

<http://www.cakewalk.com/VideocardTips.html>

Tips on Configuring Popular Video Adaptors When Using Cakewalk Pro Audio or Home Studio Software

Certain video drivers can interfere with the proper operation of Cakewalk applications, especially with respect to performance during audio recording and playback. Many contemporary video adaptors include "hardware acceleration" features which are designed to allow these cards to display complex graphics and 3D images more quickly; this is especially useful in interactive computer games. Unfortunately, the associated video drivers (supplied by the video card manufacturer) can sometimes "hog" the computer's bus, blocking the operation of other time-critical software (such as digital audio/MIDI sequencing software like Cakewalk Pro Audio 9 or Home Studio 9).

If you experience problems recording or playing back audio or MIDI in your Cakewalk software, your video card (or rather, it's driver) *may* be part of the cause. As a general rule, we urge users who are experiencing such problems to obtain and install the latest video drivers available directly from their video card manufacturer. Newer driver versions often repair "problems" present in earlier versions. Most major video card manufacturers supply downloadable drivers on their web sites. If you have a "store-bought" PC, and are not sure who manufactures the video card bundled in your computer, try contacting the PC maker directly. Major PC vendors often supply driver upgrades for their bundled video cards directly on their web sites.

We also recommend that users who are experiencing problems try reducing, or disabling, their video card's hardware acceleration feature (if present). Doing so may reduce the speed at which the screen redraws, but it may enable proper audio/MIDI operation in your Cakewalk application.

- To disable the hardware acceleration on your video card: Launch Control panel (Start | Settings | Control panel). Double-click the Display icon. Select the Settings tab. Click on the Advanced button. Select the Performance tab. Move the slider for hardware acceleration one notch at a time toward 'none' and re-test your recording/playback after each such adjustment. If problem(s) persist, leave the slider at 'none' and continue below.

Video cards can sometimes cause problems for audio/MIDI applications if they are forced to operate at extremely high display resolutions or color range. If you experience operating problems in your Cakewalk software, a simple thing to try is to reduce the display resolution and/or the number of colors displayed by your video card (e.g., reduce 16-, 24-, or 32-bit true color down to 256 colors).

- You can adjust color depth by right-clicking on your Windows desktop, clicking "Properties", clicking on the "Settings" tab, and selecting a suitable entry in the "Colors" listbox. Display resolution can also be adjusted on this tab.

In some cases, the video card may be "conflicting" with your soundcard because the two cards are "sharing" an IRQ line. Although some soundcards claim that they work properly on a shared IRQ, this is usually not the case and it is advisable to avoid such sharing.

- To see if your soundcard and videocard are currently claiming the same IRQ, do the following: On the Windows desktop, right click on My Computer, select Properties from the popup menu, click on the Device Manager tab of the dialog that opens, then double click on the "Computer" icon at the top of the list. This will show you a list of all the devices in your system and which IRQs they are using. Scroll the list until you see your soundcard. Check the IRQ setting to the left of the icon. *If there are other devices (such as a video card) that are assigned to the same IRQ, you should try moving your soundcard to a different slot in your computer.* Contact your hardware manufacturer if you need

assistance. (Note that entries that say something similar to "IRQ Holder for PCI Steering" do not indicate conflicting devices. You can ignore these entries.)

Disabling hardware acceleration and relieving IRQ conflict (if any) may not be sufficient to correct your problem. If you have one of the video cards listed below, try following the instructions provided for your card. If problem(s) persist even after following these instructions, consult the online Help built into your Cakewalk software: locate the Help topic "Dropouts and Other Audio Problems" for further assistance.

Video cards based on the nVidia "Riva TNT" or Intel i740 chipset:

- Hercules Dynamite TNT2
- Canopus Spectrum 5400
- Creative 3D Blaster Riva
- Creative 3D Blaster TNT2, TNT2 Ultra
- ASUS AGP-V3800
- Elsa Erazor III, Synergy II
- Leadtek WinFast 3D S320 II
- Diamond Viper V770, V770 Ultra
- Microstar MS-8802, MS-8806

Some users have reported errors in Cakewalk's StudioWare View when using certain types of videocards. Specifically, videocards based on the NVIDIA Riva TNT or Intel i740 chipsets are known to cause illegal operation errors when opening the StudioWare View in Pro Audio/Home Studio. Cakewalk has found that this problem can be remedied by downloading the most recent reference drivers from NVIDIA and Intel directly.

To download reference drivers for Riva TNT-based videocards, please visit NVIDIA's website at:

http://www.nvidia.com/Products.nsf/htmlmedia/software_drivers.html

To download reference drivers for i740-based videocards, please visit Intel's website at:

<http://developer.intel.com/design/graphics/drivers/>

(Please note that NVIDIA and Intel provide these reference drivers "as is", and as such the drivers are not supported by the manufacturer of your specific videocard.)

Hercules Dynamite 128

Open the file C:\WINDOWS\SYSTEM.INI using Notepad (or any text editor). In the section called [Hercules], check to ensure that this line is present:

Optimization=1

The default setting is 0. If 0 is shown, edit the line and replace the 0 with a 1, so it now appears as shown above. Save the file, and restart Windows.

Matrox Millenium

Open C:\WINDOWS\SYSTEM.INI in Notepad (or any text editor). In the section called [mga.driv], add the following line:

Pcchipset=1

Edit the file as necessary to include this line, and save the file. Restart Windows.

If you have an early Matrox video card, Disable "Use PowerGDI acceleration:

Click the Windows Start button, then Settings, Control Panel, Display, MGA Settings, Advanced.
Then click the "Performance" tab. Uncheck the "Use PowerGDI acceleration" checkbox.

If you have a later Matrox video card:

Enable Use Bus Mastering:

(Start > Settings > Control panel > Display > Settings > PowerDesk button)

Disable "Use automatic PCI bus retries":

(Start > Settings > Control Panel > Display > Settings > PowerDesk button)

Video Cards based on the S3 chipset

- Savage2000
- Savage4
- Savage3D
- VIRGE/DX/GX
- Trio3D
- Trio64V2

(S3, Inc. provides graphics chips for other manufacturers.)

Open the file C:\WINDOWS\SYSTEM.INI in Notepad (or any text editor). In the section called [display], make sure the following line is present:

BusThrottle=1

(or

bus-throttle=1)

Edit as necessary to include this line, and save the file. Restart Windows.