

This option is used to turn fog table emulation on or off.

Direct3D specifies that a display adapter capable of D3D hardware acceleration should be able to implement either vertex fog or table fog. Some games do not correctly query the D3D hardware capabilities and expect table fog support. Choosing this option will ensure that such games will run properly on the RIVA TNT.

These options allow you to control the anti-aliasing features of the drivers.

Anti-aliasing is a method used to smooth edges of 3D objects to eliminate a jagged appearance. Note that enabling anti-aliasing will not automatically cause all Direct3D programs to render anti-aliased images. Anti-aliasing must be supported by the application in order for it to work properly.

Allows you to select the anti-aliasing sampling method.

You can adjust the settings to values which range from providing the fastest application performance to rendering the highest quality image.

Allows you to select the auto-mipmapping method used by the RIVA TNT.

You can select either the bilinear or trilinear mipmapping method, whereby the bilinear method generally provides better performance, while the trilinear method generally produces a higher quality image.

Allows you to adjust the LOD (Level of Detail) bias for mipmaps.

A lower bias will provide better image quality, while a higher bias will increase application performance. You can choose from five preset bias values, varying from "Best Image Quality" to "Best Performance".

This allows the RIVA TNT to utilize up to the specified amount of system memory for texture storage (in addition to the memory installed on the display adapter itself).

**Note:** For performance reasons, this utility will not allow you to set the value to more than one half of the available system memory as reported by Windows.

This option is not available on display adapters which use the AGP bus.

The RIVA TNT can automatically generate mipmaps to increase the efficiency of texture transfers across the bus and provide higher application performance.

However, some applications may not display correctly when auto-generated mipmaps are enabled. To correct any problems, reduce the number of automatically generated mipmap levels until the images are properly displayed. Reducing the number of mipmap levels can often eliminate texture misalignment or "seaming" (at the expense of some performance).

This option allows for dithering of trilinear mipmaps.

Allowing mipmap dithering will provide increased application performance at the expense of some image quality. In some cases, a loss of image quality may not be noticeable, so you may wish to take advantage of the extra performance gained by enabling this feature.

This option turns on page flipping for full-screen OpenGL applications, which may improve their performance. If disabled, OpenGL will use a bit block transfer to flip from the back buffer to the front buffer.

This option forces the driver to wait on VBlank after a page flip.

This allows for frame rates higher than the refresh rate of your monitor, but may produce visual artifacts and tearing resulting in reduced image quality.

A list of the custom settings (or "tweaks") you have saved. Selecting an item from the list will activate the setting. To apply the setting, choose the "OK" or "Apply" button.

Lets you save the current settings (including those set in the "Direct3D - Advanced" dialog) as a custom "tweak". Saved settings will then be added to the adjacent list.

Once you have found the optimal settings for a particular Direct3D game, saving the settings as a custom tweak allows you to quickly configure Direct3D before starting the game and eliminates the need to set each of the options individually.

Lets you save the current settings as a custom "tweak". Saved settings will then be added to the adjacent list.

Once you have found the optimal settings for a particular OpenGL application, saving the settings as a custom tweak allows you to quickly configure OpenGL before starting the program and eliminates the need to set each of the options individually.

Deletes the custom setting currently selected in the list.

Restores all settings to their default values.

Displays a dialog which allows you to customize additional Direct3D settings for the RIVA TNT.

This option changes the hardware texture addressing scheme for texels (texture elements).

Changing these values will change where texel origin is defined. The default values conform to the Direct3D specifications. Some software may expect the texel origin to be defined elsewhere. The image quality of such applications will improve if the texel origin is redefined. Use the slider control to adjust the texel origin anywhere between the upper left corner and the center of the texel.

This option allows you to limit the number of frames the CPU can prepare before they are processed by the RIVA TNT (when VSYNC is disabled).

In some cases, the higher the number of pre-rendered frames allowed, the greater the "input lag" may be in response to devices such as joysticks, gamepads or keyboards.

Reduce this value if you experience a noticeable delay in response to the input devices connected to your computer while playing games.

Restores all settings to their default values.

Allows you to adjust the image quality of textures displayed in OpenGL applications.

**Optimize for best image quality** renders textures with the highest image quality available for the best appearance.

**Optimize for best performance** renders textures with reduced image quality to improve application performance.

**Blend** uses a combination of the above two features. This is the default value.

Allows you to specify the maximum size of the PCI texture heap.

Increasing this value on PCI systems with sufficient memory may significantly improve the performance of some OpenGL applications.

**Note:** For performance reasons, this utility will not allow you to set the value to more than one half of the available system memory as reported by Windows.

This option is not available on display adapters which use the AGP bus.

The slider controls allow you to adjust the gamma values for each channel (red, green, or blue).

Gamma correction helps to compensate for variations in luminance between a source image and its output on a display device. This is useful when working with image processing applications to help provide more accurate color reproduction of images (such as photographs) when they are displayed on your monitor.

Also, many 3D-accelerated games may appear too dark to play. Increasing the gamma values equally across all channels will make these games appear brighter, making them more playable.

Selecting this option will link all three gamma sliders together, allowing the gamma value for all channels to be adjusted by the same amount when any one of them is moved.

Selecting this option will automatically restore the gamma values you have set here when Windows is restarted.

**Note:** If your computer is running on a network, the automatic gamma adjustment will occur after you have logged on to Windows

A list of the custom gamma settings you have saved. Selecting an item from the list will activate the setting.

Lets you save the current gamma settings as a custom setting. Saved settings will then be added to the adjacent list.

Deletes the custom gamma setting currently selected in the list.

Restores all gamma values to the hardware factory settings.

Allows you to select between two monitor timing modes:

**General Timing Formula** or **GTF** is a standard used by most newer hardware. This is the default setting.

**Discreet Monitor Timings** or **DMT** is an older standard still in use on some hardware. Enable this option if your hardware requires DMT.

Select this option to disable the caching of cursors by the drivers.

If the mouse cursor is improperly displayed or becomes corrupted while running certain applications, disabling the cursor cache may correct the problem. If this setting is changed, Windows must be restarted for the new setting to take effect.

Adds the NV4 Tweak **QuickTweak** icon to the Windows taskbar.

The icon allows you to apply any of the custom Direct3D, OpenGL or gamma settings "on the fly" from a convenient popup menu. The menu also contains items for restoring default settings and accessing the Display Properties dialog.

Select this option to disable driver support for enhanced instructions used by certain CPUs.

Some CPUs support additional 3D instructions that complement your RIVA TNT and improve performance in 3D games or applications. This option allows you to disable support for these additional 3D instructions in the drivers. This can be useful for performance comparisons or for troubleshooting.

Select this option to disable VBlank wait.

Also known as "disabling VSYNC", this allows an image to be immediately rendered to the screen without waiting to be synchronized to the vertical retrace of the monitor. This allows for frame rates higher than the refresh rate of your monitor, but may produce visual artifacts and tearing resulting in reduced image quality.

Closes this dialog and retains the changes you made so that they will take effect when you choose the "OK" or "Apply" button in the "Additional RIVA TNT Properties" dialog.

Closes this dialog without saving any changes you have made.

This option allows you to disable the DirectX 6 features of the drivers.

Some games written for earlier versions of DirectX may not run properly with DirectX 6 installed and the DirectX 6 support enabled in the drivers. Selecting this option forces the drivers to run in DirectX 5 compatibility mode so that older games will run correctly.

Use this option if you wish to run certain older games that do not start or do not run as they should.

