved in Version 4.00.00" on page 7
- "Other Issues Resolved Between Versions 4.00.00 and 4.00.05" on page 8
- "Issues Resolved in Version 3.00.02" on page 8

#### **Issues Resolved in Version 4.00.21**

Fixed: Quadro 750/900XGL, MAXtreme 4.00.20: Bad 3dsmax performance with AA-lines enabled.

#### **Issues Resolved in Version 4.00.20**

- Fixed: Dots Size changes by using wireframe or shaded views.
- Fixed: Shade selected faces crashes 3dsmax.
- Fixed: MAXtreme Stereo function loads but can not be enabled.
- Fixed: System crashes with MAXtreme v. 4.00.14 and 4.00.15.
- Fixed: Under MAXtreme v.4.00.14, incorrect shaded viewport is displayed when editing envelopes on a skinned mesh with bones.

#### **Issues Resolved in Version 4.00.13**

• Changed installation background tile.

- Fixed problem with MAXtreme displaying incorrect symbols with Line Antialiasing when Rendered Views is enabled.
- Fixed problem with Configuration Dialog not being available after installation of MAXtreme 4.00.07 with non-English language.

### **Issues Resolved in Version 4.00.09**

- MAXtreme displays wrong version information.
- Fixed problem with unavailable transparency in MAXtreme 4.00.03 under 3ds max 4.2 with Quadro DCC-based card.
- Fixed incorrect display of symbols with Line Antialiasing in Rendered Views enabled.
- Fixed problem with MAXtreme not starting on a system installed with both the ELSA GLoria III and the ELSA Synergy II (PCI) cards.
- Fixed problem with MAXtreme 4.00.06 not working.
- In MAXtreme 4.00.05 running in 3ds max 4.2, opacities are not displayed.
- MAXtreme 4.00.05 for 3ds max 4 contains MAXtreme 3.x help.
- No Help is available after installing MAXtreme with Regional Setting other than English.

#### **Issues Resolved in Version 4.00.05**

Windows NT 4.0: MAXtreme error message occurs in 3D Studio Max 3.1.

### **Issues Resolved in Version 4.00.04**

MAXtreme for 3D Studio MAX contains wrong MAXtreme.drv properties

### **Issues Resolved in Version 4.00.03**

- No refresh occurs after moving 3ds max window out of the screen.
- Windows 2000: No hardware detection occurs during MAXtreme Setup.
- Stereo plug-in is missing during custom setup.

#### **Issues Resolved in Version 4.00.00**

MAXtreme 4 hangs when maximizing viewport.

# Other Issues Resolved Between Versions 4.00.00 and 4.00.05

- MAXtreme animation slows down and system swaps to hard disk (Windows 2000).
- MAXtreme 4.00.01 is missing Lights in 3D Studio MAX rabbit sample (Windows 2000).
- Lighting is incorrect in nTest "Create Tank Scene" (Windows 2000).
- Interactive render test causes MAXtreme to exit (Windows 2000).
- Texture display in incorrect with Background textures (Windows 2000).
- 3D Studio MAX does not start after installing MAXtreme 4.00.00 (Windows 2000).
- After installing MAXtreme, SPECapc Benchmark for 3ds max hangs (Windows NT 4.0).
- Help titles appear in wrong font.

### **Issues Resolved in Version 3.00.02**

- Inappropriate pop-up message appears.
- Cannot install MAXtreme 3.0 RC (Windows 2000 and NT 4.0).
- MAXtreme setup does not install MAXtreme.drv.

## **Known Issues**

The following issues are known to exist in the current release of ELSA MAXtreme. These issues may be fixed in a later release.

- "Spotlight Overshooting" on page 8
- "Fog" on page 9
- "Stereo" on page 9
- "MAXtremeStereo" on page 9

## **Spotlight Overshooting**

ELSA MAXtreme does not ignore the Overshoot setting of a Spotlight. When Overshoot is set, the Spotlight casts light in all directions.

## Fog

Fogging depends on the environment range of the camera. When the near and far values are equal, everything at this distance should instantly vanish into the fog. In ELSA MAXtreme, there is a small range around this distance where the fog intensity rapidly grows.

When the environment range of the camera is set in such a way that large picture elements are within the fogged range as well as outside, those parts of the picture elements in front of the fogging range should be clear. In ELSA MAXtreme, these picture elements are not completely clear and appear to be fogged.

The **Active** toggle in the **Atmosphere** section of the Environment dialog box is not supported. Supported fog is always rendered as active in the viewports.

#### Stereo

If the Stereo option is enabled in the ELSA MAXtreme Driver Configuration dialog box, Dual Planes support is not available in stereo-capable resolutions.

### **MAXtremeStereo**

When storing a stereo-paired animation as defined in the Render dialog box, "File Number Base" is ignored. The animation frames are stored with a "File Number Base" of zero.

#### CHAPTER



# INSTALLATION, CONFIGURATION, AND UNINSTALLATION

This chapter contains the following sections:

- "Installing ELSA MAXtreme" on page 10
- "Accessing ELSA MAXtreme Driver Settings" on page 10
- "Accessing ELSA MAXtreme Stereo Settings" on page 12
- "Uninstalling ELSA MAXtreme" on page 13

# Installing ELSA MAXtreme

- 1 Be sure you have met the requirements in "System Requirements" on page 3.
- **2** Verify that you have a 3D Studio application installed on your system; see "3D Studio Applications" on page 5 for details.
- **3** From the Setup directory, click the **Setup.exe** program and follow the instructions that appear in the dialog prompts.
- **Note:** If the installation program stops processing and generates an error message, try to run it with Administrator access rights.

# Accessing ELSA MAXtreme Driver Settings

After you have installed ELSA MAXtreme, follow these steps to access the ELSA MAXtreme Configuration dialog box.

**1** Start the 3D Studio application from which you will access ELSA MAXtreme.

On first-time use of ELSA MAXtreme, the Driver Configuration dialog box appears (Figure 2.1).

**2** Refer to ELSA MAXtreme online Help for details on using the configuration options.

#### Figure 2.1 ELSA MAXtreme Driver Configuration

ELSA MAXtreme Driver Configuration				
Configuration	Configuration			
Speed C Qual	Speed C Quality			
Wireframe Views				
Line Anitaliasing	🔽 Use Triangle Strips			
Rendered Views				
Line Anitaliasing	Enable Fogging			
Use Environment Back				
Transparency	None			
- Texture Filter-				
Minification	Fastest 💌			
Manifestin	Fast 💌			
Magnification	Fast 💌			
Maximal Anisotropy	1 💌			
Texture Size Background	512 x 512			
Background	1012 × 012			
Material	256 x 256 💌			
Texture Compression	Fast 💌			
I exicle compression	Fast 💌			
Dot Customization				
🗍 Customize Dot Size	2,0 🜻			
Stereo				
Enable Stereo				
Version 4.00.05	Close Help			

- **3** To access the ELSA MAXtreme Driver Configuration dialog box *after firsttime use*, follow these steps:
  - **Note:** If you are running ELSA MAXtreme 3 in a 3D Studio Release 3 application, click the **ELSA MAXtreme** menu, then click **Configuration**. If you are running ELSA MAXtreme 4, follow the steps below.
  - a Click the **Customize** menu and select **Preferences** to display the Preferences dialog box (Figure 2.2).

Files Gamma -Viewport Parameters ✓ Use Dual Planes ✓ Show Vertices as Dots ≪ Small Dots ← Large Dots Draw Links as Lines	Viewports Ghosting Ghosting Frames: 5 Display Nth Frame: 1	MAXScript
<ul> <li>✓ Use Dual Planes</li> <li>✓ Show Verlices as Dots</li> <li>● Small Dots     C Large Dots</li> </ul>	Ghosting Frames: 5	:
Backface Cull on Object Creation     Attenuate Lights     Mask Viewport to Safe Region     Update Background White Playing     Filter Environment Backgrounds     Low-Res Environment Background     Display World Axis     Grid Nudge Distance: 1.0     S     Non-scaling object size: 10		nt Frame  After ers com C Stroke int (Orthographic) int (Perspective)
Intersection         Persp Sens:         200.0         €           C         Projection         Rotation Incr:         0.5         €           Viewport Arc Rotate Snap Angle:         1.0         €	Currently Installed Driver: ELSA MAXIreme v Choose Driver	r. 4.00.05 onfigure Driver
- Transform Gizmo IV On Size: [40] ♀ IV Use Lab	els 🔲 Use Center Box 🔽	Use Planes

#### Figure 2.2 3ds max Preference Settings

**b** Click **Configure Driver** in the Display Driver section of the Preferences dialog box to display the ELSA MAXtreme Configuration dialog box (Figure 2.1).

# Accessing ELSA MAXtreme Stereo Settings

- 1 Be sure you have installed ELSA MAXtreme following the guidelines in "System Requirements" on page 3, including "Stereo Requirements" on page 5.
- 2 Start the 3D Studio application from which you will access ELSA MAXtreme. On first-time use of ELSA MAXtreme, the Driver Configuration dialog box appears (Figure 2.1).
- **3** Click the **Stereo** check box to enable the option; click **OK** to complete configuration.
- 4 To access the ELSA MAXtreme Stereo dialog box, follow these steps:
  - **Note:** If you are running ELSA MAXtreme 3 in a 3D Studio Release 3 application, click the **ELSA MAXtreme** menu, then click **Stereo**. If you are running ELSA MAXtreme 4, follow the steps below.

- a In the main 3D Studio application window, click the "hammer" icon on the right panel to display the **Utilities** tab.
- **b** Click the **Utilities** tab, then click the **More** tab.
- c From the Utilities list box that appears, click ELSA MAXtremeStereo, then click OK. The ELSA MAXtreme Stereo dialog box appears (Figure 2.3).

#### Figure 2.3 ELSA MAXtreme Stereo Settings

ELSA MAXtreme Stereo 🛛 🗙
Stereo
Eye Dist. 3.0 🛒
Focus Dist 0.0
Render to File
Rendering Progress
Close

**5** Refer to ELSA MAXtreme online Help for details on using the Stereo configuration options.

# Uninstalling ELSA MAXtreme

- 1 From the Windows desktop, click Start > Settings > Control Panel > Add/ Remove Programs.
- 2 Click the Add/Remove Programs icon.
- **3** Click **ELSA MAXtreme** from the list.
- 4 Click the Change/Remove button.
- **5** Follow the instructions from the InstallShield program to complete uninstallation.

#### A P P E N D I X



# MAXTREMERENDER FOR ELSA MAXTREME 3.X

**Note:** The ELSA MAXtremeRender feature *only* applies to ELSA MAXtreme versions 3.x. Since this feature is incorporated in 3D Studio 4.x applications, it is not available as a separate feature in ELSA MAXtreme versions 4.x.

ELSA MAXtreme versions 3.x comes with MAXtremeRender, a utility that allows you to use the current software production renderer to render into a viewport. This method of rendering may not be as fast as using the graphics card hardware engine, but it is easy to use and provides better control of the final rendering. To activate the MAXtremeRender plug-in software, follow these steps:

- 1 Be sure you have installed ELSA MAXtreme.
- **2** Start the 3D Studio application from which you will access ELSA MAXtreme.
- 3 Click the ELSA MAXtreme menu, then select Render.

The ELSA MAXtreme Render dialog box appears (Figure A.1). The renderer can be used in **High**, **Medium**, or **Low** Resolution settings. Under **Medium** and **Low** resolution, you can smooth the rendered image by linear interpolation.

**Note:** Because the software production renderer is relatively slow, the viewports are not always updated automatically. To force an update, use one of two **Update** buttons to update either all rendered viewports or only the active viewport.

#### Figure A.1 ELSA MAXtreme Render Settings (Release 3 *only*)