

Help subjects for the miroHISCORE(?) 3D configuration software

Choose among the following subjects:

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- Game settings
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- Desktop on TV

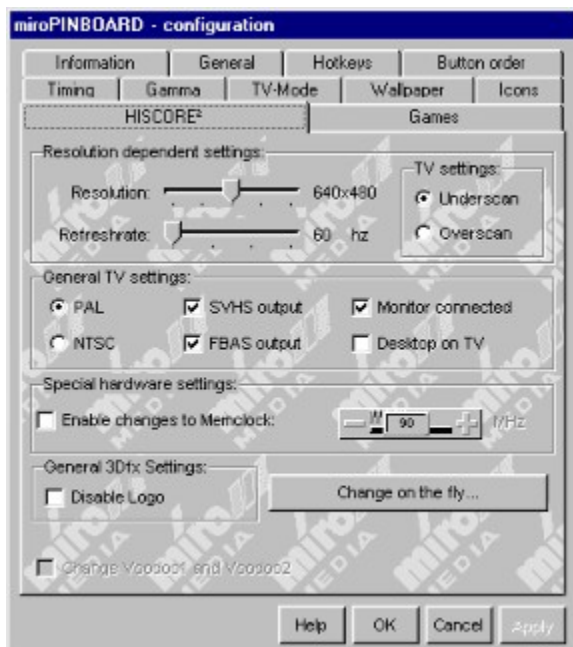
miroHISCORE(2) 3D features

Resolution dependent settings:

Here, you can adjust the refresh rate and size of the TV picture with relation to resolution. First, adjust the *resolution* slider control to the resolution for which you want to change the refresh rate and TV settings (e. g. 640x480). Then, move the *refresh rate* slider to the desired refresh rate. Please make sure that you do not specify higher values than allowed by the characteristics of your monitor. Especially when using miroHISCORE 3D (Voodoo 1), pls. take into consideration that gamma correction will only work properly at refresh rates up to 75 Hz.

The *resolution* slider does not specify the resolution of your game graphics but the relationship between resolution and refresh rate.

TV settings can only be specified for resolutions of 640 x 480 and 800 x 600. At these resolutions you can choose whether the TV picture is shown in *Underscan* mode (smaller but completely visible on every TV monitor) or in *Overscan* mode (normal size but somehow cut-off at the right or left edge, depending on the TV monitor).



General TV settings:

Here, you can specify the television standard (*PAL* or *NTSC*) and the desired TV-outputs. *SVHS* output means output via miniature DIN jack of your miroHISCORE(2) 3D board provided that you have a super-VHS capable TV set. *FBAS* output (also known as Composite) is the conventional connection via Chinch cable to your TV set.

Monitor connected should be disabled when you have only connected a TV set to your miroHISCORE(2) 3D board. As miroHISCORE(2) 3D is able to control both monitor and TV set

in parallel, the board provides for a higher output power if the option *Monitor connected* is enabled thereby guaranteeing for constant picture brightness.

Desktop on TV is hidden by default.

Special hardware settings:

Here, you can modify the memory clock of your miroHISCORE⁽²⁾ 3D board. The memory clock determines how fast the Voodoo⁽²⁾ chip and the memory on board work.

If the clock is set too high, the Voodoo⁽²⁾ chip and/or memory will no longer work in the optimum way which can result in graphics errors and program failures. For this reason, the memory clock is pre-set to 90 MHz. However, if you want to make your board even more performant, you can enable *Enable changes to Memclock* and slide the control to a higher value. For **miroHISCORE² 3D** you can even fine-tune the memory clock of the Voodoo² chipset. To do so, click on Change on the fly...

Please note: The maximum memory clock rate for PC boards cannot be fixed precisely due to the tolerances of electronic components. Ambient temperature is a further important factor (heat dissipation in the PC housing and number of installed boards, etc.). For this reason, the memory clock setting is divided into a green, yellow and red area. The green area is the safe working area where you can always find a good clock rate for every board at normal ambient temperatures (additional fine-tuning for miroHISCORE² 3D). Within the yellow area (see colourbar above the slide control) the clock rate is no problem for most graphics boards provided that heat dissipation in the PC casing is good. Should you really have problems with poor or missing textures or even program failures due to higher clock rates, you have to reduce this rate. The red colourbar indicates clock rates that are supported by only very few graphics boards and very good heat dissipation (e.g. by additional ventilation). **Overclocking in the red area can considerably accelerate ageing of electronic components due to higher heat dissipation!**

General settings:

Disable logo means that the 3Dfx starting logo for 3Dfx Glide and OpenGL games will be suspended.

Change Voodoo1 and Voodoo 2 switches Glide and Direct3D support between the Voodoo and Voodoo² hardware if you have installed both miroHISCORE 3D and miroHISCORE² 3D.

TV settings are available for miroHISCORE 3D und miroHISCORE² 3D only. All other options - game profiles included – might be used with other Voodoo⁽²⁾-cards. The configuration property page is titled „Voodoo“ or „Voodoo²“ in such case.

Changing operational parameters on the fly

By clicking on the *Change on the fly* button you can change all important settings – the modifications become directly visible on the test pattern, thereby allowing to comfortably test different settings for miroHISCORE² 3D without having to start a game each time.

Resolution:

If you have not defined your own test pattern in the *game* register, you will see the following display.

With the aid of the arrow keys LEFT and RIGHT you can directly change the values, with UP and DOWN you can change between the different points of configuration.



Enable TV:

With the aid of the LEFT and RIGHT arrow key you switch the TV-output on/off.

Output signal:

Here you can select whether your TV set is connected to miroHISCORE² 3D via CHINCH output (FBAS) or Super-VHS output (SVHS).

Display method::

Overscan or underscan

TV standard:

PAL or NTSC

Horizontal adjust:

Horizontal correction for TV picture.

Vertical adjust:

Vertical correction for TV picture.

Flickerfilter

Flickerredution in three steps for TV picture.

Brightness, contrast, sharpness:

Specifies these values for the TV picture.

Gamma white, red, green, blue:

Gamma correction modifies the output level for the colour components as they are displayed on the monitor and TV output in order to determine brightness of the three colour components of the monitor and TV picture.

White gamma sets the RGB colour components to one value.

Example: Put the gamma value for Blue to 2.0; the blue component of the picture is visibly reinforced.

Memory clock:

If you find < locked > here, the option *Enable changes to Memclock* in the HISCORE(2) register is not yet enabled.

Clock fine tuning (only miroHISCORE² 3D):

Should you have problems to find a stable clock rate within the green area (83 ... 90 MHz) you can fine-tune the synchronisation between the Voodoo² texture processors (TMU). Try both higher and lower rates. If the picture is still unsatisfactory, you have not yet found the optimum setting.

If you cannot find an acceptable setting for the current clock rate, pls. reset the fine-tune value to ,1‘ and repeat the procedure with a lower clock rate.



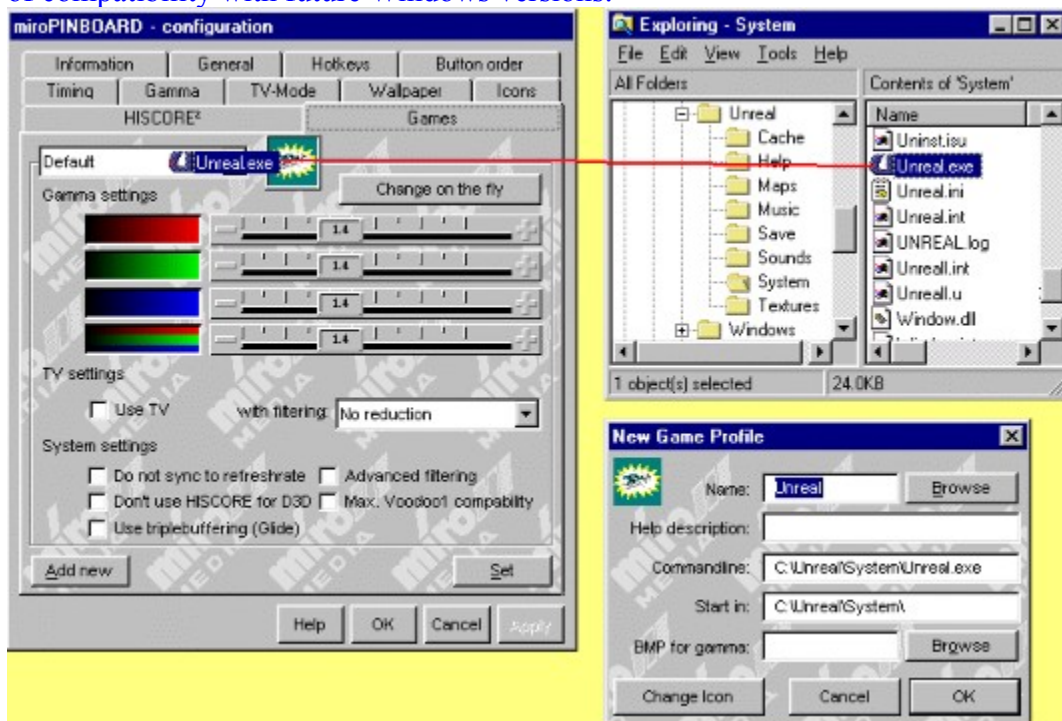
Save changes:

Press the ESC key and - using the arrow keys LEFT or RIGHT - select ,yes‘ for saving modifications, ,no‘ for rejecting modifications or ,back‘ to return to the setting menu. Then press RETURN.

Game settings

This register card allows you to make individual 3Dfx settings for your games. Apart from the standard setting *Standard* you can add any game title which can then be conveniently started via the Pinboard start menu. To do so, open the Windows Explorer and go to the directory where the program file of the game (ending .exe, .pif or .bat) is found. Then use the mouse to draw the file name on the *Games* register card. This will open the *New game profile* interactive box. Here you can enter an additional description, add start parameters to the command line and establish an individual background pattern for gamma correction (just draw .BMP file from the Explorer into the input field). An icon for the Pinboard start menu (file ending .ICO) can also be drawn by Drag&Drop on the interactive box and later appears on the *Games* register card.

Note: File connections cannot be drawn onto the game register card by Drag&Drop for reasons of compatibility with future Windows versions.



Now you can make the settings for the game profile you have just created.

To save the settings of your current game profile, just click on the [*Save*] button.

The settings of the respective game profile come into effect once you have opened the game start menu and the respective game title by clicking on the 3Dfx icon of the Pinboard.

Gamma settings:

Use the slide control to modify the gamma values of the three RGB colour components or the unified gamma value (affects all colour components). Gamma corrections can directly be made visible in the background pattern (which can individually be determined for every game profile) by Change on the fly.

TV settings:

Use TV establishes that the TV-out of miroHISCORE(2) 3D will be enabled in the respective profile.

With filtering specifies flickerredution for the TV-out.

System settings:

Do not synch to refresh rate means that 3D output will not be synchronised with the refresh rate of the monitor. This allows for an increase of the frame rate (number of 3D frames per second). However, this might result in mismatching frames since the monitor refresh rate and the frame rate of Voodoo(2) are no longer synchronised.

Do not use HISCORE for D3D disables miroHISCORE(2) for Direct3D games to make sure that certain D3D games use the primary Direct3D board (graphics board). Pls. note that DirectX offers the possibility to select between several installed Direct3D boards. Many games offer a list of 3D boards registered by Direct3D (either when starting the game or in a separate configuration program). However, for some titles this option is not available which means that the games find a Direct3D capable add-on board, e. g. miroHISCORE(2) 3D, and output via primary board is not possible.

Use Triple buffer is a special option for Glide games which allows for an even smoother set-up of the image, though more video memory is required. When using the conventional double buffer option, a new image is first built-up in an invisible part of the video memory (backbuffer) and copied into the visible part of this memory (frontbuffer) at the next monitor refresh interval. Triplebuffering adds a further backbuffer. The memory requirements for triplebuffering can be calculated with the following equation:

Video memory:= (resolution_X * resolution_Y * colour depth * 3) / 8 + (resolution_X * resolution_Y * Z_buffer_bit depth) / 8

The colour depth can be 8, 16 or 24 bit while Z_buffer bit depth can be 0 (no Z-buffer), 16 or 32 bit.

Advanced 3D filtering (miroHISCORE² 3D **only**) enables trilinear filtering for Glide and Direct3D programs, provided that no other filtering method is specified by the program itself. Compared to bilinear filtering, trilinear filtering is a refined interpolation procedure for the transfer of textures on surfaces. However, the amount of time required by the Voodoo(2) for calculation is slightly increased.

Maximum Voodoo1 compatibility (miroHISCORE² 3D **only**) solves problems with some game titles which expect texture memory of 2 MB and otherwise abort with an error message. With the aid of this option the texture memory reported by the driver is limited to 2 MB and SLI (Scanline-Interleaving) is disabled.

Games start menu

To start self-defined game profiles, pls. open the games menu by clicking on the 3Dfx icon and select the desired game title with the aid of your mouse.



Alternatively, you can add the icon of your game title to the Pinboard.

To do so, open the *Button order* register in the miroPINBOARD configuration. In the list of *Available functions* you will find the icons of your game profiles. Just draw the desired icon to the Pinboard bar. You will e.g. get the following result :



Desktop on TV

If your graphics board is capable of refresh rates of 50 or 60 Hz, the miroPINBOARD allows for the output of the Windows Desktop via miroHISCORE(?) on TV.

If you want to use this special function your graphics board has to support the following resolutions:

640 x 480, 50 Hz (for output on PAL TV)
800 x 600, 50 Hz (for output on PAL TV)
640 x 480, 60 Hz (for output on NTSC TV)
800 . 600, 60 Hz ((for output on NTSC TV)

This option is not offered as standard option in the HISCORE / HISCORE² register. In order to make this option available open the **pinboard.ini** file in the Notepad (Windows Editor) or a different editor – the file can be found in the \windows\miro\tools directory. Now look for „[3DFX]“ and change the line from „DesktopOnTV=0“ into „DesktopOnTV=1“. Then close and reopen the miroPINBOARD (program group „miroHISCORE(?)“). You will find a *Desktop on TV* button in the HISCORE/HISCORE² register under *General TV settings*.

Now select one of the TV capable Desktop resolutions mentioned above. The refresh rate has to be set individually via (Display) properties / Settings / Advanced properties.../ Graphics board / Refresh rate.

Please make sure that you select the correct TV standard (PAL / NTSC) in the HISCORE(?) register to obtain a correct TV image.
Then activate the *Desktop on TV* button.

Note: Desktop on TV sometimes causes problems with Glide/3Dfx/OpenGL and Direct3D games when these games choose a resolution which is different from the current Desktop resolution (for example: Qxxxx II). For this reason, we recommend to disable Desktop on TV before starting 3Dfx games, if required.

