



AVerMedia Live Streamer CAM 513 Quick

Installation & Troubleshooting Guide

For Amazon AVerMedia Customer Service Team

Date: Oct. 2022

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Part 1. System Requirements (For dedicated streaming PC)

Desktop

Usage	CPU	GPU
Image Adjustment, Picture in Picture, Skin Filter, AR Effect, AI Framing	Intel® Core™ i5 6th or better	NVIDIA® GeForce® GTX 1060 or better
NVIDIA® Virtual Background	Intel® Core™ i5 8th or better	NVIDIA® GeForce RTX 20 or 30 Series, or NVIDIA® RTX professional GPUs, or NVIDIA® Quadro RTX

RAM: 8 GB or more

Laptop

Usage	CPU	GPU
Image Adjustment, Picture in Picture, Skin Filter, AR Effect, AI Framing	Intel® Core™ i7 7th 2.8GH 4 core or better	NVIDIA® GeForce® GTX 1050 Ti or better
NVIDIA® Virtual Background	Intel® Core™ i5 8th 3GH 6 core or better	NVIDIA® GeForce RTX 20 or 30 Series, or NVIDIA® RTX professional GPUs, or NVIDIA® Quadro RTX

RAM: 8 GB or more



Part 2. Quick installation guide on AVerMedia CamEngine software application

CamEngine is designed specifically for AVerMedia's webcam series. CamEngine allows you to customize video settings and access the full suite of features the webcam has to offer. Built-in rotation, zoom, picture-in-picture, keystone correction, capture the current video image, AI framing and ePTZ to enhance any online lesson/video call, the software will offer your digital classroom/meeting room with rich and varied set of information sources.

Please visit <https://www.avermedia.com/us/product-detail/PW513> to download the latest version of CamEngine and firmware package. Or download via the following links:

For Win10, Win11:

https://storage.avermedia.com/web_release/www/software/AVerMedia_PW513_Firmware_0.0.8000.46_CamEngine_Win_v4.2.17.1.zip

For macOS 11, macOS 12:

https://storage.avermedia.com/web_release/www/software/CamEngine_v4.1.65.1_PW513_Firmware_0.0.8000.46_v1.0.0.16.zip

CamEngine setting tutorial video:

[How can I use AVerMedia webcam in CamEngine 4 and use zoom in / zoom out feature in other 3rd apps](#)

Two important things to remind in advance:

1. Be sure to launch CamEngine earlier than other software apps like Zoom, Skype, Google meet, etc.
2. Select the video device in the app you use to be "AVerMedia CamEngine Virtual Camera"

Part 3. Troubleshooting guide

(1) Settings don't provide quality I want

These steps can help achieve better image quality and resolve issues where PW513 video appears some noise, graininess, or video's frame dropped.

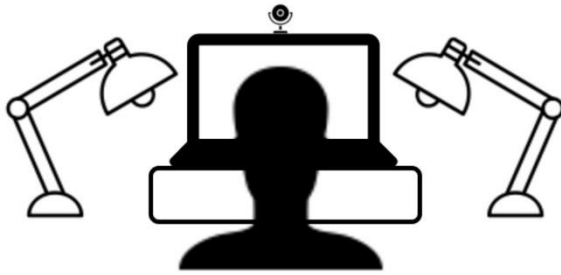
Live Streamer 4K CAM PW513 shines best with a studio-quality setup. That said, set up bright and adjustable light sources would be helpful to optimize its best performance. At best, get a key light or some sort of lighting behind PW513



In case the key light is not bright enough, or you don't have a budget to afford the key light, a ring light is an effective and affordable solution.



Or you can use lights you may already have at home. Use multiple light sources from different angles to balance your lighting and put your face forward.



Once you have enough light on you, you can adjust the software setting. Optimize Live Streamer CAM 513 Video Quality In this video, we'll show you some tips and tricks on how to get the best quality video from your Live Streamer CAM 513.

Recommended illuminance: 500+ LM Main light used in the video: VILTROX VL-200

<https://youtu.be/A5aFEUKX2I4>

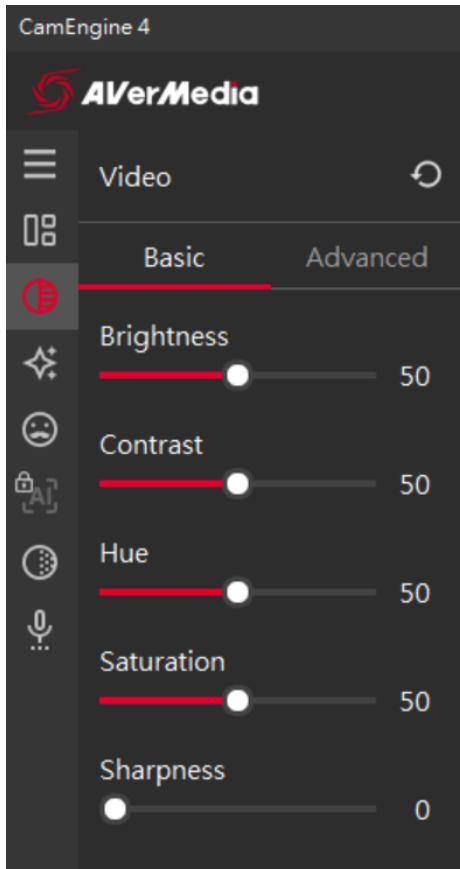
(2) Can't get the claimed frame rate and the color reproduction is extremely poor

The following steps may be applied to fix the low frame rate issue:

- Disconnect inactive USB devices: Too many active USB devices being used at the same time can affect the overall quality of your video.
- Confirm if system requirement is fulfilled:
There are minimum system requirements for webcams and CamEngine application. Check if the computer in use meets the min. ones in need. More information on system requirements can be found in page 1. of this document.
- Lower CPU and GPU usage: For Windows users: To determine your CPU usage, head into Task Manager by pressing ctrl + alt + delete.
Once you're in the Task Manager, click the Processes tab at the top.
Then, simply look for the CPU column, adjacent to the Processes tab and click it to order by CPU usage.
Finally, turn off any applications that use up a high percentage of your CPU.
For Mac users: Head into your activity monitor to check if your CPU usage is too high. Turn off any applications that use up a high percentage of your CPU.
- Connect the webcam into the USB slot directly:
Plugging the webcam in directly excludes USB hub or USB extension cable problems. Please use one of the built-in ports on your device.
If a Macbook is in use. please use USB-C Digital AV Multiport Adapter or the Type-C to USB port adapter made by Apple.

The following steps may be applied to fix the color reproduction issue:

- Upgrade PW513 firmware to the latest version 0.0.8000.46, which has finetuned its default image settings.
- Launch CamEngine and adjust with video settings, by sliding the bars of Contrast, Hue, and Saturation for the most preferred settings, depending on environments where PW513 is located.



(3) Once I installed the software, it kept repeatedly crashing my computer. I had to uninstall software to keep my computer working properly

CamEngine keeps improving its CPU and GPU usage. Please download the latest version as in the links on page 1 of this document.

Should you run into any trouble by using AVerMedia products, please contact our technical support team by TechnicalSupport@avermedia.com