

## **QuickDraw 3D RAVE to Direct3D Driver for Windows**

*Version 1.0*

### **Description**

The RAVE to Direct3D driver lets your Windows PC take advantage of 3D hardware acceleration for faster QuickDraw 3D and RAVE graphics. It works with PCs running Windows 95 or 98.

When a 3D scene is rendered with the QuickDraw 3D Interactive Render or RAVE its commands are sent to the RAVE to Direct3D driver, QD3DRAVE\_HW.rav. If a board which supports Direct3D is installed these commands are converted to Direct3D and accelerated through hardware. If no accelerator is present rendering is performed by the RAVE software renderer.

### **Requirements**

The following are system requirements for using the RAVE to Direct3D driver:

- A Pentium (or later) processor based computer
- Windows 95 or 98
- DirectX 5 (or later) with Direct3D
- QuickDraw 3D 1.6\*
- A video board with 3D hardware acceleration supporting High Color (16-bit) or True Color (24-bit or 32-bit) video and any necessary drivers

\* This can be installed with the QuickTime 4.0 installer through the custom install selection.

### **Installation**

To install this software:

- Make sure to first quit any running QuickDraw 3D or RAVE applications.
- Copy the QD3DRAVE\_HW.rav file into your Window System directory.

### **Performance**

Performance depends on several factors:

- Screen depth (some cards may only support screen color depths of 16-bit)
- Features supported by the 3D accelerator board
- Quantity and size of textures in the model
- Quantity of triangles or line primitives in the model
- Amount of available texture RAM on accelerator board

## **Limitations**

- Screen depth of 8-bit is unsupported.
- Only 16 & 32-bit textures are supported.
- When insufficient memory is available to render the scene Direct3D switches from hardware acceleration to software rendering. The quality of the final rendered image may differ under these conditions.
- Window NT is unsupported because NT only supports DirectX 3 while Window 95/98 support DirectX 5. Many 3D acceleration cards support DirectX 5.

## **Known Problems**

- When a new window is created or the window is resized the window temporarily draws the first frame in black before rendering the scene.
- Changing screen bit depths while a program is running may cause textures to become corrupted or possibly cause the program to crash.
- Models with large textures or many textures may not load if insufficient memory is available on the 3D card. This will result in gray or single colored surfaces.
- A diffuse color may be blended together with the texture if a surface has both.

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