



Performance/Compatibility Guide

This guide will help you get the most out of your Thunderbolt-based vMix system. For further support and information about vMix, visit the [online help site](#).

Compatible Laptop List

The following models are listed as compatible with our system to provide 4 HD inputs from the AJA IO 4k. Specific models may have individual limitations based on CPU/hard drive/GPU specifications and speed.

Thunderbolt

Asus ROG G750JT, JY, JX - GTX 7xxM, 8xxM, Win 8.1 Pro 64, 17.3"

Asus ROG G751JT, JY - GTX 8xxM, 9xxM, Win 8.1 Pro 64, 17.3"

Sager NP9377 - GTX 980M, Win 8.1 Pro 64, 17.3"

Thunderbolt v2

MSI WS60 - Quadro, Win 7 Pro 64, Win 8.1, 15.6"

HP Zbook - Quadro, Win 8.1 Pro 64, 17.3", 15.6"

HP Z1 G2 - Quadro, Win 8.1 Pro 64, 17.3"

Lenovo ThinkPad W540 - Quadro, Win 8.1 Pro 64, 15.6"

Dell Precision M3800 - Quadro, Win 8.1 Pro 64, 15.6"

Performance Considerations

Thunderbolt

Using a laptop platform for true HD-based live switching/production is now possible with the vMix Thunder with a few issues for maximum performance and usability. The first is the Thunderbolt connection. Thunderbolt currently ships in two versions, the original Thunderbolt (v1), which provides up to 10Gbps throughput and the newer version 2, which operates at 20Gbps. By way of comparison, USB3.0 is only 5Gbps. The extended bandwidth of Thunderbolt 2 allows daisy chaining additional devices like G-Tech storage devices for ISO recording individual HD video inputs. A future Thunderbolt version will again double the bandwidth and provide even more options such as increasing the number of inputs.

Performance

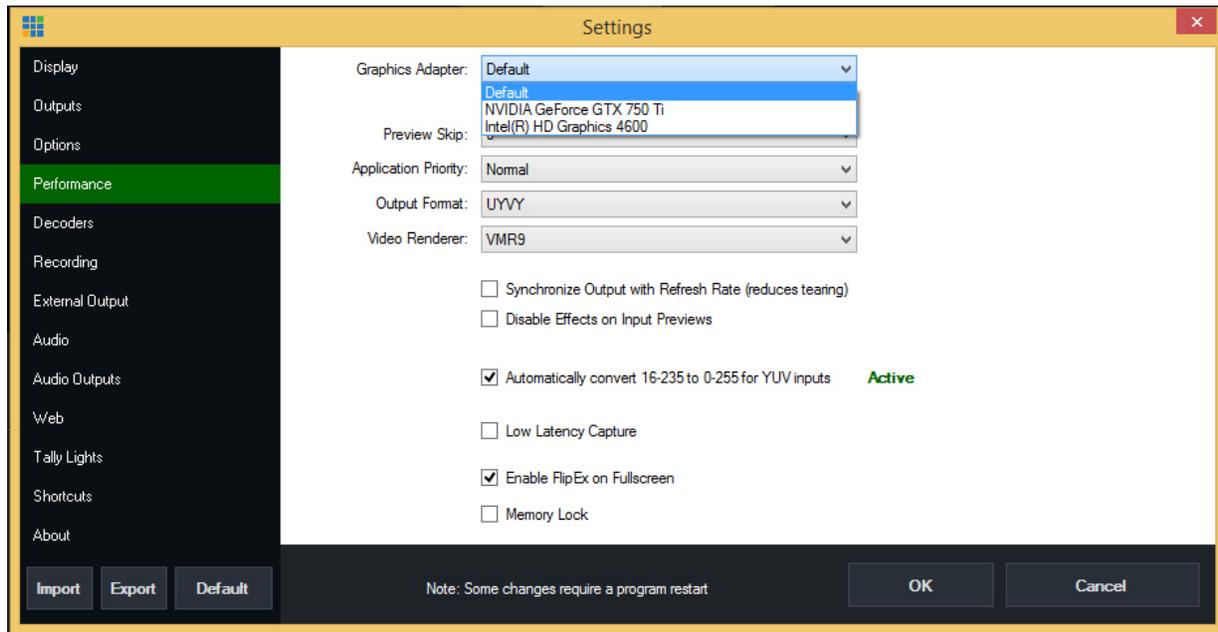
vMix uses the graphics card processor (GPU) for graphics related tasks such as chroma-key, overlays and titling. The best vMix performance is obtained using Nvidia Geforce graphics technology. Current compatible models with Geforce graphics are Asus and Sager Thunderbolt v1 models. The benefit is higher performance at the cost of limited additional connectivity with external storage, displays, etc. Quadro-based units require configuration to get acceptable performance while providing higher Thunderbolt bandwidth.

Display

Display is an important consideration with some compatible units providing 15" versions and others using 17" versions. Some even support resolutions higher than 1920x1080 with MSI and HP announcing models with 4k screens. Another consideration is external display options for use with full screen multiview or using the system with a larger production monitor.

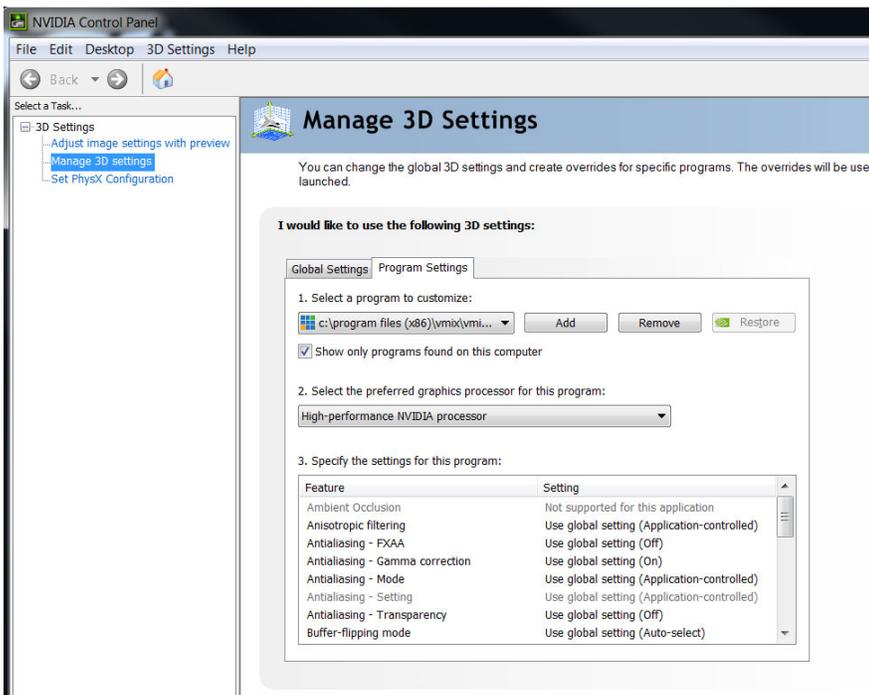
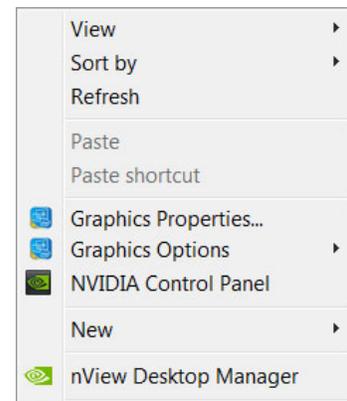
Configuration

On many laptops, it is necessary to specify the Nvidia adapter as the primary display adapter to get maximum performance/compatibility with vMix.



In vMix, click Settings and then Performance. Choose the entry for the installed Nvidia graphics card. Some configurations will show the Nvidia card listed twice, either entry will work. If the dropdown does not list the Nvidia card, you may need to make a change in the Nvidia Control Panel.

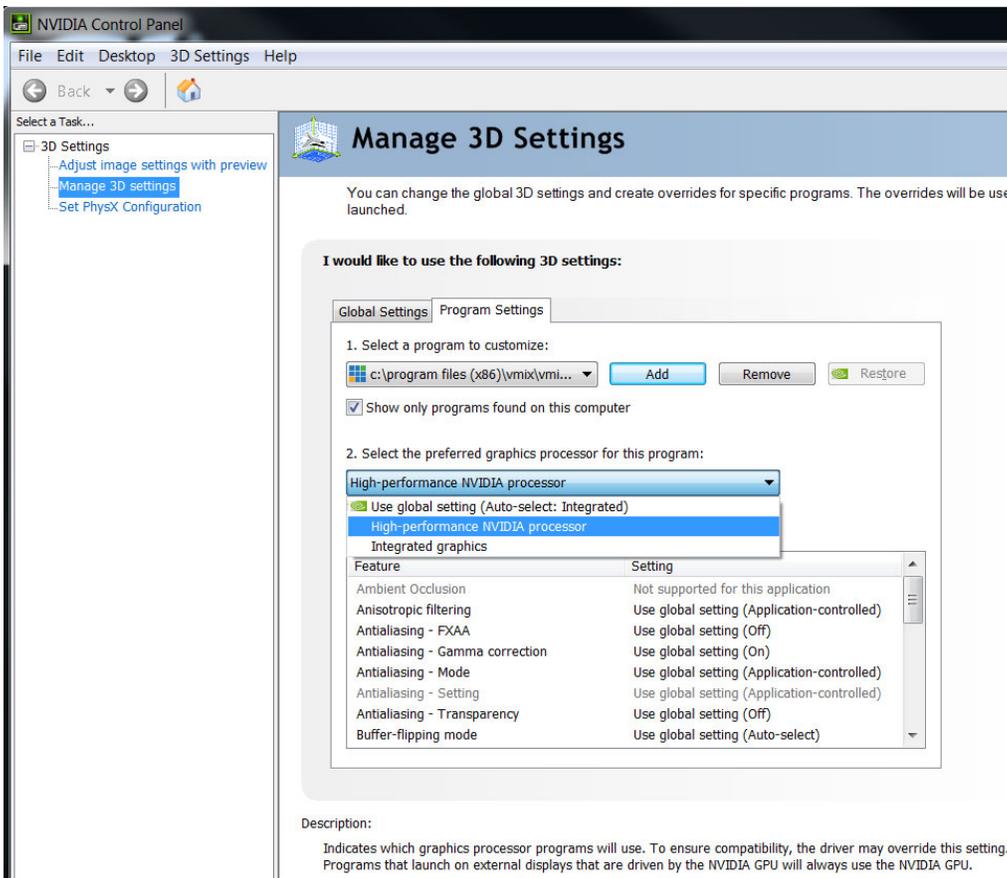
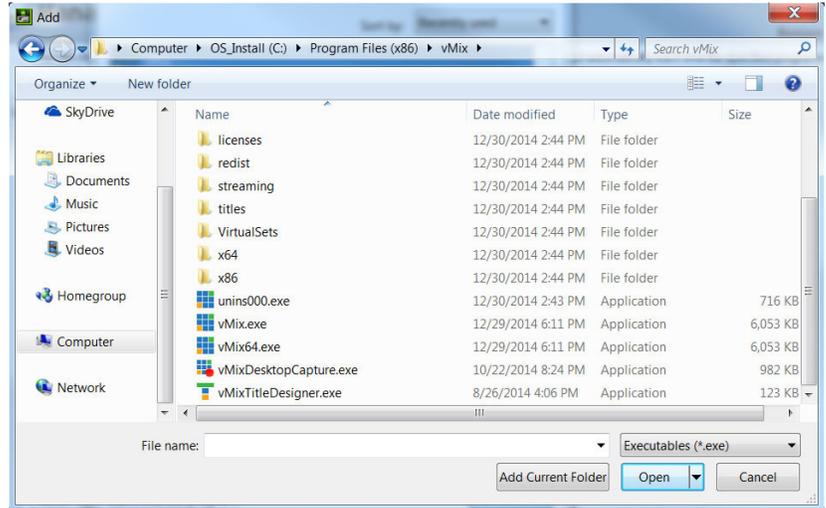
To access these settings, right-click the desktop and select NVidia Control Panel



Next, select Manage 3D Settings

Add vMix under the Program Settings tab by clicking the Add button

In the Select a Program window, click the Browse button. Then navigate to the C:\Program Files (x86)\vMix directory. Select the vMix64.exe application and click Open.



Under the “Select the preferred graphics processor for this program” option, select High performance NVIDIA processor.

Once you hit Apply, return to the vMix Performance settings to verify you can now select the Nvidia graphics card.

Two additional considerations for optimal laptop configuration

1. The laptop should always run under AC power
2. Power options should be set to High Performance