ELSA Driver Settings

The *ELSA Driver Settings* let you make fine tuning of you ELSA board for Direct3D, OpenGL and hardware.

To get detailed information call the context help of the property pages.

Select the settings you want to adjust.

To get help for a list box entry select the entry and call the context help again.

A list of the custom Direct3D settings 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 as a custom setting. 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 setting 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, thereby forcing the display drivers to use their default settings.

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 NVIDIA chip.

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.

You can select from the following options:

Enabled - Enables Direct3D support for anti-aliasing in the drivers.

Disabled - Disables all anti-aliasing support.

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

Some games written for earlier versions of DirectX may not run properly with DirectX versions 6 or 7 installed and their 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.

Forces the hardware to automatically adjust the depth of its Z-buffer to the depth that the application requests.

Normally, you will want to keep this option enabled, unless your work absolutely requires a specific Z-buffer depth. If this option is disabled, any application whose working Z-buffer depth does not match that of the current hardware configuration will not run.

Enables an alternate technique for depth buffering.

This lets the hardware use a different mechanism for depth buffering in 16 bit applications. Enabling this setting can produce higher quality rendering of 3D images.

Enables the ELSA logo in Direct3D.

Enabling this setting will display the ELSA logo in the lower corner of the screen while running Direct3D applications.

The NVIDIA chip 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).

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**.

Allows you to select between the auto mipmap method bilinear and trilinear.

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.

Attention ! For testing only! Your system may become unstable !

This option determines whether textures of a specific color depth should be used by default in OpenGL applications.

Use desktop color depth will always use textures of the color depth at which your Windows desktop is currently running.

The **Always use 16 bpp** and **Always use 32 bpp** options will force the use of textures of the specified color depth, regardless of your desktop settings.

Allows the drivers to use the OpenGL extension **GL_KTX_buffer_region**.

This can increase application performance in 3D modeling applications that support this extension.

Allows the use of local video memory when the GL_KTX_buffer_region extension is enabled.

However, if there are less than 8 MB of local video memory available, dual planes extension support will not be enabled.

This setting has no effect if the **Enable buffer region extension** option above is disabled.

Allowing fast linear-mipmap-linear filtering will provide increased application performance at the expense of some image quality.

In many 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 allows OpenGL to use anisotropic filtering for improved image quality.

This option determines the buffer flipping mode for full-screen OpenGL applications.

You can select from the block transfer method, the page flip method or auto-select. Auto-select allows the driver to determine the best method based on your hardware configuration.

This option lets you specify how vertical sync is handled in OpenGL.

Always off will always disable vertical sync in all OpenGL applications.

Off by default will keep vertical sync disabled, unless an application specifically requests that it be enabled.

On by default will keep vertical sync enabled, unless an application specifically requests that it be disabled.

Lets you save the current settings as a custom setting. 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 setting allows you to quickly configure OpenGL before starting the program and eliminates the need to set each of the options individually.

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

This slider changes the core clock speed of the graphics processor. We recommend that you retain the hardware default speed as other settings result in the operation of the graphics board outside of the specifications. Be certain to provide good ventilation of your PC system (e.g. with an additional ventilator) as over-clocking results in the production of surplus heat.

This slider changes the speed of the memory clock. We recommend that you retain the hardware default speed as other settings result in the operation of the graphics board outside of the specifications. Be certain to provide good ventilation of your PC system (e.g. with an additional ventilator) as over-clocking results in the production of surplus heat.

Resets all clock adjustment capabilities to the entry values.

Resets all clock adjustment capabilities and forces a redetection of the graphics hardware before the controls can be reenabled.

It is recommended that you perform a reset any time you flash the BIOS of your display adapter with an updated BIOS image.