

NVIDIA Quadro® FX SDI Plug-in for Adobe® After Effects®

Author: Thomas J. True
ttrue@nvidia.com

Version: v1.0

Software Requirements:

Adobe After Effects 6.5 or 7.0. NVIDIA graphics driver 83.30 or later.

Hardware Requirements:

NVIDIA Quadro® FX 4000 SDI
NVIDIA Quadro® FX 4500 SDI

Installation:

Place the nvstdi.aex file into After Effects Plug-ins folder. This folder is typically located in: c:\Program Files\Adobe\After Effects 6.5\Support Files\Plug-ins or c:\Program Files\Adobe\After Effects 7.0\Support Files\Plug-ins.

Usage:

Bring up the NVIDIA Quadro FX SDI control panel by selecting NVIDIA Quadro FX SDI in the Composition menu.

Select 'Sync option' and 'Sync format' and click on 'Enable to start SDI output'.
If no external sync is desired, select the default 'Sync option Internal'.

The SDI plug-in will automatically select the video output format based upon the width, height and frame rate of the current Composition or Footage item. The SDI plug-in will not activate if neither a Composition nor a Footage item is selected.

If either 'Genlock' or 'Frame lock' synchronization to an external source is specified, the plug-in will automatically detect the sync timing and attempt to lock the video output. If the plug-in fails to lock the video output to the sync source, or if the Sync Option is

specified as Internal, the SDI output will be free running. SDI output will start quicker when Internal sync is specified, otherwise, detection of the input sync timing can take up to 5 seconds to complete.

To disable SDI video output, click on the 'Disable' button.

Known Issues:

Due to race conditions within the SDI driver and plug-in, the sync status is sometimes not correctly reported in the control panel when SDI output is initially started. However, the control panel should eventually update.

When SDI output is started, some type of refresh event is required to force After Effects to refresh and send a frame to the SDI output. Until this happens, the SDI output is black.

When SDI output is enabled, changes to the video output data format and timing require a mode sync on the graphics monitor. This will cause the monitor to momentarily flash.

In 16-bpp mode, the colors displayed on the SDI output are sometimes incorrect.

In 16 and 32-bpp modes, color banding can occur as data is decimated to the 10-bit per-component SDI output.