

Barco Thunderbolt™ eGPU Solution



Installation Manual

The eGPU Enclosure with Barco MXRV display controller allows you to drive powerful graphics from a laptop computer (Intel®-based systems only) using a Thunderbolt™ 4 & 5 connection.

Before using the enclosure, closely follow the setup instructions and ensure you are using a Barco-approved laptop running Windows 11 in combination with the dedicated Barco driver for your display controller.

What's in the box:

- Sparkle Studio-G Ultra 850 assembled with the Barco MXRV display controller
- Power cord
- Thunderbolt™ 5 cable
- USB cable
- Mini displayport cable

For further information on this product, including compatible laptop, installation, and troubleshooting, visit:

<http://www.barco.com/en/support/egpu>

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Operating System Requirements

The laptop used with the eGPU enclosure and MXRV display controller must meet the following minimum system requirements:

- Windows® 11 (version 24H2 or later)
- Thunderbolt™ 4 or Thunderbolt™ 5 port

Note: Other operating systems are not supported. The MXRV graphics board is the only supported display controller.

Hardware Setup

1. Connect the AC power cord to the enclosure and a power outlet.



2. Connect the Thunderbolt™ 5 cable from the enclosure to the computer.
Use the designated port in the box.



3. Connect the display(s) using the Mini DisplayPort adapters supplied in the box.



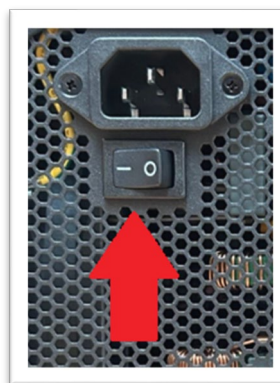
4. Connect the display USB cable(s) to the enclosure.



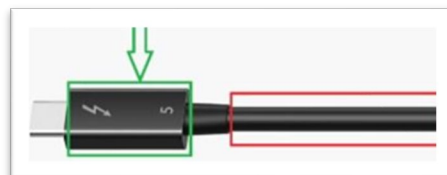
5. Connect the network cable to the enclosure if you want to share a wired network connection with your laptop over USB-C.



6. Ensure the enclosure is powered on.



Note: Use the Thunderbolt™ 5 cable with care. Plug and unplug the cable by holding the **type-C connector** instead of pulling **the cable**.



Software setup

Once the hardware setup is complete, first verify the following updates. Your computer's Thunderbolt™4 or 5 ports might not function properly until you update one or more of the following on your computer:

Ensure the system BIOS, Thunderbolt™ firmware, and Windows 11 updates are installed to the latest versions available from your PC manufacturer. Visit your PC manufacturer's website to download the latest software. Once all updates are completed you can proceed.

Prepare and update your computer

1. Ensure that you are using a compatible version of Windows 11 (24H2 or higher).
 - a. Navigate to **Settings > Windows Update** and select **Check for updates**.
 - b. If an update is available, click **Download & install**.
 - c. Restart your computer to apply the updates.
2. Update the system BIOS by downloading the latest firmware for your specific computer from your manufacturer's support site (HP, Lenovo...).

To quickly check the System SKU on a laptop:

- a. Type **msinfo32** into the Windows search bar which opens System Information.
- b. Within this window, look for **System SKU** under the System Summary.
- c. Go to the support site from the manufacturer, insert the system sku and follow the instructions to download and install the the BIOS-systemfirmware.

Install the Barco MXRV driver package

1. Connect the eGPU box to your laptop.
If not connected, the MXRV-3100 graphics controller will not be detected, and the driver installation will fail.
2. Download the driver package.
Barco Drivers and Intuitive Workflow Tools, **version 11.2 or higher**, is required. The latest version is recommended.
Download the latest version for your region here: <https://www.barco.com/support/mxrv-3100>.
3. Extract and open the downloaded zip folder.
4. Right-click the *Master_Setup* application file and select **Run as administrator**.
5. Read and accept the license agreement, then select **Next**.
6. Select all software components and select **Next** to proceed with the installation.

Name	Date modified	Type	Size
Master_Setup.dan	12/12/2025 10:00 AM	DAN File	8 KB
Master_Setup.deu	12/12/2025 10:00 AM	DEU File	9 KB
Master_Setup.ell	12/12/2025 10:00 AM	ELL File	10 KB
Master_Setup.enu	12/12/2025 10:00 AM	ENU File	8 KB
Master_Setup.esn	12/12/2025 10:00 AM	ESN File	9 KB
Master_Setup.eti	12/12/2025 10:00 AM	ETI File	8 KB
 Master_Setup	12/12/2025 10:00 AM	Application	2,835 KB
Master_Setup.fin	12/12/2025 10:00 AM	FIN File	8 KB
Master_Setup.fra	12/12/2025 10:00 AM	FRA File	9 KB
Master_Setup.hrv	12/12/2025 10:00 AM	HRV File	9 KB
Master_Setup.hun	12/12/2025 10:00 AM	HUN File	9 KB
Master_Setup.ita	12/12/2025 10:00 AM	ITA File	9 KB
Master_Setup.jpn	12/12/2025 10:00 AM	JPN File	5 KB
Master_Setup.kor	12/12/2025 10:00 AM	KOR File	5 KB

Barco Product Installation Wizard

License Agreement

 Press the PAGE DOWN key to see the rest of the agreement.

BARCO END USER LICENSE AGREEMENT

These license terms are an agreement between You and Barco with regards to the Barco Software and/or Barco Connected Services used subject to the relevant Product Specific Terms. Additional services may be subject to additional terms. Updated software versions may

Barco is not responsible for unauthorized installation of device driver and software. Check with your local administrator for system compatibility and regulatory compliance in your region.

Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install the driver, you must accept this agreement.

☒ Yes, I accept.
☐ No, I do not accept.

Next Cancel

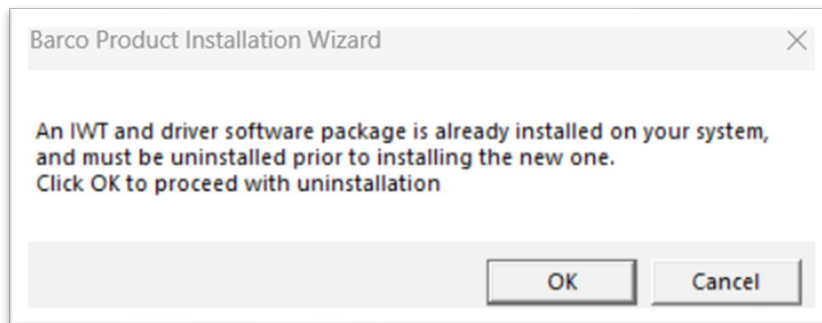
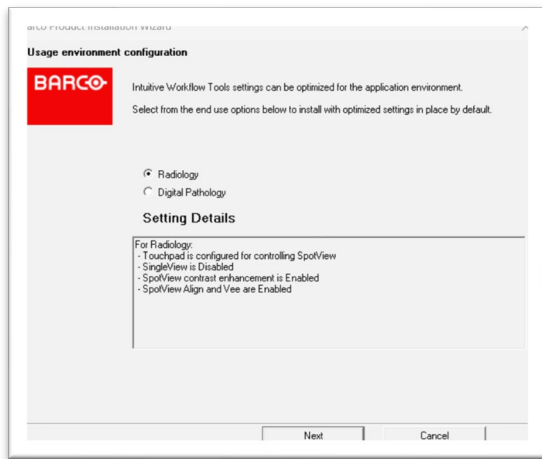
WELCOME TO BARCO PRODUCT INSTALLATION WIZARD

Welcome to the Barco Product Installation Wizard.

 The following components will be installed.

- ☒ Barco Drivers and Intuitive Workflow Tools v11.1
 - ☒ MXRV Driver on Barco MXRV 3100
 - ☒ Intuitive Workflow Tools Installer 2.4.1.0
- ☒ Barco Med Self Exam
- ☒ Barco TouchBar App

Next Cancel



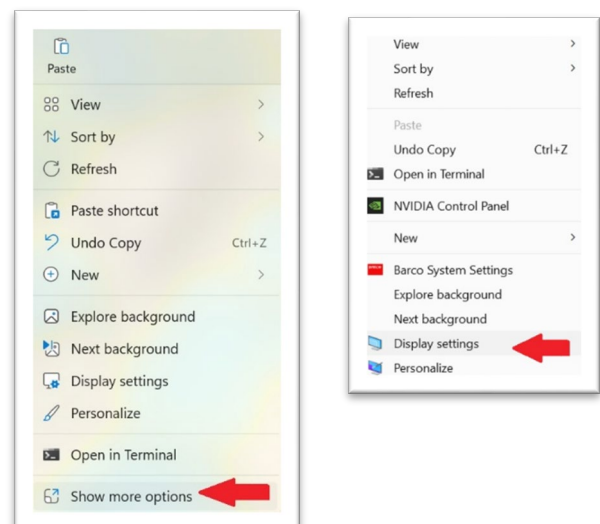
Note: Your computer may restart multiple times during the installation process.

Configure the display

Important: Display settings are configured per connected display.

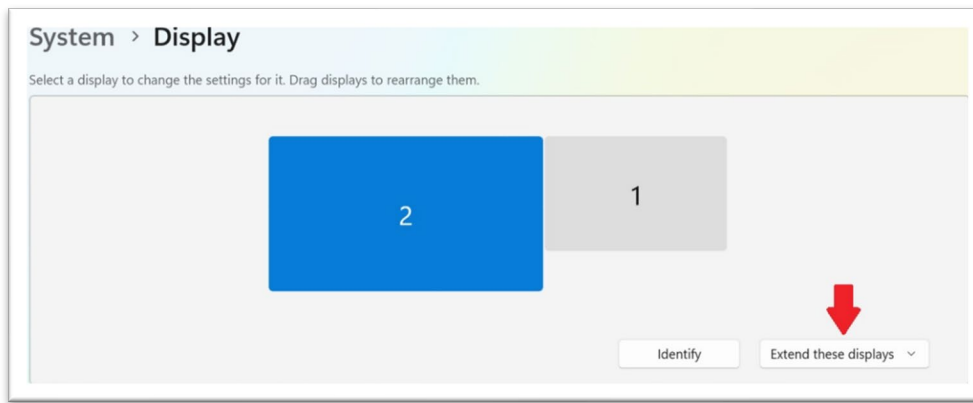
Note: When your device is configured with an additional onboard GPU/Graphic card you may need to disable the card to ensure performance with the BARCO eGPU solution.

1. To extend the desktop and configure the displays, access the Display Settings panel by right-click the Windows logo in the taskbar selecting **Show more options > Display settings**.



Result: Depending on your configuration, you should see a multi-display layout preview.

If the shown layout is not representative, you can try detecting other displays.

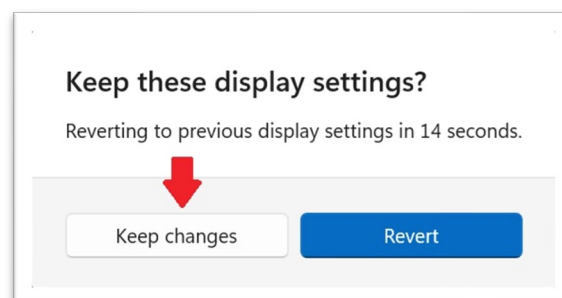


If the desktop is not automatically extended to connected displays, proceed to Step 3.

2. Select the target display in the **Rearrange your displays** window in Step 2. In the **Multiple Displays** dialogue box select **Extend desktop to this display**.



Important: Always be sure to select **Keep changes** when prompted.



3. In the **Scale and layout** window select the appropriate resolution for your display.



Result: The software setup is now complete. See the following page for the explanations of other helpful tasks.

Additional tasks

Checking for an onboard GPU

1. Right click on the windows logo on your desktop.
2. Select **Device Manager**.
3. Select **Display Adapters**.
4. Here you will find the GPU('s) on you computer.

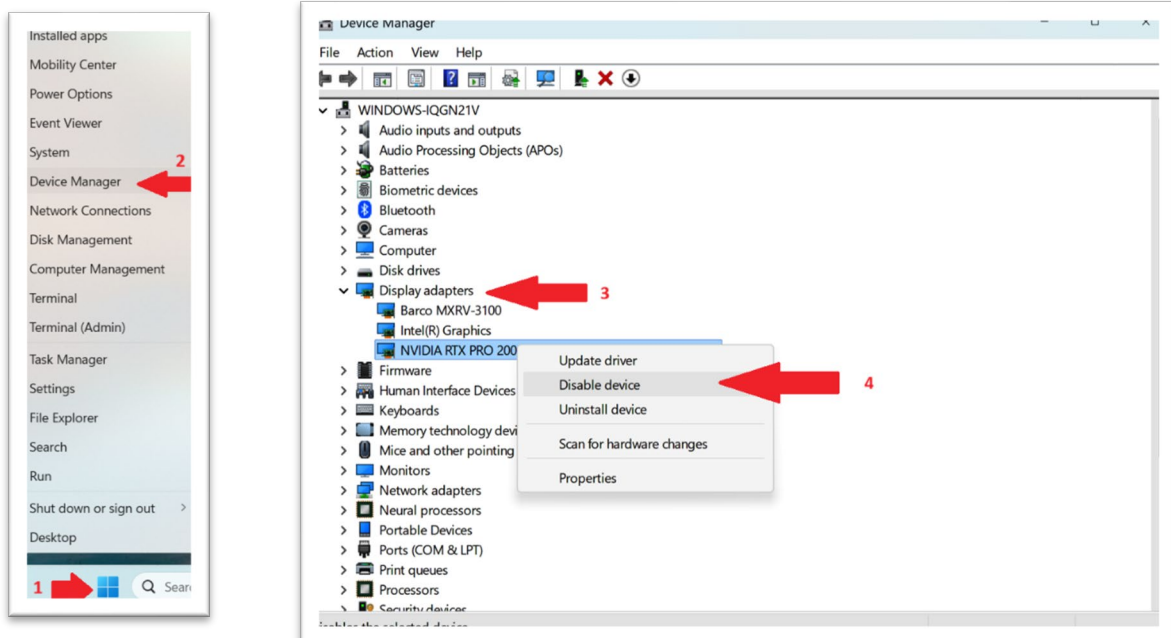
If your computer has an additional onboard graphics card, it will be listed separately from the integrated graphics card.

The integrated GPU card always needs to stay active. Mostly the integrated graphics card is described as: INTEL(R) Graphics.

Warning: I case you disable the integrated (INTEL®) GPU card you could disable your laptop's display. Therefor ensure an external display is connected before proceeding.

Disabling the onboard GPU

1. Right click on the windows logo on your desktop.
2. Select **Device Manager**.
3. Select **Display Adapters**.
4. Select **Disable device**.



Note : After using the enclosure please don't forget to activate the onboard GPU again.