

BiNoX's CS2 Optimization Guide

This guide is being updated regularly. Last update: 10/10/2024

This guide is for Windows 11 users. If you're still on W10, now would be the time to switch :)

Make sure to have a clean CS2 installation. You might have leftover folders from csgo since the switch to CS2

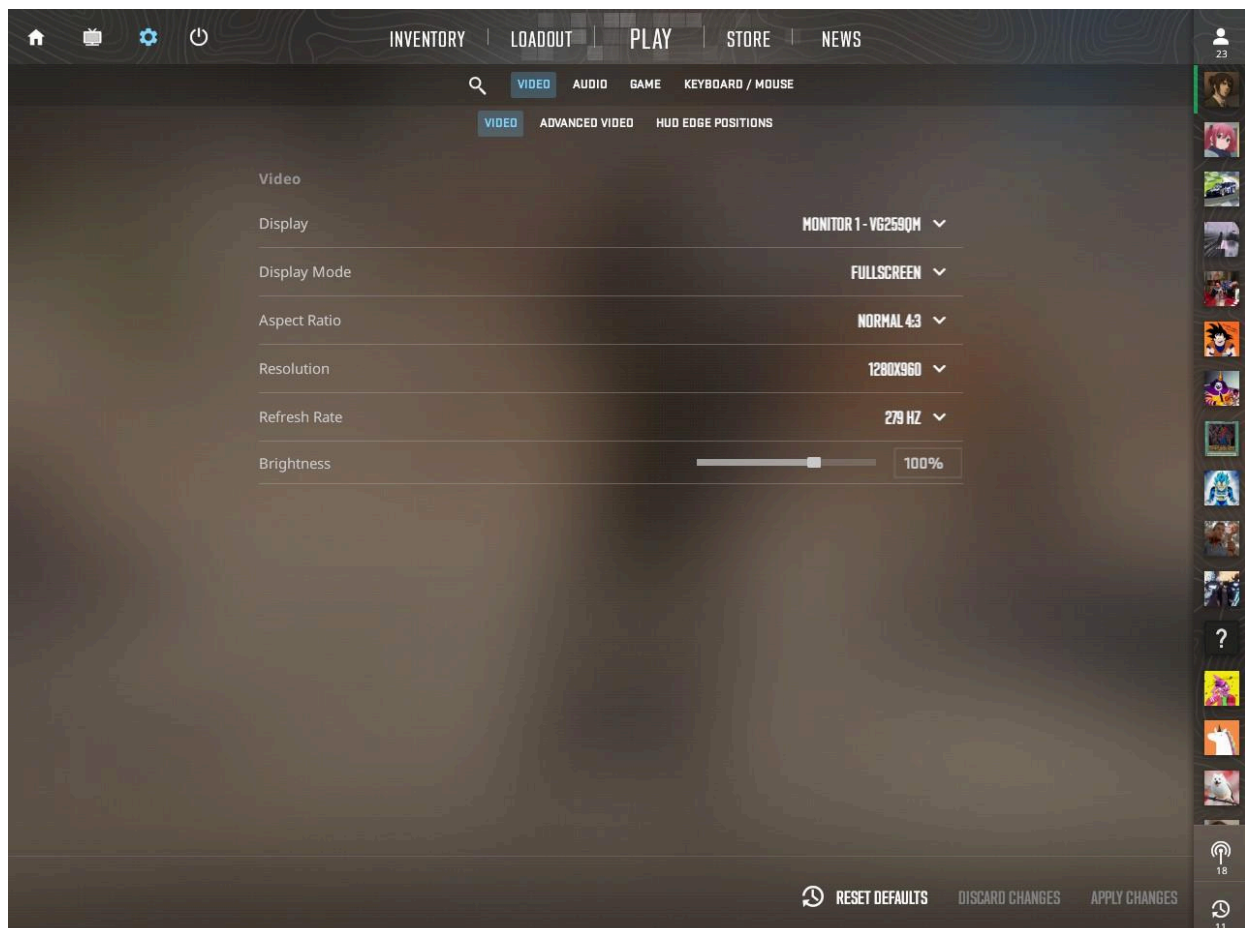
Also do a before and after benchmark using this map

[CS2 FPS BENCHMARK - Steam Workshop](#)

CS2 SETTINGS

Video Settings

[4:3 or 16:9: What's The BEST Resolution In CS2? - Youtube](#)



Advanced Video Settings

Boost player contrast: enabled (can help see players through molly)

Multisampling: 2x, don't go below this otherwise you won't see through railing on vertigo

Global shadow: high

Dynamic shadows: all

Model: low

Texture: 16, literally 0 fps difference and can see details further

shader: high (fix pixelated shadows and skins are cleaner)

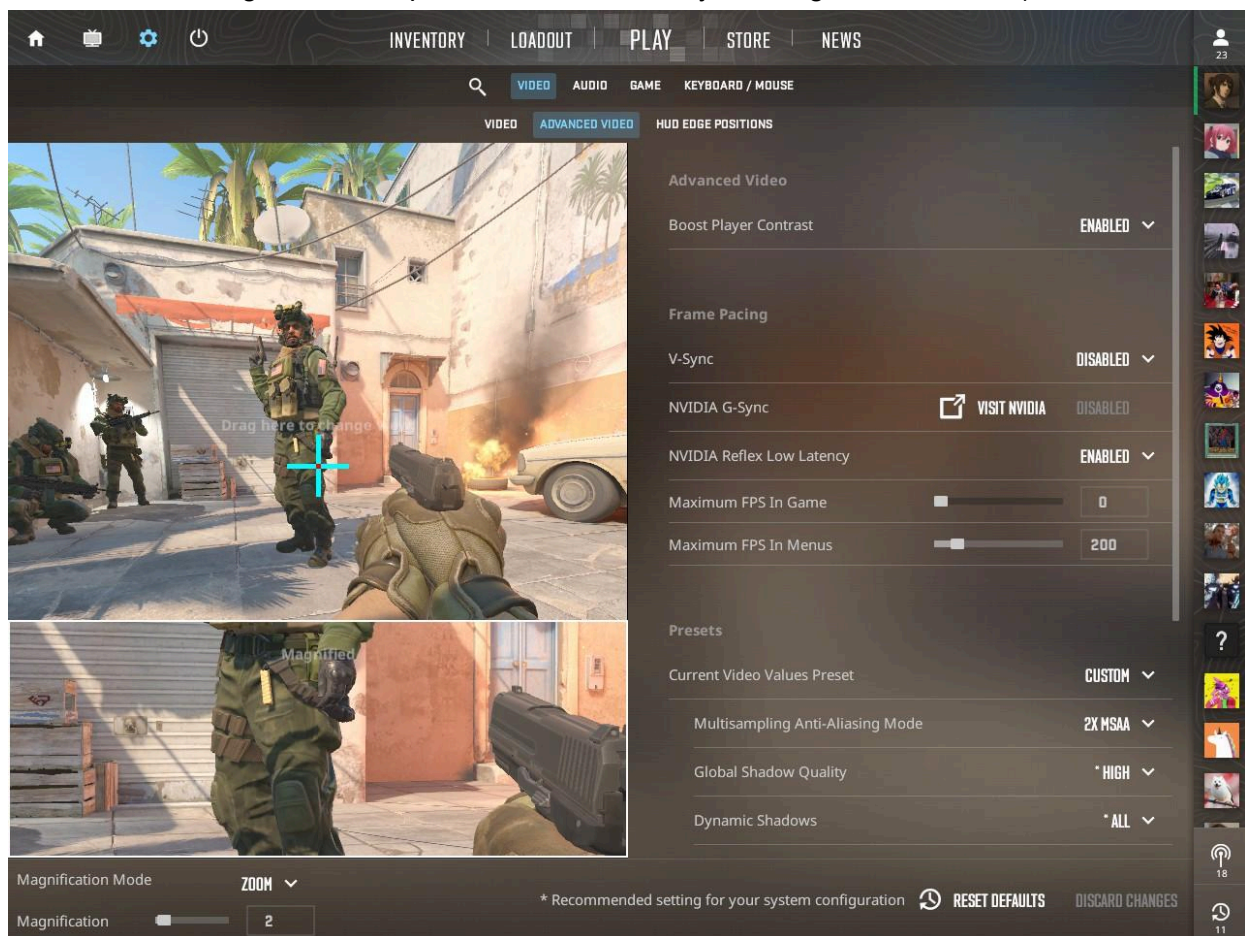
Particle: Low

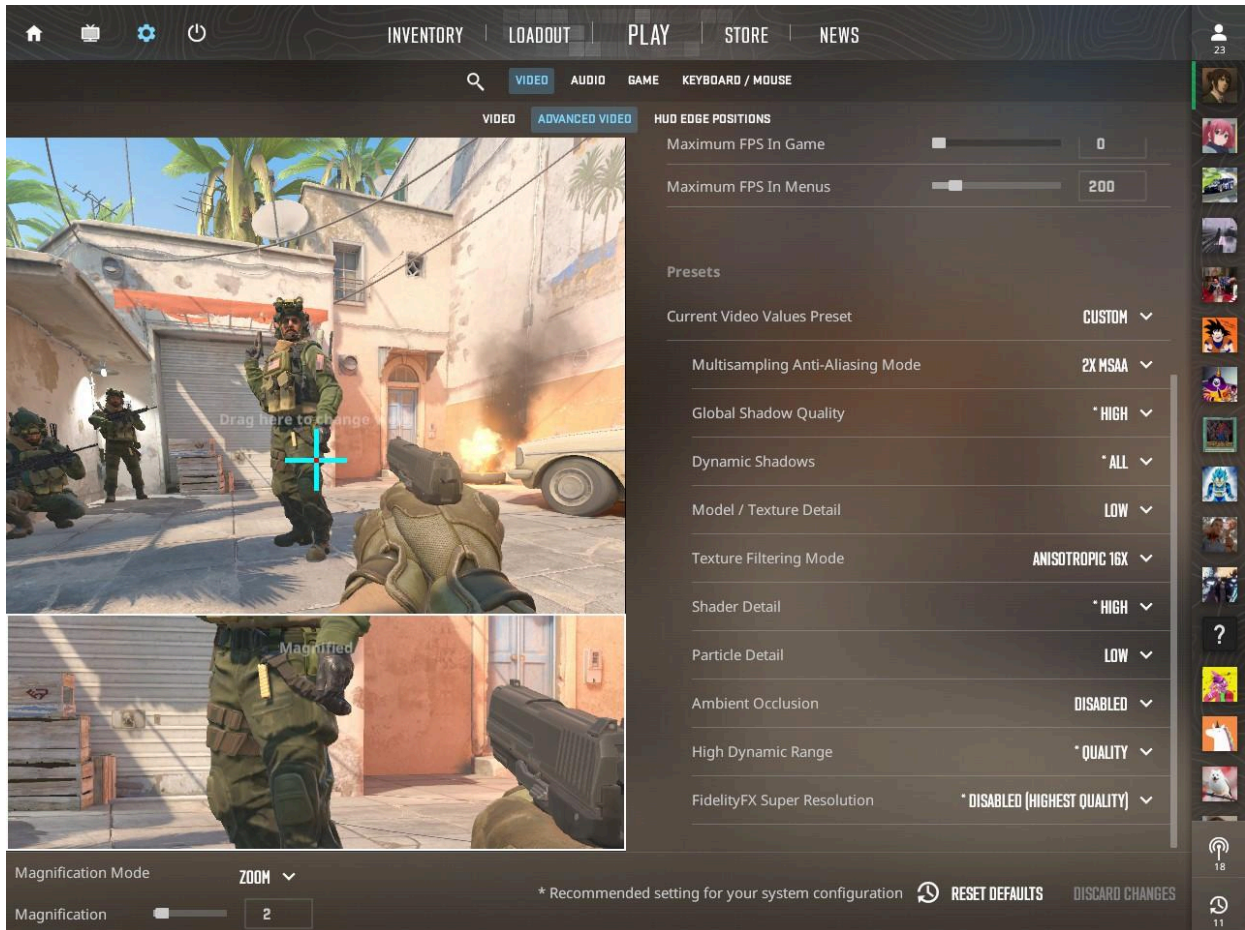
ambient occ: disabled, i know you can have advantage cuz of shadow on the wall but since i started playing cs2, i killed nobody using it and it eat like 30 fps, not worth it

hdr: quality

fidelity: disabled

nvidia reflex: use enable (Enabled + Boost” can further reduce latency at the cost of extra power usage and a slightly lower frame rate. In Counter-Strike 2, this setting is only recommended for gamers who prioritize lowest latency over highest frame rate)





[CS2 - Advanced Video Settings of 25 Pro Players](#)

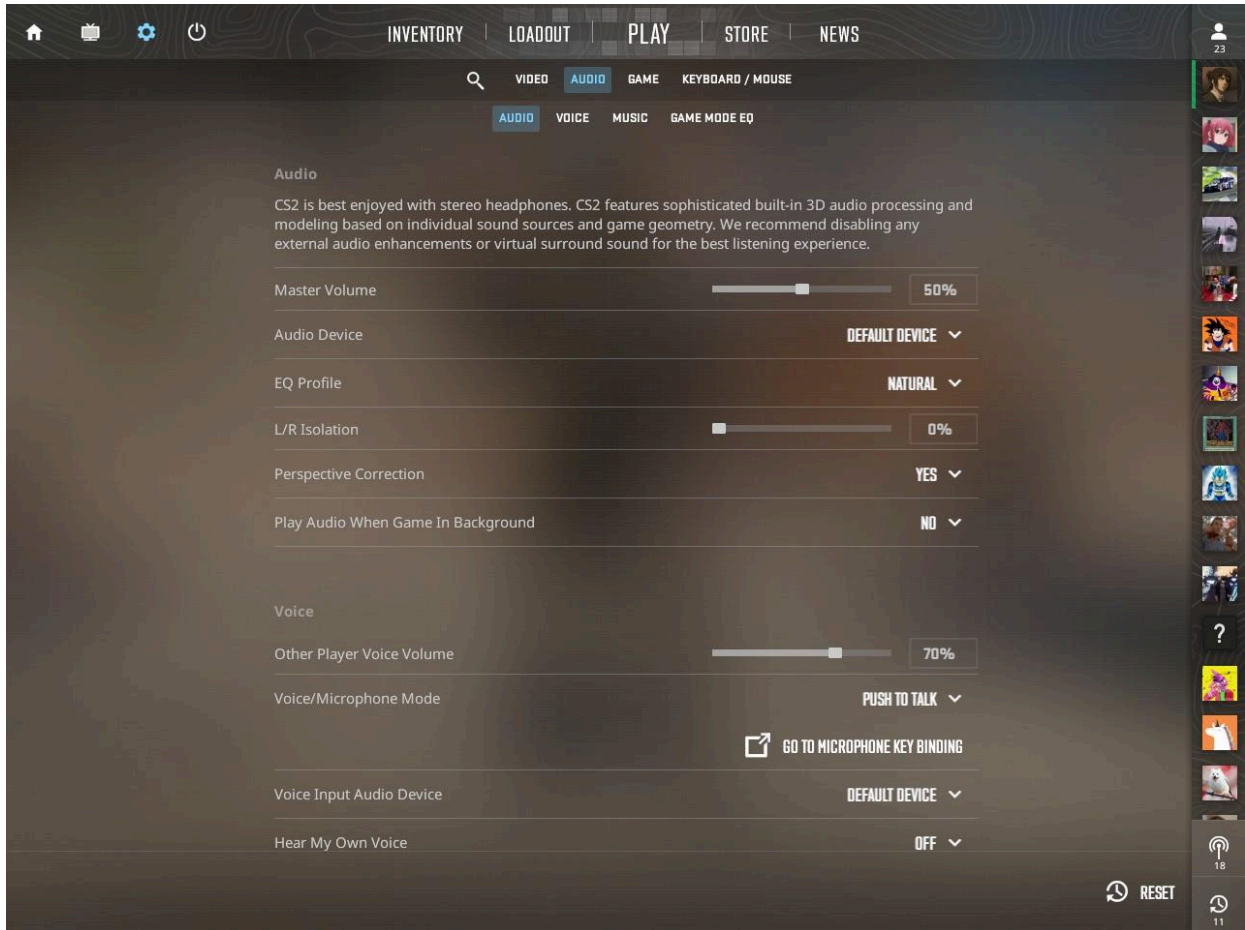
▶ Should you use NVIDIA Reflex in CS2?

Audio Settings

EQ Profile: Natural

L/R isolation: 0%

Perspective Correction: Yes



Streamlined Push To Talk: Yes
Microphone Trigger Threshold: -30

L/R Isolation 0%

Perspective Correction YES ▾

Play Audio When Game In Background NO ▾

Voice

Other Player Voice Volume 70%

Voice/Microphone Mode PUSH TO TALK ▾

GO TO MICROPHONE KEY BINDING

Voice Input Audio Device DEFAULT DEVICE ▾

Hear My Own Voice OFF ▾

Streamlined Push To Talk YES ▾

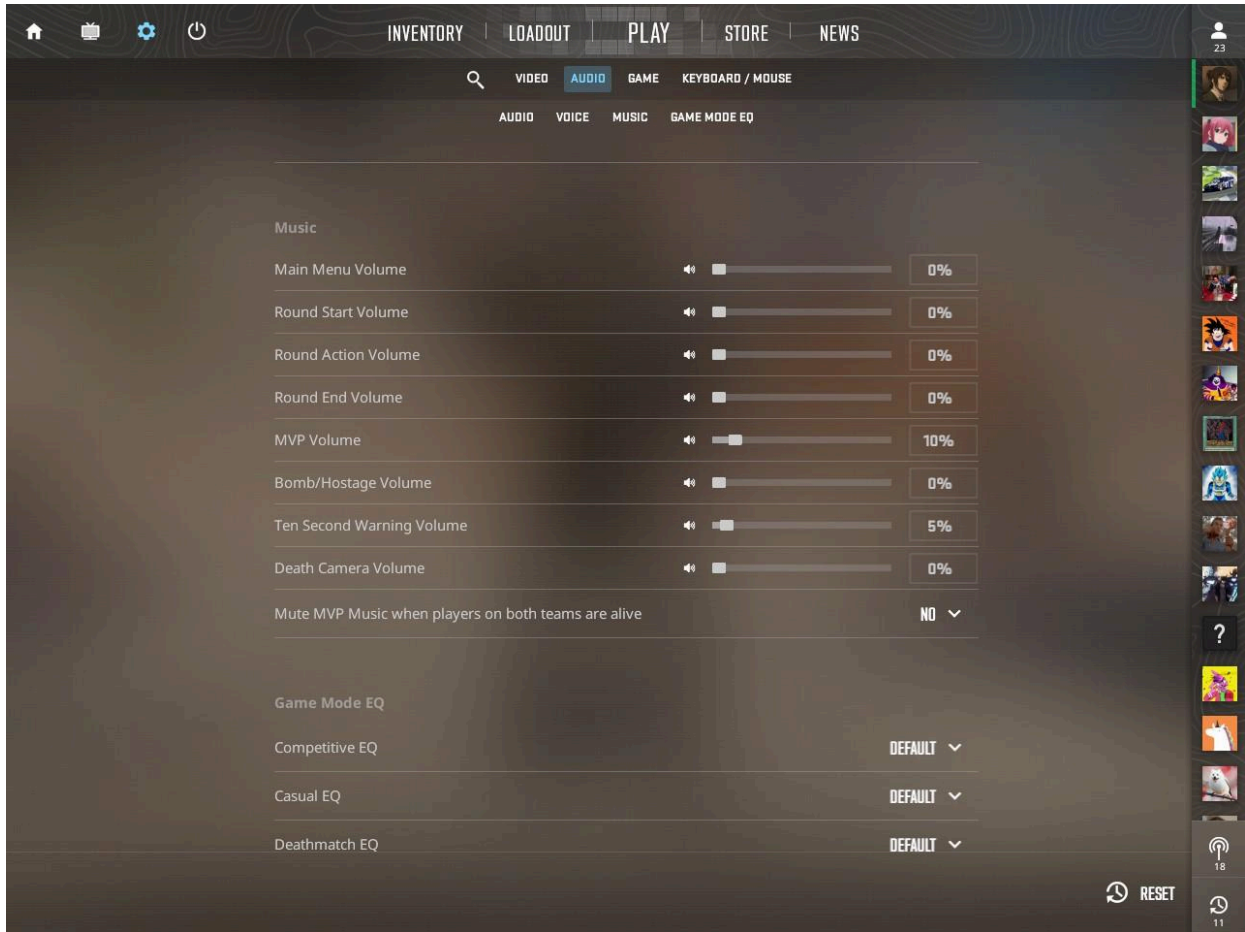
Microphone Trigger Threshold -30

Music

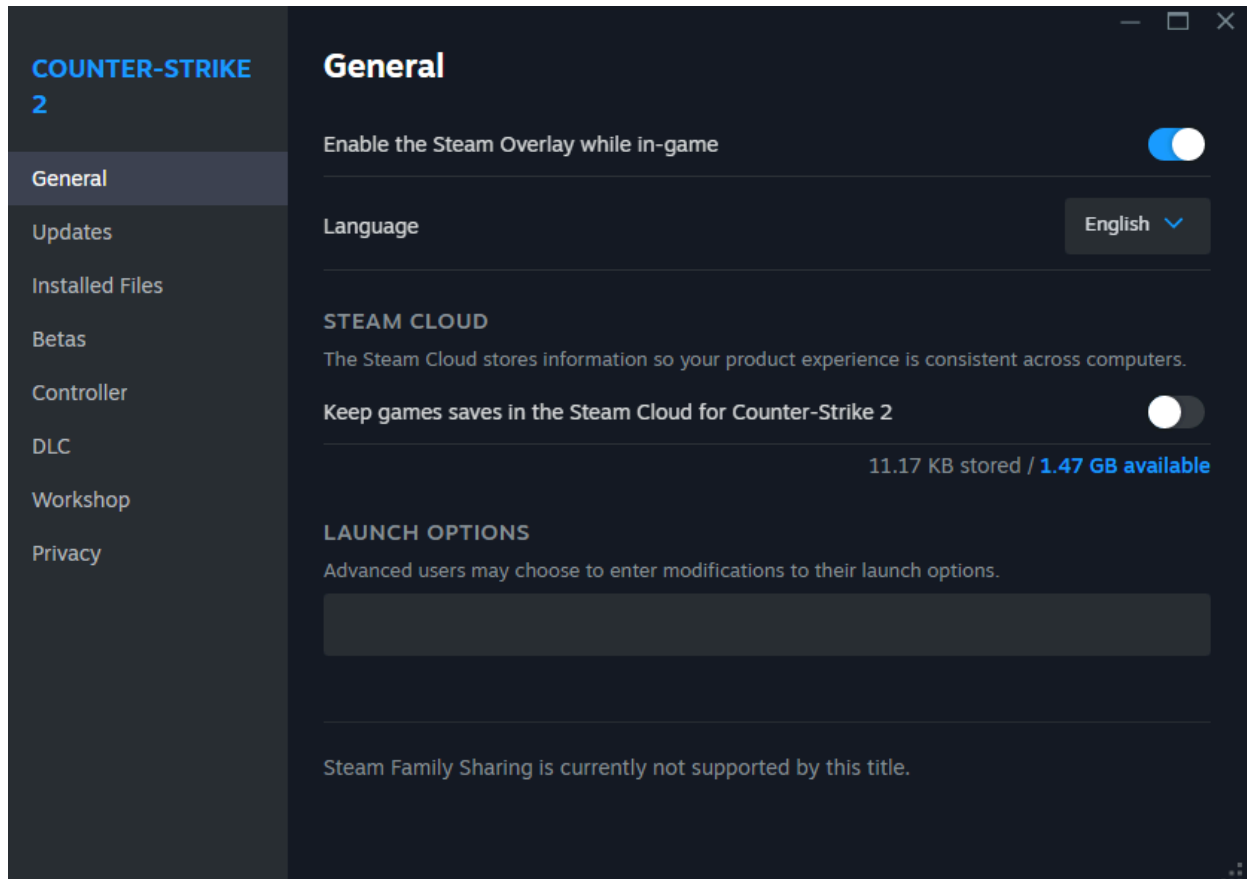
Main Menu Volume 0%

RESET

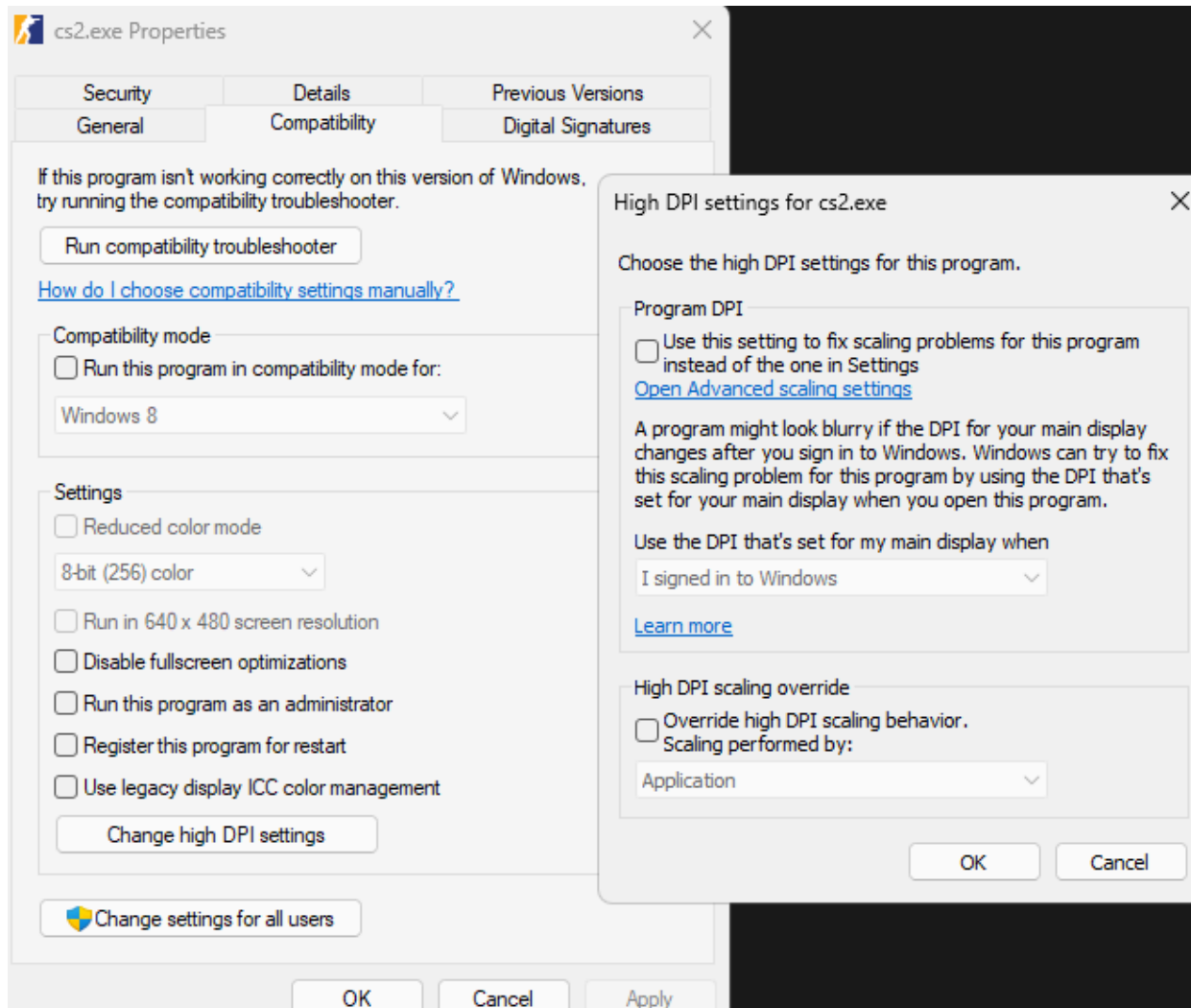




Nothing in launch options unless u stream OBS where u need `-allow_third_party_software`



C:\Program Files (x86)\Steam\steamapps\common\Counter-Strike Global Offensive\game\bin\win64
untick everything under properties



New novid method

You gain like 2 seconds when opening game + you don't have the audio breaking your ears

[CS2 How to skip intro - Steam Guide](#)

Tweaks to fix stuttering

Fix #3 [Delete shaders in steam - Reddit](#)

[delete nvidia or amd shader cache](#)

[YouTube: Improve Stuttering & Performance | Clear Nvidia Cache Guide | Improve Performance In ...](#)

[Fix CS2 hard stutters or freezes in FACEIT and you have an ASUS motherboard - Twitter](#)

<https://x.com/fREQUENCYCS/status/1818947137742233847>

<https://x.com/fREQUENCYCS/status/1816822462182498786>

<https://x.com/Afromnazareth/status/1838988784215409133>

Autoexec/Commands

Download Autoexec and Prac config

Make sure to check every line!

C:\Program Files (x86)\Steam\steamapps\common\Counter-Strike Global Offensive\game\csgo\cfg

[Pastebin - Easy Version](#)

[Pastebin - Advanced Version](#)

[Pastebin - Prac Config](#)

Important commands to have:

- rate 1000000
- r_show_build_info 0
- cl_allow_animated_avatars 0

Hardware Optimization

Mouse:

- Use 1600 dpi
- Use the maximum polling rate your mouse can (2khz, 4khz, 8khz)

▶ [Why Gamers are Switching to High DPI](#)

▶ [Before you upgrade to higher polling rates.](#)

Keyboard:

Use a keyboard where u can change the actuation and have rapid trigger

- Steelseries APEX PRO TKL (2023)
- Razer huntsman V3 Pro
- Wooting

WINDOWS SETTINGS FOR CS2

Hags OFF

System > Display > Graphics > Default graphics settings

Hardware-accelerated GPU scheduling

Reduce latency and improve performance. You'll need to restart your PC to have your changes take effect.

Off

Optimizations for windowed games

Reduce latency and use advanced features in compatible games by using flip presentation model. You'll need to restart your game for changes to take effect.

On

[More about optimizations for windowed games](#)

Game Mode off

Gaming > Game Mode



Game Mode

Optimize your PC for play by turning things off in the background.
[More about Game Mode](#)

Off

CS2 High performance

System > Display > Graphics











Desktop app

Browse

Find an app in the list and select it, then choose custom graphics settings for it. You might need to restart the app for your changes to take effect.

Search this list

Filter by: All apps

-  BlackOps3
Let Windows decide (High performance)
-  Camera
Let Windows decide (Power saving)
-  Halo: The Master Chief Collection
Let Windows decide (High performance)
-  Microsoft Store
Let Windows decide (Power saving)
-  Photos
Let Windows decide (Power saving)
-  Rainbow Six
Let Windows decide (High performance)
-  VLC media player
Let Windows decide (Power saving)
-  WinRAR
Let Windows decide (Power saving)
-  cs2
High performance
-  h12
Let Windows decide (High performance)

Core isolation off

[Windows 11 - Core Isolation](#)

NVIDIA SETTINGS FOR CS2

Nvidia Driver

Anything above **551.86** is fine. If you use below that, u won't get the proper CS2 driver

[CS2 REFLEX Driver - Reddit](#)

[Driver shader fix](#)

DDU

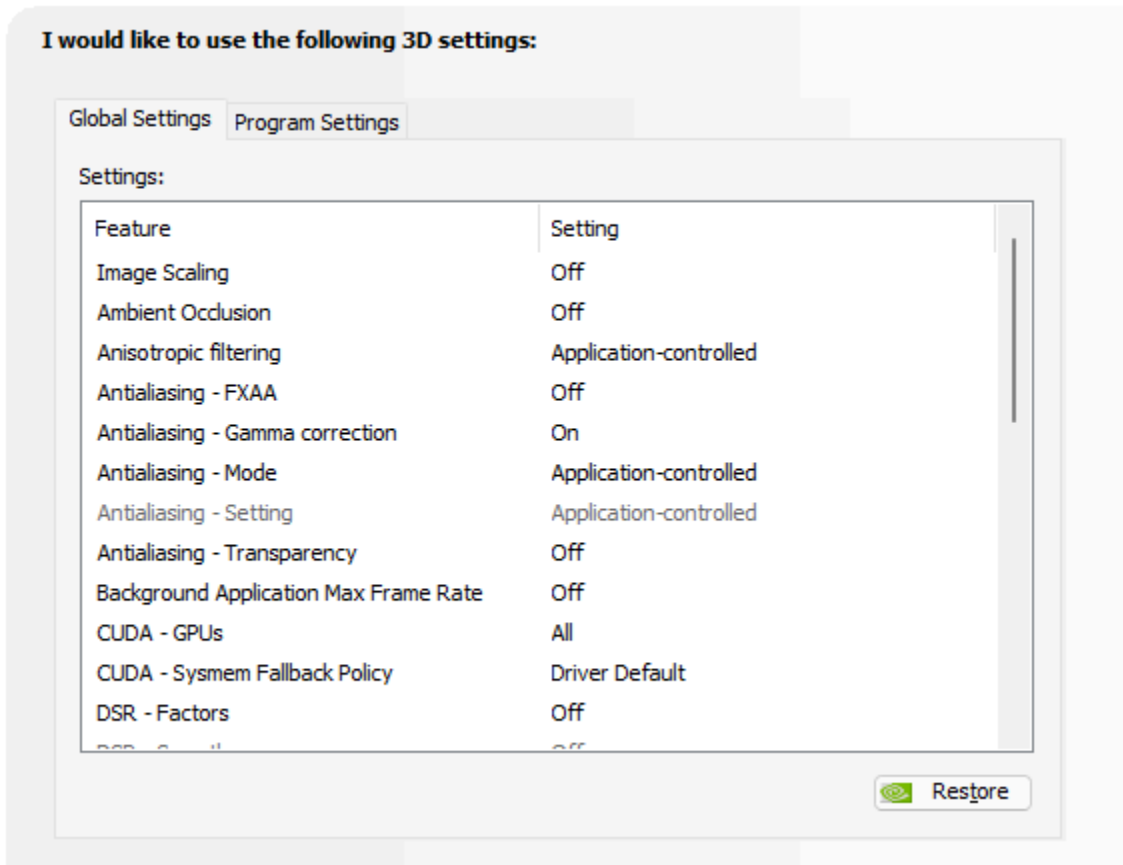
🔧 How to Install GPU drivers PROPERLY for OLD or NEW GPUs in 2024 ✓

use Nvclean to clean install driver 1:20

🔴 The ONLY CS2 FPS BOOST GUIDE You'll EVER NEED, Increase FPS, REDUCE Input L...

Nvidia Control Panel

3D Settings:



I would like to use the following 3D settings:

Global Settings

Program Settings

Settings:

Feature	Setting
DSR - Factors	Off
DSR - Smoothness	Off
Low Latency Mode	On
Max Frame Rate	Off
Multi-Frame Sampled AA (MFAA)	Off
OpenGL GDI compatibility	Auto
OpenGL rendering GPU	NVIDIA GeForce RTX 3070 Ti
Power management mode	Prefer maximum performance
Preferred refresh rate (Asustek Computer...)	Highest available
Shader Cache Size	Unlimited
Texture filtering - Anisotropic sample opti...	Off
Texture filtering - Negative LOD bias	Allow
Texture Streaming Opti...	Off

 Restore

I would like to use the following 3D settings:

Global Settings Program Settings

Settings:

Feature	Setting
Preferred refresh rate (Asustek Computer...)	Highest available
Shader Cache Size	Unlimited
Texture filtering - Anisotropic sample opti...	Off
Texture filtering - Negative LOD bias	Allow
Texture filtering - Quality	Quality
Texture filtering - Trilinear optimization	On
Threaded optimization	Auto
Triple buffering	Off
Vertical sync	Off
Virtual Reality pre-rendered frames	1
Virtual Reality - Variable Rate Super Samp...	Off
Vulkan/OpenGL present method	Auto

 Restore

Display Settings:

1. Select the display you would like to change.



Asustek Compu...



Samsung S24...

2. Apply the following settings:

Scaling Size

Select a scaling mode:

- Aspect ratio
- Full-screen
- No scaling
- Integer scaling

Perform scaling on:

GPU

Override the scaling mode set by games and programs

Preview

Resolution:

1920 x 1080 (current)

Refresh rate:

280Hz

Native resolution:

1920 x 1080

A preview window showing a grid of pixels. In the center, there is a square with a circle inside it, representing the current display settings. The square and circle are slightly larger than the grid, indicating that the display is scaled up from its native resolution.

Unless your hardware is ancient, always use GPU

[Difference between GPU and Display scaling in CS2 - Reddit](#)

Benchmark

This is my own benchmark result to give you an idea

PC Specs

CPU : Intel i9-10850k

GPU : Zotac 3070 ti 8GB
RAM : 32GB DDR4 3200Mhz

Performance report

FPS: Avg=369.7, P1=148.4

```
CONSOLE
[Console] Enabling flag 'donotecho' on channel 'Console'.
[VProf]
[VProf] -- Performance report --
[VProf] Summary of 42307 frames. (2879 frames excluded from analysis.)
[VProf] FPS: Avg=369.7, P1=148.4
[VProf]
[VProf]
[VProf]                All frames        Active frames
[VProf]                Avg    P99        N    Avg    P99
[VProf] -----
[VProf]                FrameTotal    2.70  8.74  42307  2.70  8.74
[VProf]                Client Rendering  1.47  2.02  42307  1.47  2.02
[VProf]                Frame Boundary   1.03  1.48  42307  1.03  1.48
[VProf]                Client Simulation  0.48  1.85  42307  0.48  1.85
[VProf]                ClientSimulateFrame 0.33  0.59  42307  0.33  0.59
[VProf]                Server Simulation  0.32  2.19   7311  1.83  2.36
[VProf]                Server Game       0.25  1.81   7311  1.47  2.04
[VProf]                Prediction         0.20  1.03  42307  0.20  1.03
[VProf]                ClientSimulateTick 0.14  1.04   7311  0.78  1.14
[VProf]                Client Input/Output 0.13  0.62  42307  0.13  0.62
[VProf]                PanoramaUI         0.13  0.22  42307  0.13  0.22
[VProf]                UserCommands       0.13  0.94   7311  0.72  1.11
[VProf]                HUD                0.12  0.18  42307  0.12  0.18
[VProf]                ClientSimulate_Think 0.05  0.36   7311  0.28  0.49
[VProf]                LowlatencySleep     0.04  0.68  42307  0.04  0.68
[VProf]                Server Send Networking 0.04  0.26   7311  0.21  0.31
[VProf]                NPCs                0.03  0.37   7311  0.19  0.45
[VProf]                Server Animation     0.03  0.25   7311  0.19  0.30
[VProf]                Client_Animation    0.03  0.22   7311  0.16  0.26
[VProf]                Server PackEntities  0.03  0.20   7311  0.16  0.24
[VProf]                Networking         0.03  0.21   7314  0.16  0.27
[VProf] LatchAndSaveLastSimulationValuesForInterpolationList 0.02  0.13   7311  0.10  0.19
[VProf]                Magic              0.00  0.00    330  0.12  0.32
[VProf]
[VProf] VProflite stopped.
[BuildSparseShadowTree] CSparseShadowTreeGameSystem::GameShutdown
[WorldRenderer] CWorldRendererMgr::ServiceWorldRequests long frame: 20.700133ms
```

[Here are all my sources for creating this guide:](#)

- ▶ [these pro tips WILL fix your fps in CS2](#)
- ▶ [The ONLY CS2 FPS BOOST GUIDE You'll EVER NEED, Increase FPS, REDUCE Input L...](#)
- ▶ [THIS BHOP SETTING IS LIFE CHANGING](#)

[The Placebo Bible \(All known CS2 performance fixes and tweaks\)](#)

[PC Optimization Guide - Increase FPS in CS2 | Refrag.gg](#)

- ▶ [these pro tips WILL fix your fps in CS2](#)

[CS2 Best Settings & Options Guide](#)
[CS2 Nvidia Low latency "ON / OFF / ULTRA"](#)
[Nvidia driver CS2](#)

Here are my socials:

- [BiNoX Config - SETTINGS.GG](#)
- [Twitter](#)
- [Steam](#)
- Discord: binox.

Hmu if you have any questions or want to talk about pc optimization with me :)
see ya