This document describes how to install the Quadro4 900XGL / 980XGL display driver (version 41 or higher) for Windows 2000/ XP for use with the IBM T221 flat-panel monitor. Some of the figures used in this document have the word "900XGL". If you use Quadro4 980XGL, you will see the word "980XGL" instead of it during the installation.

#### Preparation

<u>For 900XGL / 980XGL pre-installed IBM PC :</u> The Windows 2000/XP driver suitable for 900XGL pre-installed IBM PC (IntelliStation) is available for downloading from IBM website. Please look at <u>http://www.pc.ibm.com/qtechinfo/MIGR-39635.html</u> for the 900XGL driver. If you cannot find it or for 980XGL driver, please go to <u>http://www.pc.ibm.com</u> and search the driver by the key words +xxxx +T221 or the key words +"xxxx" +"T221" , where xxxx is your 900XGL / 980XGL pre-installed IntelliStation Machine Type such as 6850. Please download the device driver for use with T221 and write it onto a removable storage like a CD-R or directly download it onto your PC that you will connect to the T221 monitor.

<u>Note:</u> The website has 900XGL / 980XGL device drivers that do not support the T221 monitor. Please download the device driver for use with the T221 monitor.

<u>For other 900XGL / 980XGL for T221:</u> Please use the driver provided from the 900XGL / 980XGL vendor and follow the instruction available from the vendor.

### 1. Software Installation for Windows 2000/XP

To install the display driver, follow these steps:

1. Remove existing video driver.

Note: If you don't remove a driver for other video card or other version of 900XGL / 980XGL driver, the installation may not succeed.

2. Restart the PC.

3. The Windows 2000/XP desktop appears. Note: A warning message, "The hardware has changed," may appear, ignore this message.

4. If you created a driver CD-R disk, insert it into the CD-ROM drive of your personal

computer and double click the driver file on the CD. If you downloaded the driver onto the PC, double click the driver file.

5. Choose the directory for storing the driver files by following the instructions in the dialog boxes. If you don't choose the directory, the driver files are stored at C:¥IBMTOOLS¥DRIVERS¥xxxx, where xxxx is determined by driver version.. The driver has not yet been installed at this moment. Next, go to the directory where you have chosen to store the driver files. Double click "Setup.exe" in the directory. Note: If you don't remember the directory, go to step 4 and do the driver storing operation

again. Please find the directory name, and this time, cancel to store the driver files.

NVIDIA Windows 2000/XP Display Drivers	
	Welcome to the InstallShield Wizard for NVIDIA Welcome to NVIDIA Setup. This will install NVIDIA Display Drivers on your computer.
	< Back Next > Cancel

6. The following screen appears. Click the **Next** button and continue the installation.

7. For Windows XP, please follow the instruction in section 7.1.

For Windows 2000, please follow the instruction in section 7.2.

7.1 WinXP: If Hardware Installation dialog box appears, then click the Continue button.



**7.2 Win 2000:** If **Digital Signature Not Found** dialog box appears, then click the **YES** button.

Digital Signature Not Fo	und X
	The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested. The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows. NVIDIA Quadro4 900 XGL (IBM)
	If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available. Do you want to continue the installation?
	Yes No More Info

8. When the **Installation completes** message appears. Select "**Yes**, **I want to restart my computer now**" and then click the **Finish** button. This will restart your computer.

This completes the software installation for Windows 2000/XP. Please go to the next section, Software Settings for Windows 2000 / XP.

- Software Settings for Windows 2000 / XP
- 1. The Windows 2000/XP system restarts and two Windows desktops appear. Then **NVIDIA nView Setup Wizard** dialog box appears on each desktop. Complete nView setup by following the instruction in the dialog boxes.
- 2. Click the right mouse bottom on any area of the Windows desktop where no program is running, and then select **Properties**

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The **Display Properties** appears.

If you use Windows 2000, please go to step3. If you use Windows XP, please go to step 4.

 Select the Quadro4 900XGL / 980XGL dialog via Display Properties > Settings > Advanced > Quadro4 900XGL / 980XGL. Select Desktop Utilities and uncheck the option Enable Dualview.



4. Select the Quadro4 900XGL / 980XGL dialog via Display Properties > Settings > Advanced > Quadro4 900XGL / 980XGL. Select Standard from nView Display Mode and click the OK button.

I	General Adapter Monitor Troubleshoot Color Management Color Management Ouadro4 900 X6L
Ousdro4 900×XSL     riView Display Mode     Performance and Qualit	NVIEW
OpenGL Settings Direct3D Settings Refresh Rate 0 Overlay Controls	nView Modes
NVRotate	
· · · ·	Display: NView Display 1: Digital Display (First)
	Detect Displays Device Settings >> OK Cencel Porty

5. The following dialog box appears. Click the **OK** button.

Display Settings		
٩	Windows will now apply your new display settings. This will take a few seconds, during which time your screen may flicker.	
	<ul> <li>If your new settings are not applied correctly, your original display settings will be automatically restored in 15 seconds.</li> </ul>	
	OK Cancel	

6. The screen turns blank, momentarily. The new Windows desktop and the following dialog box appears. Click the **YES** button in the dialog box.



7. Click the **Cancel** button to close the **Display Properties.** 

Display Properties 🔹 💽		
Themes Desktop Screen Saver Appearance Settings		
Drag the monitor icons to match the physical arrangement of your monitors.		
1 2		
Display:		
1. (Default Monitor) on NVIDIA Quadro4 900 XGL (IBM)     Screen resolution     Color quality		
Less More Medium (16 bit)		
800 by 600 pixels		
✓ Use this device as the primary monitor.		
Extend my Windows desktop onto this monitor.		
Identify Iroubleshoot Advanced		
OK Cancel Apply		

 Select the Settings dialog via Display Properties > Settings. Select Monitor 1 and set screen resolution to 1920x2400 pixels. Please set the color quality to Highest(32 bit) if you like. Click the OK button.

Display Properties	? 🛛	
Themes Desktop Screen Saver A	ppearance Settings	
Drag the monitor icons to match the physical arrangement of your monitors.		
Display:		
1. Plug and Play Monitor on NVIDIA Quadro4 900 XGL (IBM)		
Screen resolution	Color quality Highest (32 bit)	
1920 by 2400 pixels		
✓ Use this device as the primary monitor.         ✓ Extend my Windows desktop onto this monitor.         Identify         Identify		
ОК	Cancel Apply	

9. The screen turns blank, momentarily. The new Windows desktop and the following dialog box appears. Click the **YES** button in the dialog box.

Confirm Display Settings	
Your desktop has been rea	configured. Do you want to keep
Reverting in 12 seconds	Yes No

 Select the Quadro4 900XGL / 980XGL dialog via Display Properties > Settings > Advanced > Quadro4 900XGL / 980XGL. Select Horizontal span from nView Display Mode and click the OK button.



11. The following dialog box appears. Click the **OK** button.

Display Settings		
<b>(</b>	Windows will now apply your new display settings. This will take a few seconds, during which time your screen may flicker.	
	If your new settings are not applied correctly, your original display settings will be automatically restored in 15 seconds.	
	OK Cancel	

12. The screen turns blank, momentarily. The new Windows desktop and the following dialog box appears. Click the **YES** button in the dialog box.



13. The following dialog box appears. Click the **OK** button in the dialog box.

Control Panel Exit Required 🔀	
⚠	The Control Panel has applied changes to which other pages on the property sheet may be sensitive. To ensure proper operation, the Display Settings property sheet will now be closed.
	ОК

- 14. Click the **Cancel** button to close the **Display Properties**.
- 15. When you wish to use any resolution besides 3840x2400, go to step 4, then proceed until step 7. If the dialog box shown in step 13 appears between step 6 and 7, click the OK button. Then select the resolution at step 8.

Note: If you select 3840x2400 pixels at step 8, video performance is poor. If you wish to use 3840x2400 pixels, follow the instruction in step 16.

16. When you wish to use 3840x2400 pixels again after you have changed the resolution by step 15, go to step 10, then proceed until step 14.

This completes the software settings for Windows 2000 / XP.