

## Problem

I wanted to set up a computer in my living room to connect to my TV. This would be an easy task to accomplish on a new HDTV since the majority of them have a VGA or DVI input and all of them have HDMI. However, I have an aging SDTV that only has RCA composite and S-Video. Since this TV would be the only display on the computer, so the VGA and the DVI are not being used. Luckily, the computer I am using has an Nvidia GeForce 6200 video card with VGA, DVI, and S-Video outputs installed. This system is also running Windows XP MCE with SP3. Normally, with the S-Video output, connecting to a SDTV should be easy. Usually, the display driver needs to be changed so that it is aware the screen is a TV that way the computer knows to output the signal in a standard format the TV can understand. This signal in the United States for analog TV is NTSC. This was not as easy on my computer. When connected to the TV using the S-Video, it would start up showing a perfect display as expected. Once Windows would load, the display would become all jumbled and unviewable. This would happen everytime I started the computer. I knew the Video card was fine since I was plugged into a monitor in another room, but I didn't want to drag a monitor into my living room for testing, so I had to get the video to load properly on the TV.

## Solution

The first thing I had to do was get Windows to load with minimal display drivers, or VGA mode. Usually, when Windows loads with minimal display drivers, Windows will boot at a low display resolution and a standard number of colors. Starting Windows in VGA mode has similar steps as starting the computer in Safe Mode. After turning on the computer, hit the F8 button on the keyboard until the Windows boot options appear. Listed a few below Safe Mode is Enable VGA Mode. Select this and video signal will remain after Windows boots, but it will not last after changing the display settings. This happens for a couple of reasons. The first is that many of Nvidia's newer Forceware drivers have issues with S-Video out. The second is that the newer versions of the Nvidia Forceware drivers have a new version of the Nvidia Control Panel that makes it impossible to properly set up TV out on the card. The steps I took were to download an older version of the Forceware driver. I used an extremely old version with a build number around 94, but supposedly versions in the 160s will work too. I installed the older version of the driver and suddenly the computer recognized my TV and switched my resolution immediately to a 1024x768. I also checked my settings in Nvidia Control Panel, and they were correct.

Sometimes, it might not be this easy. If the driver used has the new Nvidia Control Panel, a registry hack can be used to enable the old version of the control panel. Remember, making an incorrect edit to the registry can have serious consequences, so make sure you know what you are doing. In the registry, change the following:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\NVIDIA Corporation\Global\NvCplApi\Policies]
"SedonaDisable"=dword:00000002  "ContextUIPolicy"=dword:00000001
"TaskbarUIPolicy"=dword:00000001  "CplGroupUIPolicy"=dword:00000002
```

Close the registry, and restart the computer, once again enabling VGA mode. After the computer has restarted, open the Nvidia Control Panel by right clicking on the desktop and

selecting Nvidia Control Panel. On the left in the Control Panel, under Video & Television select *Change the signal or HD format*. In this menu option, you can select *Auto Detect* or *S-Video* as the signal. Now, close Nvidia Control Panel and open the standard Windows Display Settings located in the Windows Control Panel. Under the settings tab, select *Advanced Settings*. In the Advanced Settings, click on the GeForce xxxx tab. This will display Geforce specific settings. the first setting in the list is nView Display Settings. This should show the TV now as a display. Now right click on the picture of the TV, and a context menu will appear with *Select TV Format* as the first option. Expand the menu and click *Advanced*. The advanced TV Settings will appear and allow you to select the proper signal format and connection type. For the United States, select M/NTSC as the signal and the connector in this case is S-Video. The display settings should now save and stick for future reboots of the computer.

The Nvidia forums were a pretty good resource to figure out how to fix this. I used the following posts:

<http://forums.nvidia.com/index.php?showtopic=52156&st=0&p=302569&#entry3...>

<http://forums.nvidia.com/index.php?showtopic=61279&hl=s-video>

A much better solution is to buy an HDTV with a VGA or DVI input. The setup is so much easy and the picture looks much better. Another solution is to use an ATI video card. Supposedly, ATI video cards do not have this issue.