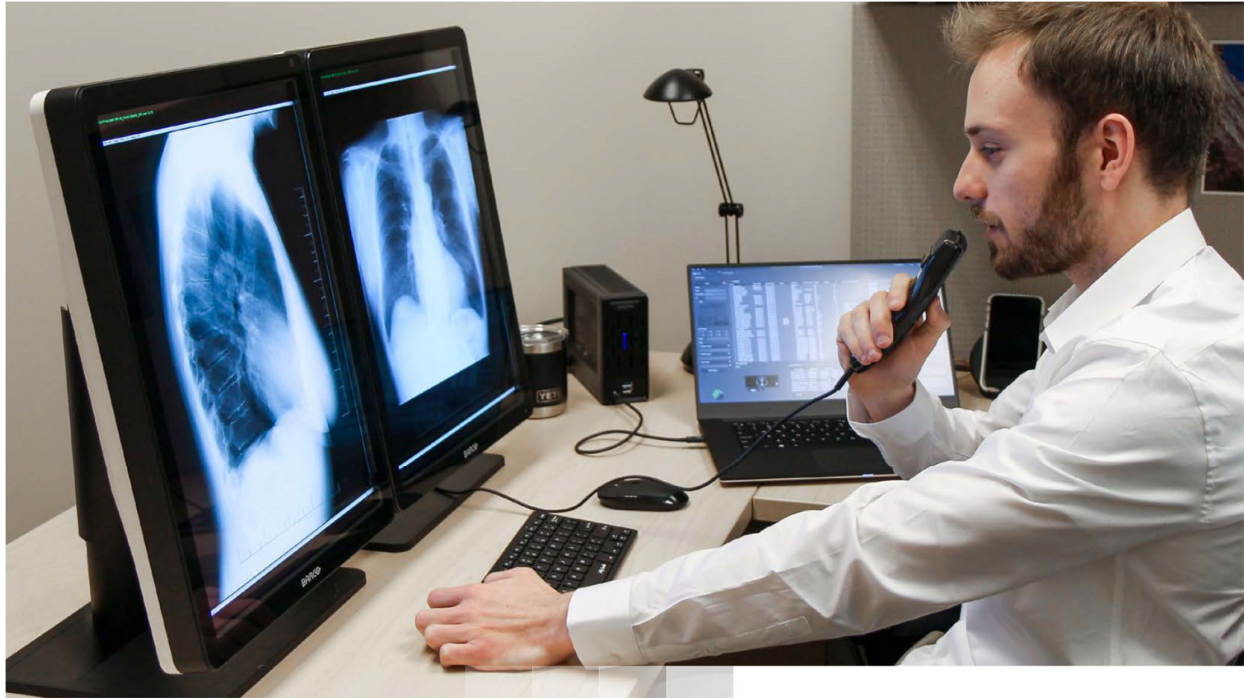


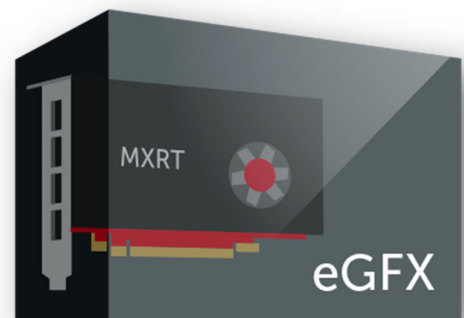
## Mobile Workstation eGFX Setup Guide



There's a growing trend in radiology towards doctors doing more reading outside the hospital. But when working remotely, how can you rely on the same level of quality, security and performance you get from medical workstations in the hospital reading room?

To answer that question, Barco developed a solution specifically designed for remote radiology reading, tackling the issues of performance and workflow, security and patient privacy, as well as quality and compliance.

This Setup Guide will assist in getting your new mobile reading station up and running with the latest software, drivers and system settings. Follow the instructions closely to ensure your system has all the necessary components in place for a seamless setup and trouble-free operation.



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## 1. Introduction

The mobile workstation, eGFX enclosure, graphics card, and displays compromise the main components of a mobile diagnostic reading station. Each component must be configured correctly for optimal performance.

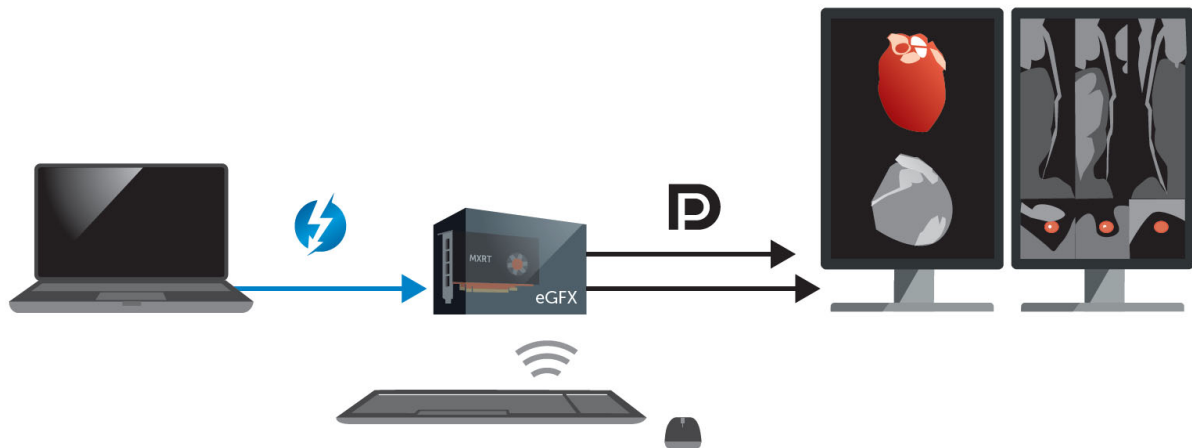


Image 1: System Diagram

It is recommended that the order of setup and connection follow the System Diagram image above from the left, starting with the PC and ending with the displays.

Depending on the PC make and model the images used in this Guide may vary slightly.

**Do not connect the eGFX box to the laptop until all updates and drivers have been preinstalled in the laptop.**

## 2. Windows Updates

Updating the PC to the latest version of Windows ensures component compatibility and smoother operation.

**Thunderbolt™ 3 is only supported in the Windows® 10 environment.**

## 2.1. Windows Update

Ensure the PC is using the latest version of Windows by checking for updates through System Settings.

Confirm the system is the latest by the “You’re up to date” notification (see Image 2: Confirming latest updates).

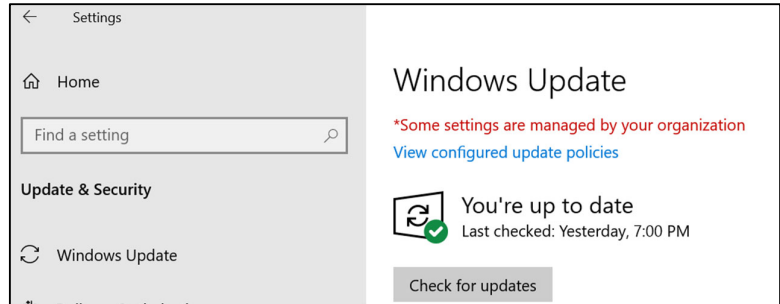


Image 2: Confirming latest updates

## 3. BIOS Instructions

PC manufacturers often provide system BIOS updates to ensure the laptop is compatible with the latest software and hardware. First update the system BIOS, then proceed to configure the specific vendor’s BIOS settings for your PC.

*Note: The settings and images below are suggestive and may differ from the actual BIOS interface on your laptop model.*

### 3.1. Update BIOS Overview

The latest BIOS can be downloaded from the PC vendor’s product support page on their website. Always select the BIOS version with the latest release date.

Be sure to carefully follow the manufacturer’s BIOS update directions to prevent permanently damaging the PC’s firmware.

### 3.2. Lenovo BIOS Settings

The eGFX requires special Graphics and Thunderbolt™ settings in the BIOS to function properly. Access those settings by doing the following:

1. Power up the PC
2. During restart press the F1 key to get into BIOS
3. Navigate to the Config tab at the top of the screen.
4. Select the DISPLAY menu
  - a. Make sure Graphics Device is set to “Hybrid Graphics”



Image 3: Lenovo BIOS Settings

5. In the THUNDERBOLT™3 menu confirm the Thunderbolt settings match those in Image 3: Lenovo BIOS Settings
6. In Main menu tab, save changes and exit

### 3.3. Dell BIOS Settings

Thunderbolt™ has specific settings in the BIOS. Access those settings by doing the following:

1. Power up the PC
2. During restart hit F2 key to get into BIOS
3. Open the System Configuration drop down list (see Image 4: Dell BIOS Settings)
4. Select Thunderbolt™ Adapter Configuration
5. Enable all Thunderbolt™ options and set Security to "No Security"
  - a. Settings should match Image 5: Thunderbolt™ Adapter Configuration below

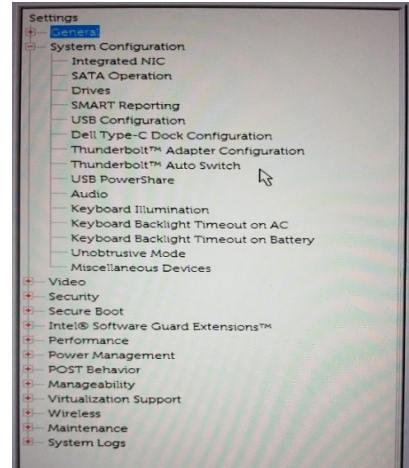


Image 4: Dell BIOS Settings

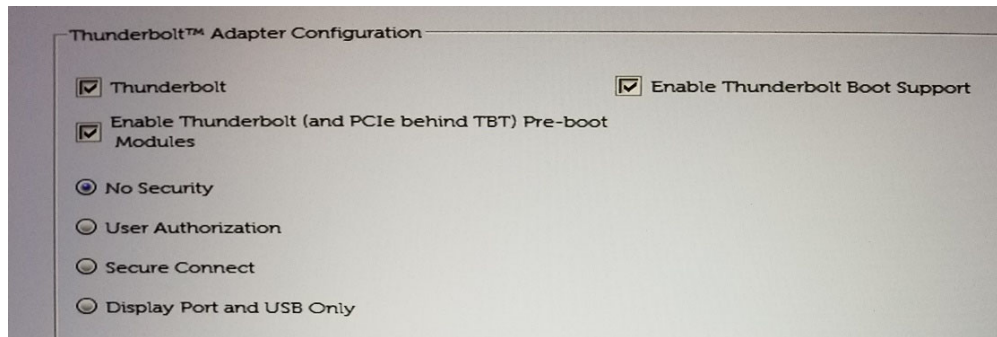


Image 5: Thunderbolt™ Adapter Configuration

6. Select Thunderbolt™ Auto Switch
  - a. Enable Auto Switch
7. Open Video drop down list (Image 6: Video Settings)
8. Select Switchable Graphics
  - a. Enable Switchable Graphics
  - b. Disable Discrete Graphics Controller Direct Output Mode
  - c. Settings should match Image 7: Switchable Graphics below

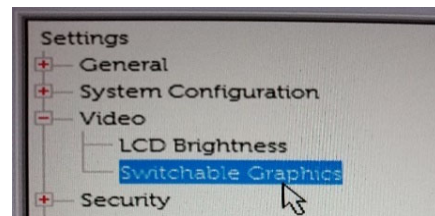


Image 6: Video Settings

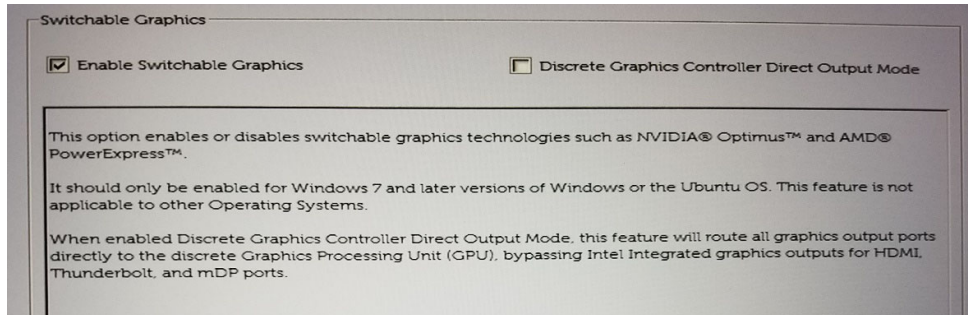


Image 7: Switchable Graphics

9. Apply settings and exit
10. PC will automatically restart

### 3.4. HP BIOS Settings

The eGFX requires special Graphics and Thunderbolt™ settings in the BIOS to function properly. Access those settings by doing the following:

1. Power up the PC
2. During restart press the F10 key to get into BIOS
3. Navigate to the Advanced tab at the top of the screen.
  - a. Select Port Options
  - b. Confirm the Thunderbolt™ settings match those in Image 8: HP BIOS Settings

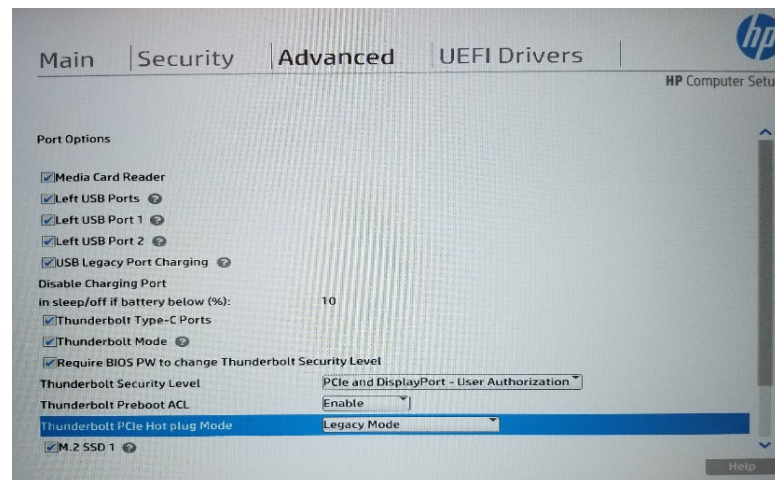


Image 8: HP BIOS Settings

4. From the Advanced tab at the top of the screen select Built-In Device Options
  - a. Ensure the Graphics are set to Auto
5. In Main menu tab, save changes and exit

## 4. Thunderbolt™ installation

Proper operation of the eGFX box requires the latest Thunderbolt™ firmware and controller software be installed. Drivers should be downloaded from the respective PC vendor's Support website.

### 4.1. Update Thunderbolt™

The latest Thunderbolt™ drivers can be downloaded from the PC vendor's Support website. Always select the Thunderbolt™ version with the latest release date.

### 4.2. Thunderbolt™ Version

Start the Thunderbolt™ Control Center application from the Start Menu. Thunderbolt™ Software and Controller version information can be confirmed by selecting "About". See Image 9: Thunderbolt™ Control Center to the right.

By selecting "About" the Thunderbolt™ Software and Controller versions can be confirmed.

The Thunderbolt™ Software and Thunderbolt™ Controller NVM Firmware window in Image 10: Thunderbolt™ Software and Controller Version Details should match the latest version from the PC vendor's website.

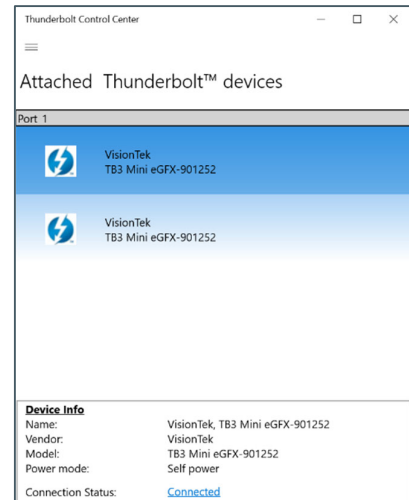


Image 9: Thunderbolt™ Control

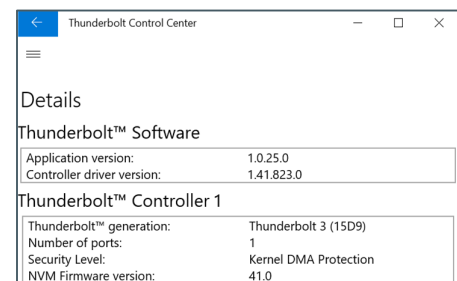


Image 10: Thunderbolt™ Software and Controller Version Details

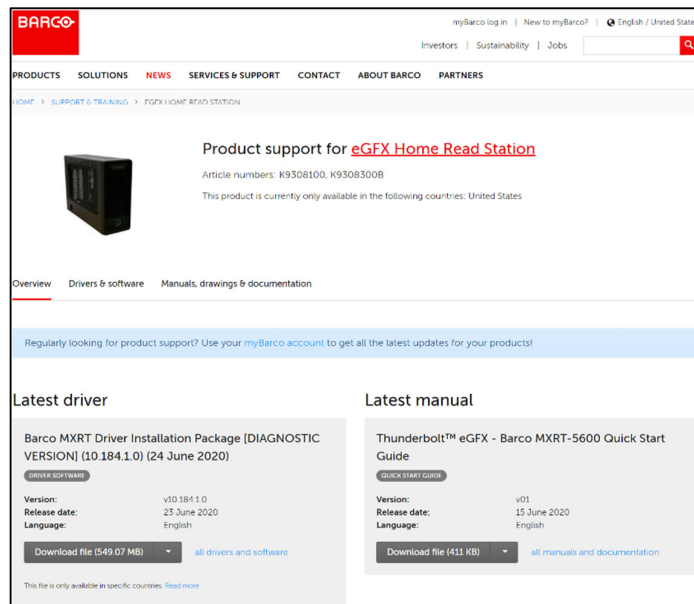
## 5. MXRT Driver Installation

The MXRT display controller in your eGFX box requires a driver to be installed for proper operation and should be preinstalled before connecting the eGFX box to the mobile workstation.

### 5.1. Driver Download

Download the latest MXRT Driver Installation Package (v10.184.1.1 or later) by searching for your MXRT product from the Barco Product Support website:

<https://www.barco.com/en/support>



Download the driver to the C: drive of your PC.  
Extract the entire Driver Software Package to your C: drive.

## 5.2. Driver Installation

Open the self-extracting Barco MXRT Installation Package to begin the installation process. The driver will automatically begin installing.

Accept the License agreement when prompted.

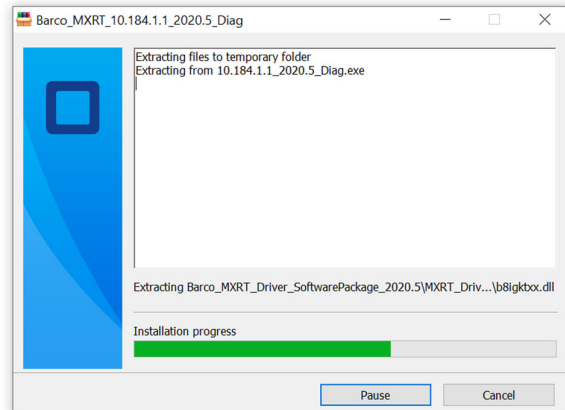


Image 11: Self-extracting installer

From the Barco Product Installation Wizard select the MXRT Driver and Intuitive Workflow Tools folder and BarcoMed Self Exam (optional). Press Next and proceed with installation.

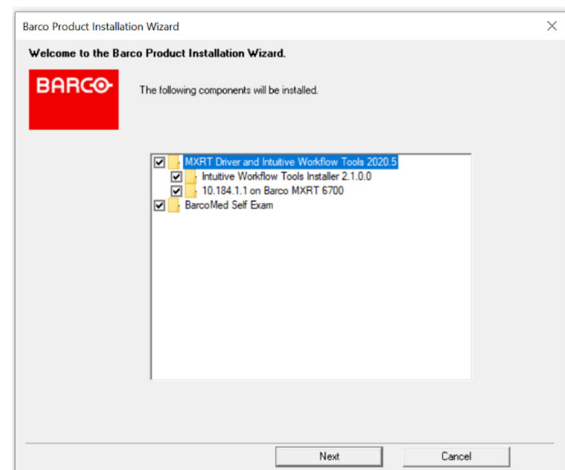


Image 12: Barco Product Installation Wizard

## 6. Physical Display Controller Card Installation

**If your eGFX device (eGFX-VTMxx00) came with a pre-installed MXRT display controller, proceed to Chapter 7.**

Follow the physical card installation instructions that came with your eGFX device or visit the manufacturer's website.

### 6.1. VisionTek mini-eGFX

<https://www.visiontek.com/mwdownloads/download/link/id/3/>

### 6.2. Sonnet Breakaway Box 550

[https://www.sonnettech.com/support/downloads/manuals/egfx\\_breakaway\\_box\\_qsg\\_5L.pdf](https://www.sonnettech.com/support/downloads/manuals/egfx_breakaway_box_qsg_5L.pdf)

## 7. Connecting eGFX Box

### 7.1. Cable connection

Once the driver has been installed, connect the power and video cables from the display to the eGFX box and turn it on.

Connect the Thunderbolt™ cable from the eGFX box to the laptop. The eGFX box will then start the connection process which may take up to 30 seconds until the displays are fully recognized.

### 7.2. Thunderbolt™ Device Approval

Confirm that the eGFX box has been approved for connection in the Thunderbolt™ task bar or Thunderbolt™ Control Center in the Start Menu app list. If necessary, set approval status to Always Connect in the Approve Thunderbolt Devices window (see Image 13: Thunderbolt™ Device Approval).



Image 13: Thunderbolt™ Device Approval

## 8. Display Configuration

Once the displays are approved and recognized, they will need to be configured within the Windows Display settings interface. Go to Windows Settings>System>Display for the following steps.

### 8.1. Extend desktop

The desktop must be extended to the displays for the video signal to appear. After selecting one of the numbered displays, select Extend desktop to this display from the drop-down menu (Image 14: Multiple displays menu). Ensure that the Resolution matches that of the display. Do this for all connected displays.

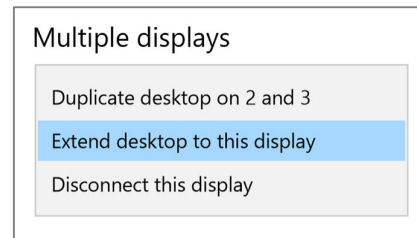


Image 14: Multiple displays menu

*Note: When VirtualView™ is enabled within the Barco System Settings, the desktop must initially be extended to that emulated display as well.*

### 8.2. Display arrangement

The displays can be rearranged to match the preference of the user (Image 15: Display settings). Once the order has been adjusted, make sure to press Apply.

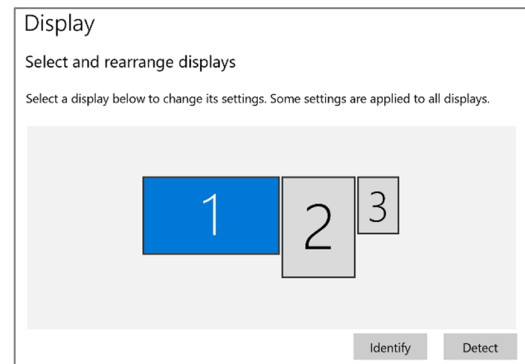


Image 15: Display settings

At this point your eGFX system should be connected and fully operational. Subsequent hotplugging with the same display configuration will not require repeating the desktop extension/arrangement process.