

Professional 3D-Hardware



NVIDIA Stereo Settings



General: NVIDIA supports OpenGL QuadBuffer passive 3D-Stereo at least since 2003.

In principle, any NVIDIA professional driver at **all** Microsoft Windows Desktop-OS since 2003 should support our 3D PluraVIEW monitor.

Microsoft has decided to offers with **Windows 10 a live time operating system**, the **user** has to **check** now recently, if the installed graphics card driver version is validated to the Windows 10 Build number.

You can check the Windows 10 Version if you click the Start button, Type "*winver*" in the search box and press Enter.

	Windows10
Microsoft Window	
Version 20H2 (OS	s Build 19042, 746)
© 2020 Microsoft	Corporation. All rights reserved.
The Windows 10 F by trademark and the United States	Pro operating system and its user interface are protecter other pending or existing intellectual property rights in and other countries/regions.
This product is lice <u>Terms</u> to:	ensed under the <u>Microsoft Software License</u>
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This document we will explain, How-To **reset** <u>first</u> the already installed NVIDIA RTX Enterprise driver to the factory defaults and after a restart, How-To **enable** the **passive Stereo** settings at NVIDIA RTX Enterprise drivers correct.

In case that after you have followed carefully the steps of these instructions, our test tool **<u>REDBLUE</u>**.exe will show two (2) times a **blue** rectangle, then finally we recommended to install the latest NVIDA RTX driver from our website <u>www.schneider-digital.com</u>

This happens typically if your installed NVIDIA RTX graphics card driver fits NOT to your installed Windows 10 version. "*winver*"

If you use a **mobile** Workstation, be sure that your **Hybrid INTEL** graphics device is switched **OFF** at the **BIOS-Settings** of your Laptop and all stereo displays are driven by the NVIDIA RTX card.

Now make sure that the following points are prepared before you start:

- 3D PluraVIEW is already powered ON with the main switch at the back side.
- In case you need mini-DisplayPort adapters, please only use the ones already delivered with your 3D PluraVIEW system.
- To setup a mobile Workstation with Thunderbolt-3 or USB-C connector, please use the USB 3.1 Type-C adapter to DisplayPort 1.2 / Schneider Digital part number <u>14607</u>.
- Workstation is set and running.

Step 1:

Please be sure that **ONLY** the two inputs form our 3D PluraVIEW are connected to your Workstation.

All side screens, even if they are connected to a second GPU in the same Workstation should be disconnected.

Plug ONLY the 3D PluraVIEW system into the Display Ports of your Nvidia Quadro Card as seen in the Picture.

- Bottom labeled cable ->Port 1
- Top labeled cable ->Port 2



Step 2:

Right click on your Desktop and go to "Display Setting".

- Check if **both** Displays are shown
- Make sure the **Bottom** Display is the **Main** Display.
- See if both Displays are at the same Resolution:
 - 28" 4k PluraView -> 3840 x 2160 (Recommended 3D)
 - 27" WQHD PluraView -> 2560 x 1440 (Recommended 3D)
 - 24" Full HD PluraView -> 1920 x 1080 (Recommended 3D)
 - 22" Compact Full HD PluraView -> 1920 x 1080 (Recommended 3D)
- Check if the Microsoft "3D Display mode" is set to -> ON

Settings			×
வ் Home	Display		
Find a setting	Get a brighter and more vibrant picture for videos, games and apps that support HDR.		
System	Windows HD Color settings		
🖵 Display	Scale and layout		
예) Sound	Change the size of text, apps, and other items		
Notifications & actions	100% (Recommended) V		
J Focus assist	Advanced scaling settings Display resolution		
(¹) Power & sleep	1920 × 1080 (Recommended, 3D) ~		
📼 Storage	Display orientation		
B Tablet	Landscape V		
	Multiple displays		
Projecting to this PC	Multiple displays		
X Shared experiences	Connect to a wireless display		
🛱 Clipboard	3D display mode		
→ Remote Desktop	On		
O About	Advanced display settings Graphics settings		

Step 3:

Right Click on your Desktop and go to NVIDIA Control center.

- Open "Manage 3D settings."
- Hit Restore Defaults at the right top corner and click on Yes and Apply.
- Hit **Restore** on the **Base Profile** and click on **Yes** and **Apply**.
- After this factory default, a **Restart** of your workstation is essential.

NVIDIA Control Panel		- 0	×
File Edit Desktop 3D Settings Help			
Select a Task	Abs		^
	Manage 3D Settings	Restore Def	aults
<mark>Manage 3D settings</mark> Set PhysX Configuration	You can change the global 3D settings and create overrides for specific programs. The overrides will be used automatically each time the specified p	rograms are lau	nched.
Display Change resolution Adjust desktop colour settings	I would like to use the following 3D settings:		
Rotate display View HDCP status	Global Settings Program Settings		
Set Up Digital Audio Adjust desktop size and position	Global presets:		
Set up multiple displays	Base profile 🗸 🚾 Restore		
	Settings:		
- Workstation	Feature Setting		
View system topology	Ambient Occlusion Off		
-Change ECC state	Anisotropic filtering Application-controlled		
Manage GPU Utilisation	Antialiasing - FXAA Off		
	Antialiasing - Gamma correction On		
	Antialiasing - Mode Application - controlled		
	Antialiasing - Setting Application-controlled		
	Antialiasing - Transparency Off		
	Sutter-hipping mode Auto-select		
	CUDA - GPUS All		
	Enable overlay Off		
	Exported pixel types Colour indexed overlays (8 bpp)		
	Anisotropic texture filtering affects the crisoness of textures.		
	Prinded oper texture intering officed one chipined of textures.		
	Typical usage sceparios:		
	The image will be less blurred at higher settings, however, you may experience a decrease in performance		
	If the application has its own anisotropic filtering controls, it is recommended to use the application-controlled setting		
O System Information			~

Step 4:

After the reboot, please open with a right click on your Desktop again the **NVIDIA Control** center.

Navigate to "Change resolution" check if both Displays have the same settings as following:

- Resolution (As mentioned in Step 2)
- Refresh rate
 - 4k, WQHD, Full HD ->60Hz
 - o 24" Full HD ->**144Hz**
- NVIDIA Colour settings
 - Output colour format: -> RGB
 - Output dynamic range: -> Full
 - Output colour depth: -> **8bpc**

Select a Task	
	Change Resolution
Adjust image settings with preview	
	You can adjust the amount of information appearing on the screen and reduce flickering. You can also choose the high-definition (HD) format if you are using an HD TV.
📄 Display	
Change resolution Adjust desktop colour settings	1. Select the display you would like to change.
Rotate display	
View HDCP status	
Set Up Digital Audio Adjust desktop size and position	
Set up G-SYNC	Idek Tiyana PI 27300 Idek Tiyana PI 27300
Set up multiple displays	(1 of 2) (2 of 2)
- Video	
Adjust video image settings	2. Choose the resolution.
· Workstation	Connectory
Set up Mosaic	Commercial .
Change ECC state	
Manage GPU Utilisation	Resolution: Refresh rate:
	1080n 1920 x 1080
	720p, 1280 × 720
	720p, 1176 × 664
	576p, 720 × 576
	480p, 720 × 480
	PC
	2560 × 1440 (native)
	Customise
	3. Apply the following settings.
	(Use NVIDIA colour settings
	Desktop colour depth: Output colour depth:
	SDR (24-bit colour) $$
	Output colour format: Output dynamic range:
	RGB V Full V

Our 28" 4k PluraView Model can drive with **10Bit** color depth.

Therefore, you need to set different color settings.

- Desktop color depth: -> 10bit
- Output color depth: -> 10bpc
- Output color format: -> YCbCr444
- Output dynamic range: -> Limited

Side Note: If Top and Bottom display are showing different colors, please follow the instruction for **10Bit** above.



Step 5:

Inside the NVIDIA Control Center go to Manage 3D Settings.

- Stereo Display mode -> Clone mode
- Stereo Enable -> **On**
- Stereo Swap eyes -> Off

Stereo Enable might be unable to switch, depending on your Windows Version. Make sure you followed Step 2 and **enabled** "3D Display Mode" under **Windows**!

3D display mode		
On On		
Image: Select a Task Select a Task Image: Select a Task	Manage 3D Settings You can change the global 3D settings and create overrides for specific programs. The overrides will be to time the specified programs are launched. I would like to use the following 3D settings: Global Settings Global Settings Program Settings Global presets: Base profile Settings: Feature Power management mode NVIDIA driver-controlled Preferred refresh rate (Acer XF240H (2 of Application-controlled Stereo - Display mode Clone mode Stereo - Enable On-board DIN connector DisplayPort In-band stereo Globard DIN connector DisplayPort In-band stereo Globarend DIN connector	- X
	Threaded optimization Horizontal interlaced stereo display Triple buffering Off Vertical sync Use the 3D application setting	
System Information	Description: Enables stereo in OpenGL applications.	~

Step 6:

Navigate to "Set up multiple displays."

- Make sure the **Primary** Display is the **Bottom** Display (Marked with a Star)
 - You can change and Identify the **Primary Display** with a **Right** Click on the Display.
- Right Click on your Display with a Star*
- Chose Clone With -> 2
- Hit Apply
- Wait until NVIDIA control center asks to Confirm your Setting



Drag the icons so they match the physical configuration of your displays. Right-click on an icon for additional options.



Step 7:

RESTART now your Workstation to save all settings!

To check if the Quad Buffer Stereo and the Display orientation are working correctly, we recommend using a small Tool called REDBLUE.exe

REDBLUE.exe will display a red and blue Box on each Display, which if everything is correctly setup, will overlap on the Mirror.

- **Red** Box shows on your **Right** eye on the **Top** Display.
- Blue Box shows on your Left eye on the Bottom Display.

This tool can be found on our Website as well as current Drivers.

• <u>**REDBLUE**.exe</u>

Workstations (driver)

- PULSARON (AMD)
- CENTURON (INTEL)

Professional Graphics Card

- 01 QUADRO / RTX-Enterprise driver
- 🖻 <u>02 TESLA driver</u>
- 🖻 <u>03</u> GRID driver
- 🖻 <u>04 LINUX driver</u>
- 🔁 <u>05 STUDIO driver</u>
- 🖻 <u>06 NVS driver</u>
- 🖻 <u>BIOS</u>
- 둼 <u>Quadro-Sync</u>
- 🖻 <u>Mosaic Tool</u>
- Enterprise Management Toolkit
- Older Operating-Systems XP Server2003
- Older Quadro-Cards
- 🖻 <u>Uninstaller</u>

Workstation (Tools / Benchmarks / Diagnostik)

- 🖻 CPU-BurnIn
- Benchmarks
- CPU-Diagnostic
- Memory RAM
- HW Temperature Tools
- B HW Reporting

Remote Support: TeamViewer download

This will open a maintenance access through a TeamViewer <u>runtime</u> executable.

Feel free to Contact support@schneider-digital.com with all Questions or Call in directly into our Office: +49 (8025) 9930-10



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