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 capabilites and expect table fog support. Choosing this option will ensure that such games can be run with the RIVA 128.

Fog table emulation is enabled by default.

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 from the following anti-aliasing methods:

Full scene (supersampling) performs full scene anti-aliasing to provide the highest possible image quality. As this method requires more than 4 MB of on-board memory, it cannot be used on display adapters equipped with less than 8 MB of memory.

Edge anti-aliasing only employs a faster technique which anti-aliases only the edges of visible objects, offering improved image quality while providing better application performance than the supersampling method.

Requires applications and games to provide the RIVA 128 with square textures.

Normally, the RIVA 128 hardware format requires square textures. Using square textures utilizes the RIVA 128 texture memory most efficiently. Some applications, however, will not work if the use of square textures is forced. If you are having problems running a particular game or application, you may want to allow the use of non-square textures.

This allows the Direct3D driver to enable or disable 5-6-5 (RGB) texture support.

Certain games will display incorrect colors when 5-6-5 texture support is enabled in the hardware. Most games require this setting to be enabled, so disable it only if a game is not displaying colors properly.

This allows the RIVA 128 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.

The RIVA 128 automatically generates mipmaps to increase the efficiency of texture transfers across the bus.

Some games do not display correctly with the default settings. To correct any problems, reduce the number of automatically generated mipmaps until the game's 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 activates mipmapping on a per pixel basis, as opposed to per polygon.

Per pixel mipmapping allows for a smoother texture transition on larger, texture-mapped polygons extending into the distance of a rendered scene. It also helps reduce "sparkling" on distant textures.

In scenes which use large numbers of smaller polygons, there is usually no perceptible difference between the per pixel and per polygon mipmapping methods.

You can select one of the following options:

Disabled - Disables the per pixel mipmapping and trilinear filtering capabilities in the drivers.

Enabled - Best image quality - implements per pixel mipmapping and trilinear filtering methods which produce the highest quality image. This is the default value.

Enabled - Best performance - implements per pixel mipmapping and trilinear filtering methods which offer better application performance.

Enables or disables iterated vertex alpha.

This option enables Gouraud alpha blending capability for Direct3D applications that require it. Note that certain applications and games may be able to perform alpha blending on their own, not requiring support from the Direct3D drivers. By disabling this option, these programs are free to render using their own implementation, which may offer improved visual quality.

However, if you are running a Direct3D application or game and notice that alpha blended objects are not being displayed properly, enabling this feature will usually correct the problem.

This option is enabled by default.

A list of the custom Direct3D 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 Direct3D settings (including those set in the "More Direct3D" 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.

Deletes the custom setting currently selected in the list.

Restores all settings to their default values.

Tip: Choosing "OK" or "Apply" immediately after clicking this button clears all changes to settings made by NV3 Tweak, thereby forcing the display drivers to use their default settings.

Displays a dialog which allows you to customize additional Direct3D settings.

Displays a dialog which allows you to customize additional settings for the RIVA 128.

This option changes the hardware texture addressing scheme for non-filtered 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 non-filtered texel origin to be defined elsewhere. The image quality of such applications will improve if the texel origin is redefined.

This option changes the hardware texture addressing scheme for filtered 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 filtered texel origin to be defined elsewhere. The image quality of such applications will improve if the texel origin is redefined.

This option will help to compensate for applications with inconsistent geometry whose images exhibit gaps or seams between polygons.

This setting allows you to adjust the geometry by the specified number of pixels to close the gaps, thereby improving image quality.

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 setting has no effect on systems equipped with an AGP display adapter.

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 NV3 Tweak **QuickTweak** icon to the Windows taskbar.

The icon allows you to apply any of the custom Direct3D 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 128 to improve performance in 3D games or applications. Disabling this option can, in some cases, improve performance if your system processor does not support additional 3D instructions.

Select this option to disable VSYNC.

Disabling VSYNC 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.