

# PCSX2 Tutorial *(for old versions v1.x.x)*

Article source: <http://fantasyanime.com/emuhelp/pcsx2>

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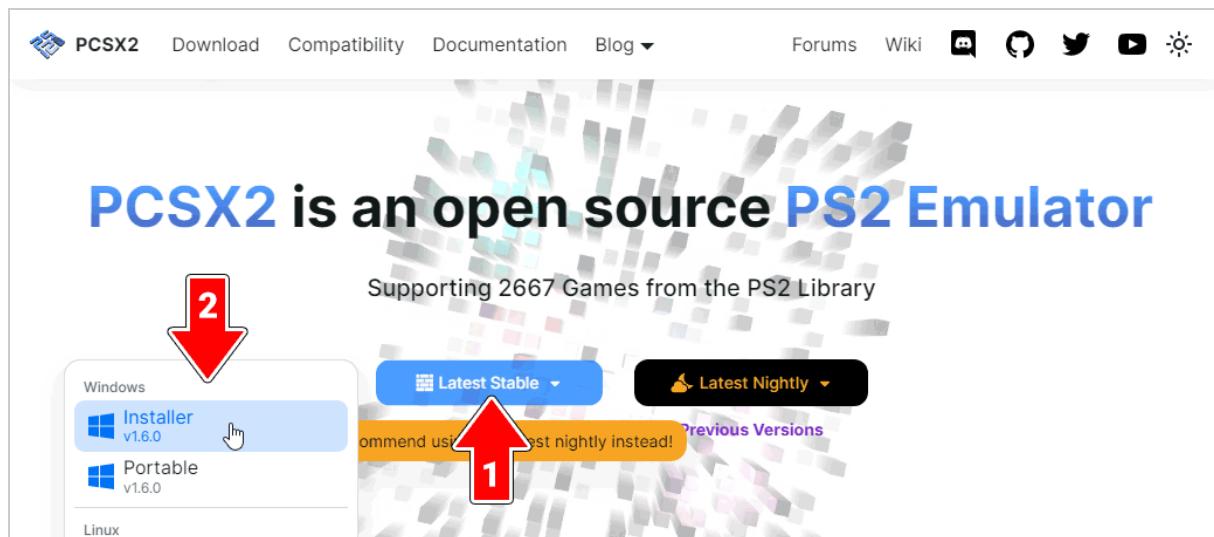
## About PCSX2

PCSX2 was the first PlayStation 2 emulator. Through persistent development, it has remained the best one around! Game compatibility is high. It conveniently comes equipped with its own plug-ins, which can be customized. PCSX2 requires a fast computer in order to run well. You might have trouble with it if you're using a budget laptop or a Windows tablet.

With other emulators you can get away with using your keyboard for gameplay. But with PCSX2 it's pretty difficult, given the PlayStation 2 controller's mini joysticks. I strongly recommend purchasing a gamepad for this emulator [<http://fantasyanime.com/emuhelp/gamepads>].

## Where to download PCSX2

You can download PCSX2 from the official homepage: <https://pcsx2.net/>  
Click on the blue **Latest Stable** button. You'll be prompted with options for “*Installer*” and “*Portable*”. What's the difference?



- **The Installer version** - This is an easy install wizard that installs PCSX2 like a normal Windows app. If in the future you want to uninstall PCSX2, you can do it through Windows:  
[https://www.youtube.com/results?search\\_query=windows+how+to+uninstall+program](https://www.youtube.com/results?search_query=windows+how+to+uninstall+program)
- **The Portable version** - A 'portable' program is one that can be placed anywhere on your computer. The program is self contained in the folder and saves everything within that folder. Hence, that is the nature of PCSX2's portable version. However, although a portable program can be placed anywhere, it's still important to only place it in a common location on your computer such as Documents, Downloads, or create a folder on your desktop. If in the future you want to uninstall PCSX2, simply delete its folder.

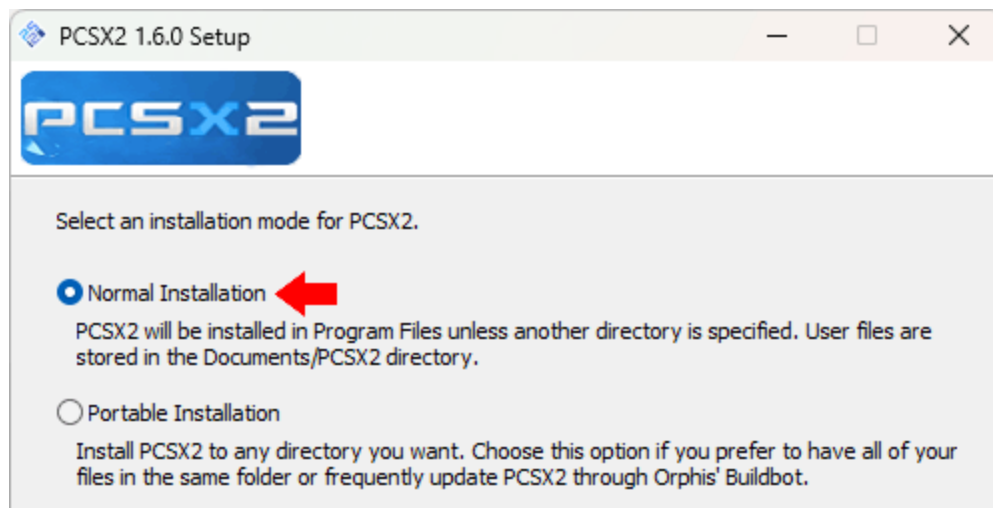
## Installation

As pointed out above, you have two versions: 'installer' and 'portable'.

### Installing via the installer

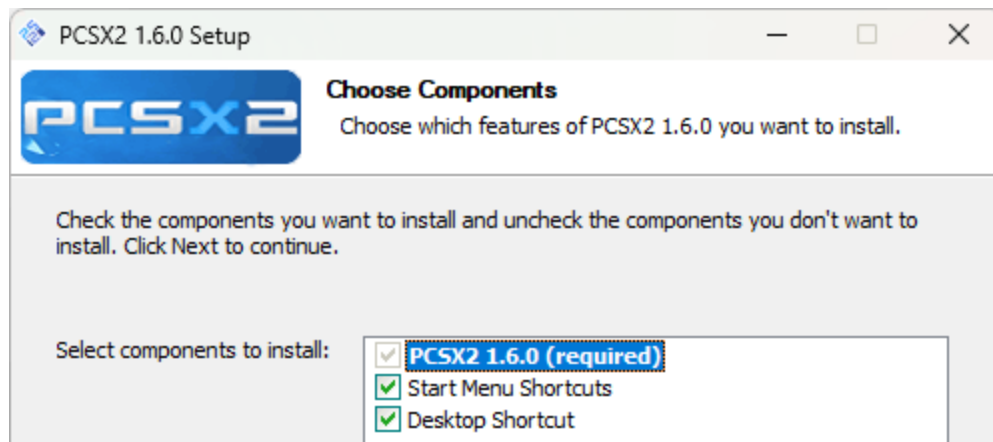
1. Double-click on the install EXE for PCSX2.

2. On the first screen:



PCSX2 will ask you if you want to do a Normal install or Portable install. You've already decided to use this install wizard, so let's proceed with the normal install - click **Normal Installation** then **Next**.

3. Next, Windows will prompt you to ask if you want to give this 'unknown publisher' permission to make changes to your device. Go ahead and allow PCSX2.
  - a. Don't let this scare you. Windows always prompts you with this when you install a new program. It's a common protocol.
4. On the "Choose components" screen:



You can choose to opt out of a PCSX2 shortcut on your desktop and in the Start menu. You should keep it in the Start menu, but having it on your desktop or not is your preference. When you're ready, click **Next**.

5. On the "Choose Install Location" screen, just click **Install**.
6. That's it! PCSX2 will install. Click **Finish** when it's done.

## Installing the portable version

Installation is simple: just extract PCSX2 from its zip file. To make things clearer, the web version of this guide has a video that shows how to 'install' a portable emulator. It's pretty straight-forward - all that you're doing is extracting a zip file while doing a little bit of folder management. For the sake of this text-only guide, I'll break down the steps in the video:

1. Move the emulator's zip file from your "*Downloads*" folder to "*Documents*". Well, you don't *have* to, but for the sake of these directions I'm suggesting *Documents* as the ideal place to house your emulators.
2. Create a new folder called "*Video Game Emulators*". Again, this is an organizational suggestion and not required.
3. Move the emulator's zip file into "*Video Game Emulators*". Open the emulator's zip file and copy its contents. In "*Video Game Emulators*", create a new folder and give it the name of the emulator you downloaded (i.e. "*Snes9x*").
4. Enter this new folder for your emulator and paste the files.
5. We don't need the zip file for the emulator anymore, so you can go ahead and delete it.
6. To start the emulator, go into your emulator's folder and double-click on its EXE (i.e. "*snes9x-x64.exe*"). Enjoy! :)

I'm recommending "*Documents*" to house your emulators. But, you could also place emulators in "*Downloads*", a folder on your desktop, an external HDD, or a thumb drive. These are common locations with full read/write access. Keeping it on your computer is better than external storage because it runs better & faster.

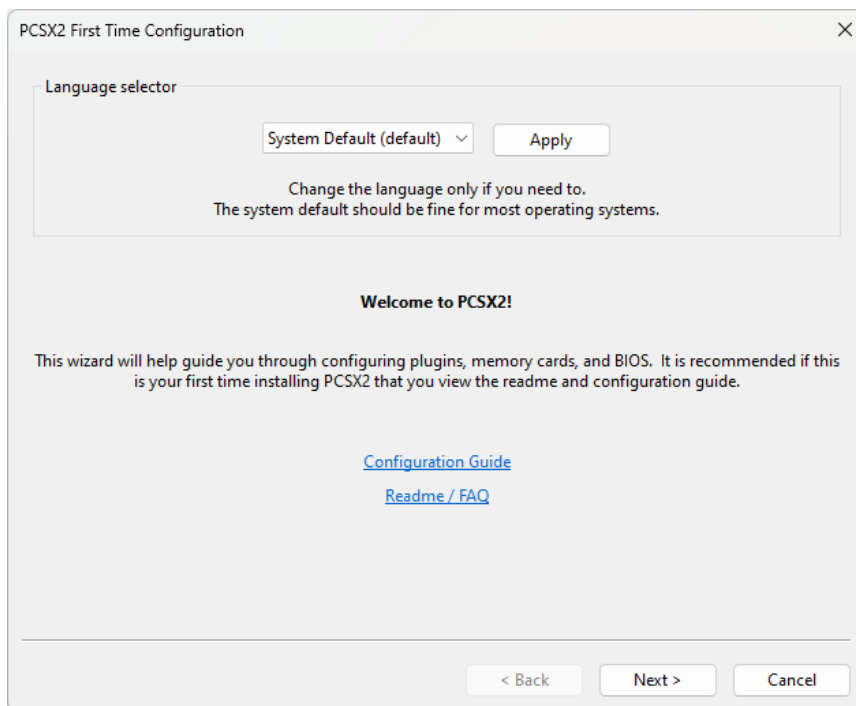
## The BIOS

The PlayStation 2 BIOS is required in order to boot games. This is a separate download after you've downloaded PCSX2. You can download it from the web version of this tutorial. Continue reading below for what to do next after you download the BIOS.

## First Time Configuration + BIOS setup

1. Open PCSX2. If you used the install wizard, you can double-click its icon on your desktop or find PCSX2 in the Windows Start menu. If you opted for the portable version, double-click on PCSX2's EXE.

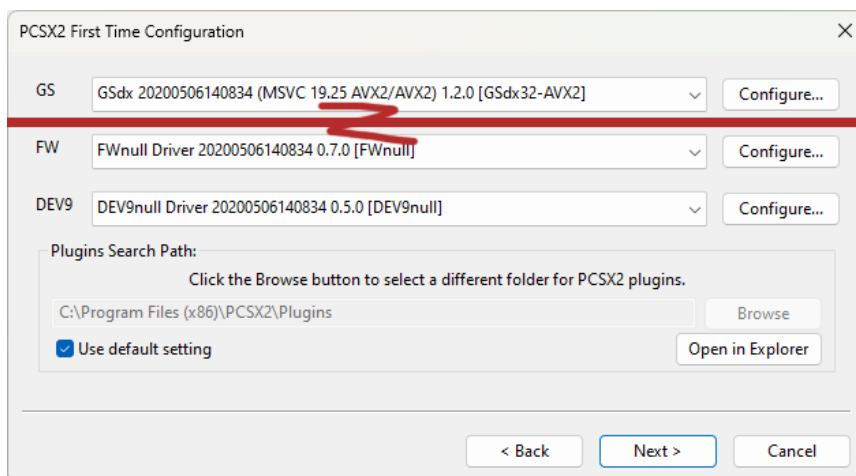
2. PCSX2 welcomes you with the First Time Configuration screen:



Click **Next**.

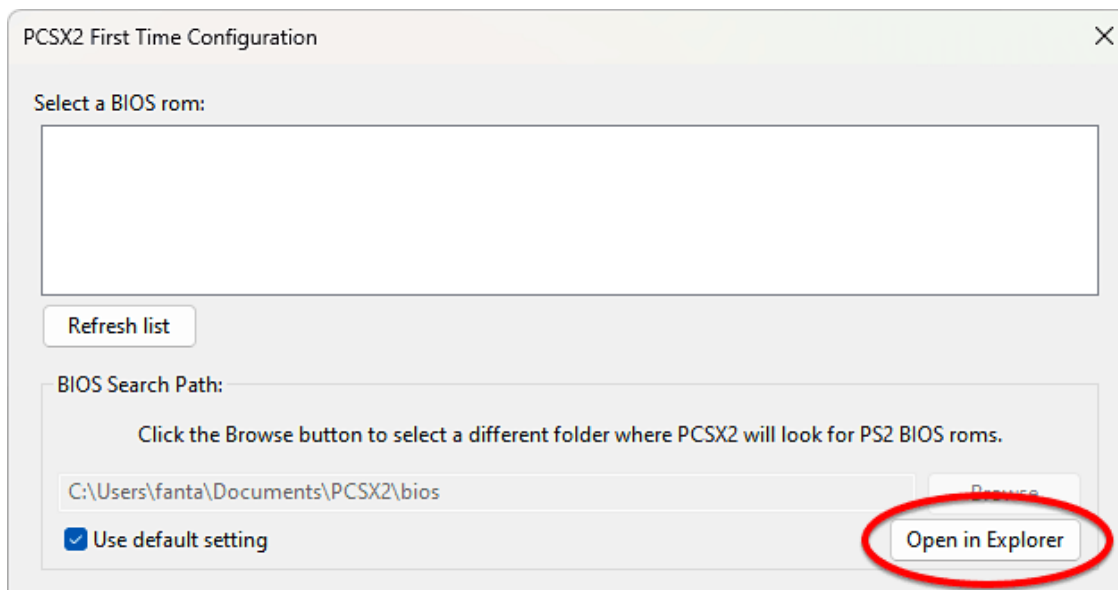
- a. Did you accidentally close this 'first time configuration' wizard? You can access the BIOS screen by going to **Config > Plugin/BIOS Selector**. Then proceed to step #4 in these directions to add the BIOS files.

3. The next screen just reviews the plug-ins that come with PCSX2:

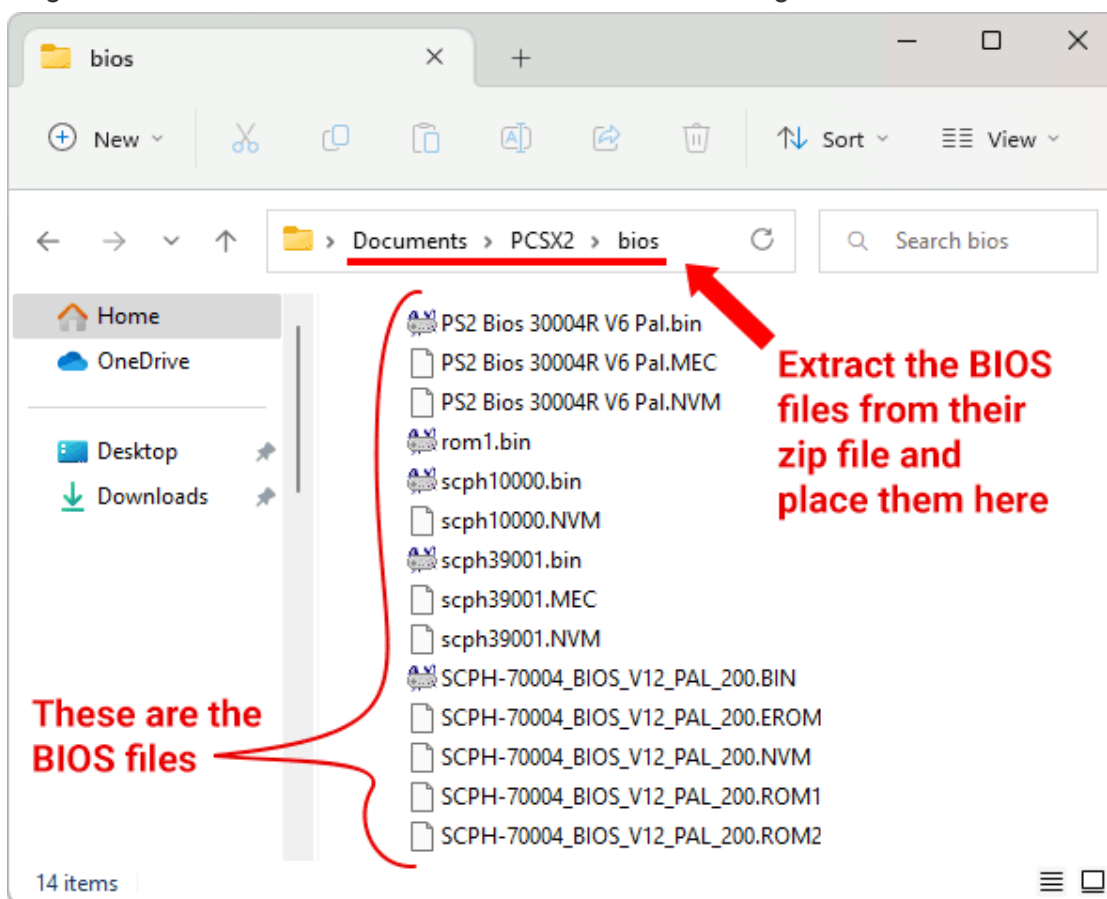


You don't need to do anything here. Click **Next**.

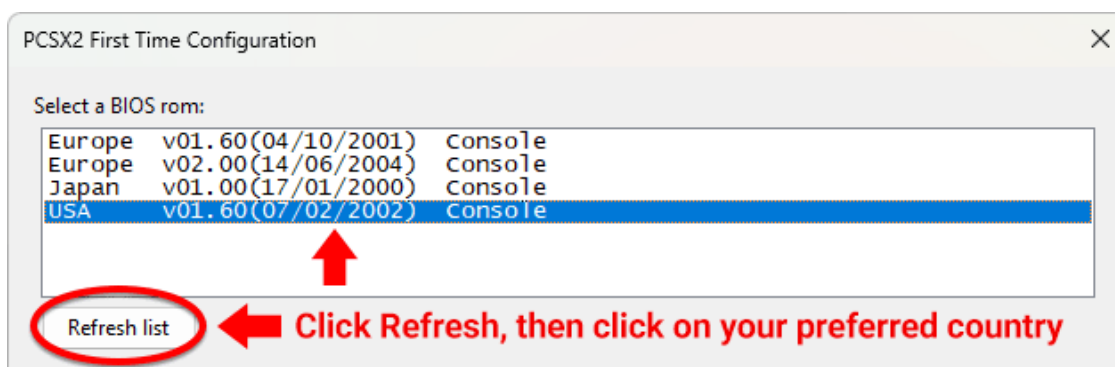
4. Next is the BIOS screen. Click ***Open in Explorer***, as shown below:



5. Minimize the *bios* folder for now. Download the BIOS if you haven't already, unzip it, and drag its contents to the BIOS folder. It should look something like below:



- Bring back the “*First Time Configuration*” window. Click the **Refresh list** button (circled below). You should now see the Europe, Japan, and USA BIOS files appear in the white box.



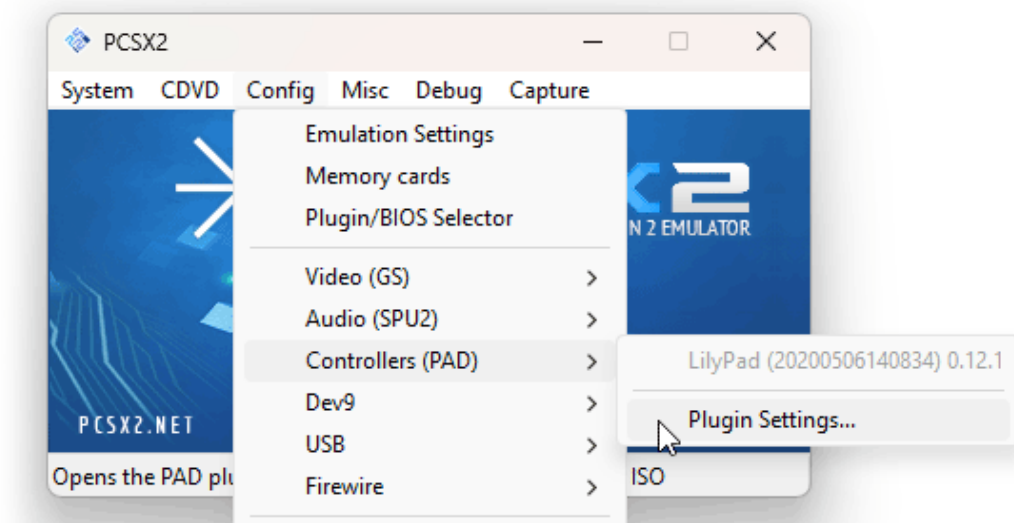
- Click on your desired country to select it. Then click **Finish**.
- That's it! PCSX2 is now fully installed and configured.

## Setting up the keyboard or gamepad

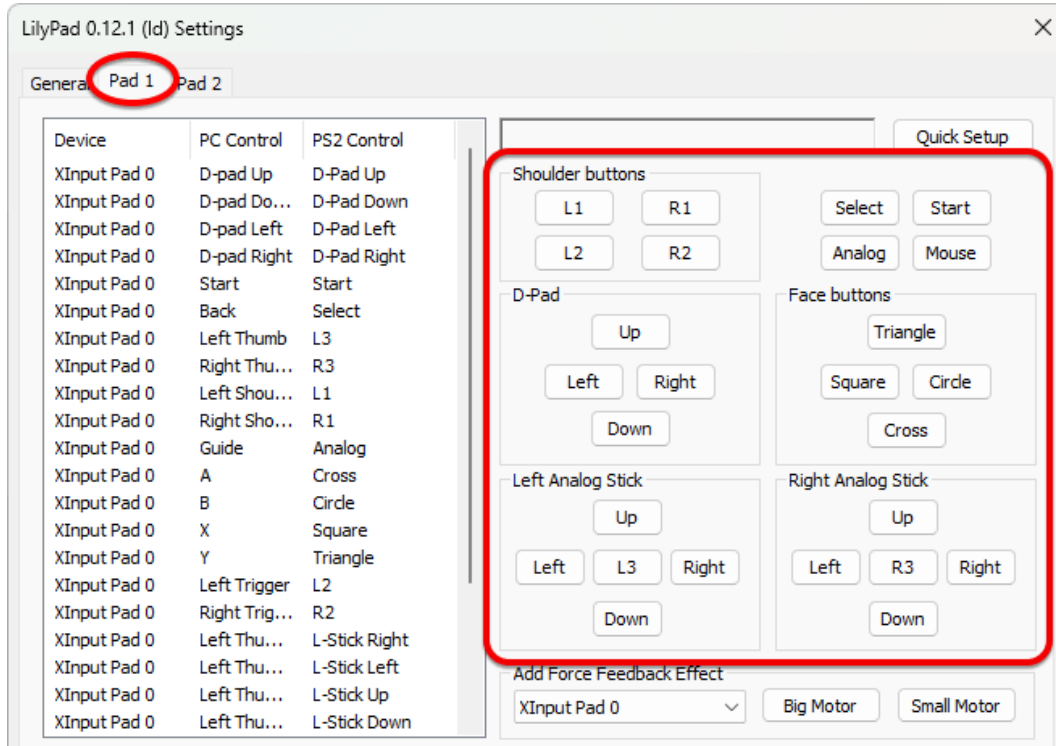
PCSX2 is pre-configured for gamepads. Again, I urge you to purchase a gamepad since the PlayStation 2 controller has a lot of buttons. Using just the keyboard is a frustrating experience. If you insist on using the keyboard, or if you want to reconfigure gamepad buttons, keep reading,

Here's how to configure (or reconfigure) the buttons for Player 1:

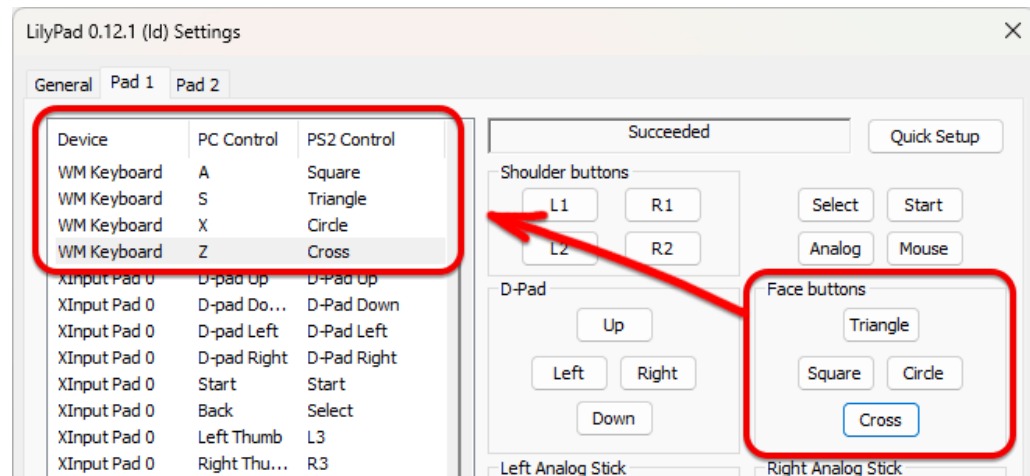
- Go to **Config > Controllers (Pad) > Plugin Settings**, as shown below:



2. You'll see tabs for *General*, *Pad 1*, and *Pad 2*. Pad 1 is Player 1 and Pad 2 is player 2. Click on **Pad 1** and you'll arrive here:



3. Notice the heavily buttoned area within the red outline. These are all the buttons you need to configure. Click a button in this area, then press the keyboard key or gamepad button that you wish to configure it to. When successful, you should see the configured button appear in the “*Device/PC Control/PS2 Control*” panel.
- a. For example, see this picture where I configured the face buttons to keyboard keys:



The configured keys appear in the left panel.

4. Click **OK** when you're finished configuring all the buttons.

## Using a PS2 or Xbox controller

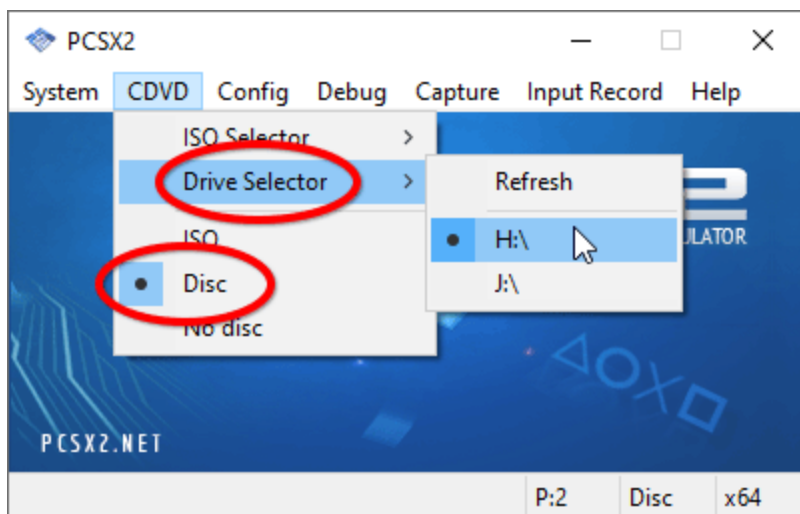
PCSX2 doesn't require any special directions for using a PlayStation 2 or Xbox controller. However, the first time you plug one into your computer it needs to be properly setup or requires special instruction for connecting. There are lots of videos on YouTube showing you how to do this:

- How to setup a PlayStation 2 controller on a PC  
[[https://www.youtube.com/results?search\\_query=install+ps2+controller+pc](https://www.youtube.com/results?search_query=install+ps2+controller+pc)]
- How to setup a PlayStation 3 controller on a PC  
[[https://www.youtube.com/results?search\\_query=install+ps3+controller+pc](https://www.youtube.com/results?search_query=install+ps3+controller+pc)]
- How to connect an Xbox controller to a PC  
[[https://www.youtube.com/results?search\\_query=connect+xbox+controller+pc](https://www.youtube.com/results?search_query=connect+xbox+controller+pc)]

## Loading a real PS2 game you own

To load a real PlayStation 2 game that you own:

1. Pop your game into your DVD-ROM drive.
2. Go to **CDVD** menu and select **Disc** - as shown below:



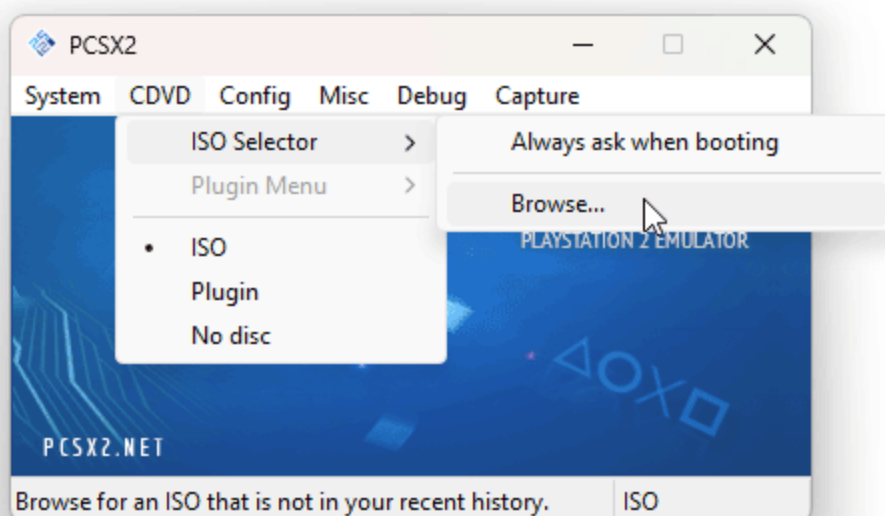
Then go to **CDVD** again and in **Drive Selector** make sure the drive that your PlayStation 2 game is in is selected.

3. When you're ready go to **System > Boot CDVD** to start your game.

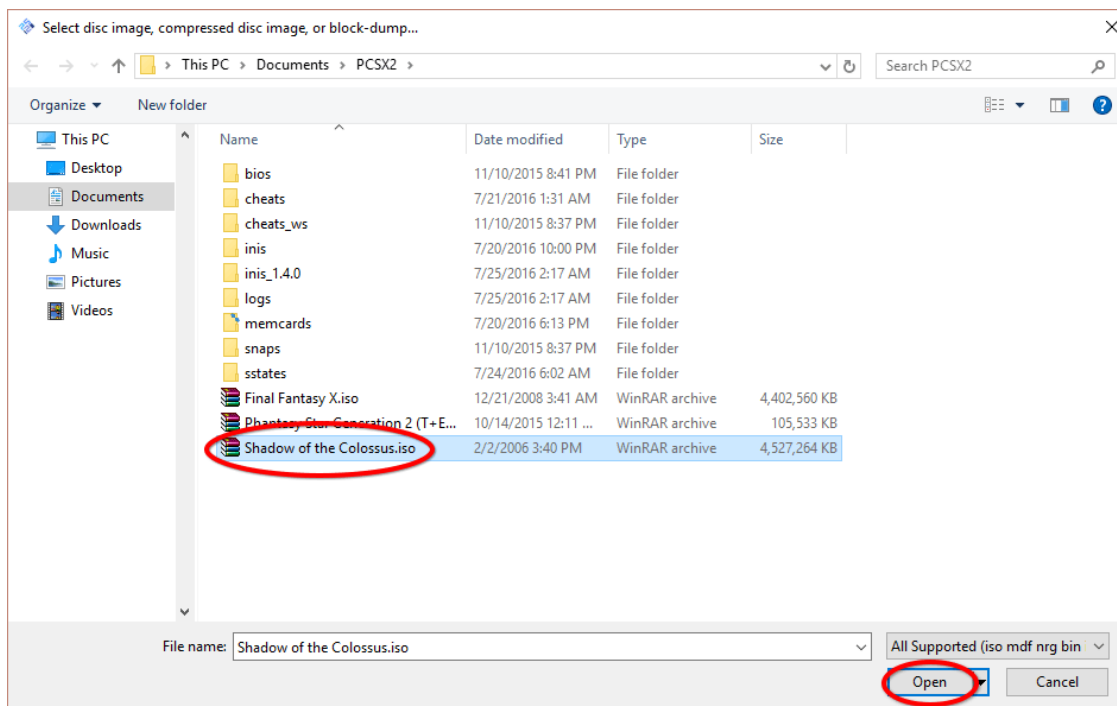
Note: I do not recommend playing your games via your DVD-ROM drive. PCSX2 is a rather demanding emulator on your CPU. Running the game from your DVD-ROM drive will slow it down and lower its performance. Rather, I recommend ripping your game to an ISO. I have directions for that towards the bottom of this guide.

## Loading a PS2 ISO

1. To begin with, you can place your PlayStation 2 ISOs wherever you want on your computer. PCSX2 doesn't care where. I recommend the PCSX2 folder in *Documents*.
2. Your games need to be extracted from their 7Z, RAR, or ZIP archives. These days, ISOs are most common in 7Z. You can use 7-Zip to extract them (it's free) - download it here: <http://www.7-zip.org/>  
If you need step-by-step help with extracting 7Z files, check out YouTube: [https://www.youtube.com/results?search\\_query=how+to+extract+7z](https://www.youtube.com/results?search_query=how+to+extract+7z)
3. Once your games are extracted, look at their file extension. PCSX2 only supports ISOs in the following formats: ISO, BIN, IMG, MDF, and NRG. If your game is *not* in those formats, read "Q: My PS2 game is not an ISO. Help!" further down in this guide.
4. Go to **CDVD > ISO Selector > Browse**, as shown below:

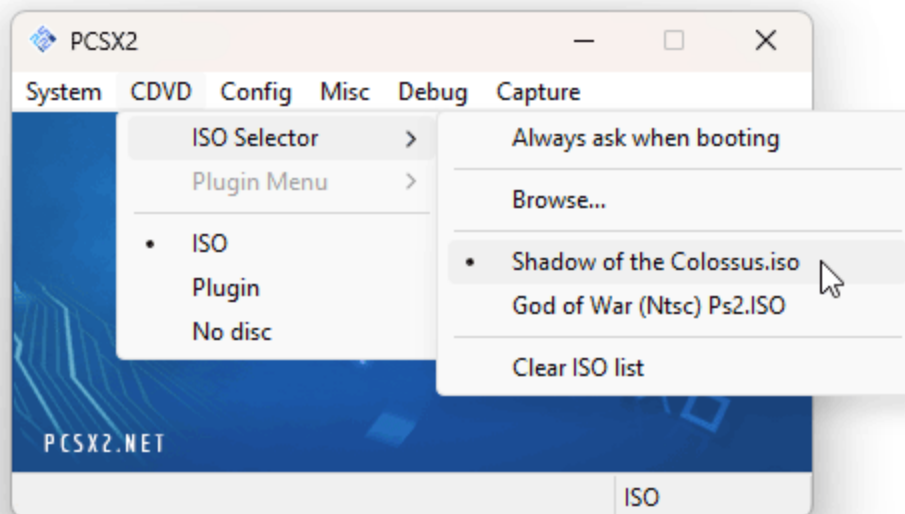


5. Navigate your computer for your PlayStation 2 ISO:



Click on it, then click **Open**.

6. Go to **System > Boot ISO (fast)**. Wait a few moments and your game will load. Enjoy!
7. PCSX2 will keep every ISO you previously opened in the ISO Selector list. See:



So then the next time you open PCSX2, you can just select the game you want to play from this list.

## Increasing the resolution

By default, PCSX2 renders graphics in the native PlayStation 2 resolution. On our sharp HD monitors, this resolution looks very blurry (see below). However, you have the option to upscale graphics by increasing the resolution.



Native PS2



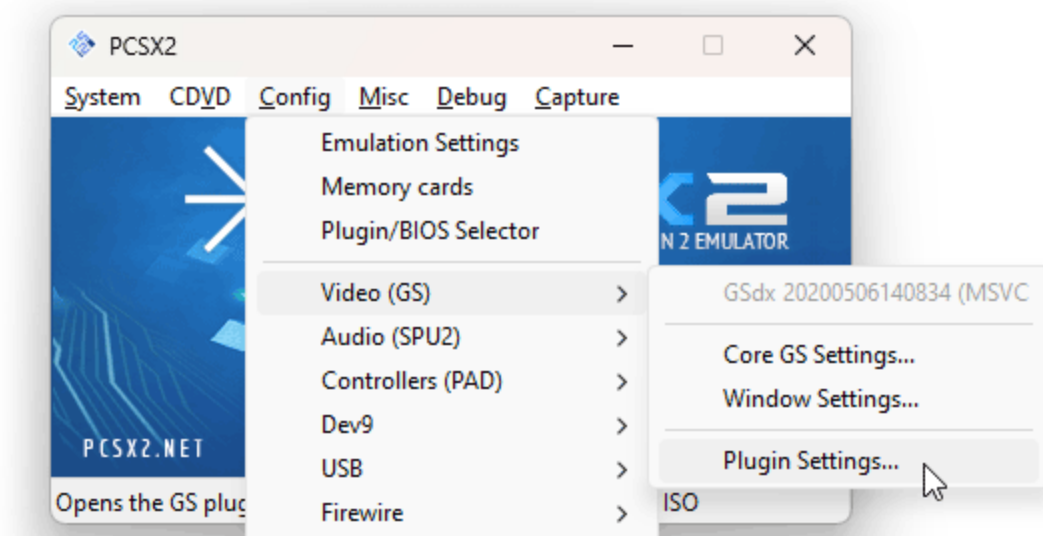
3x Native ~1080p



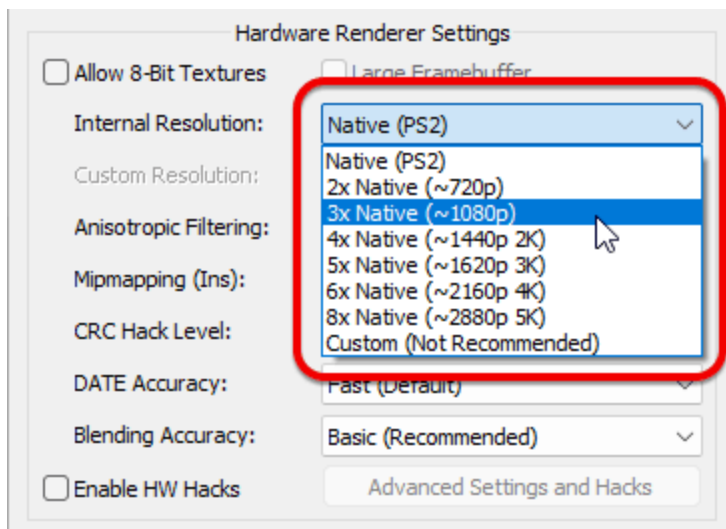
5x Native ~1620p 3K

Here's how to increase the resolution:

1. Go to **Config > Video (GS) > Plugin Settings**, as shown below:

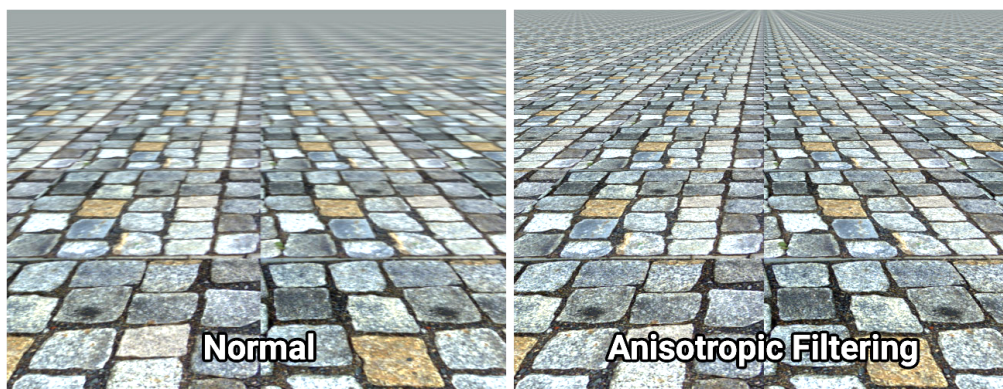


2. Select the “*Internal Resolution*” drop-down selection, as shown below:

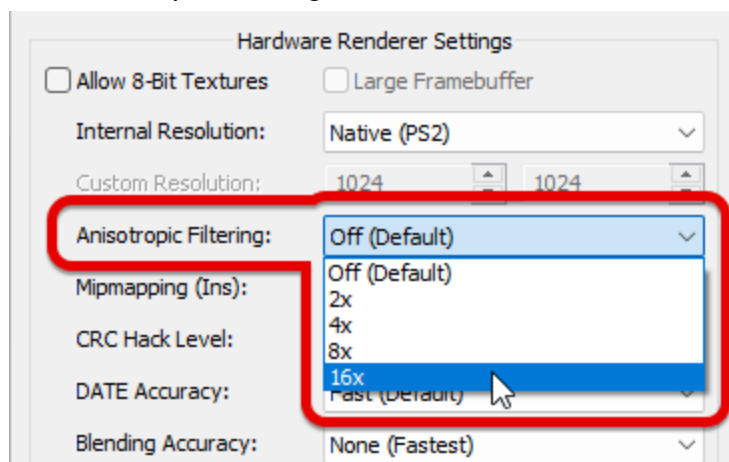


Choose a higher resolution, then click **OK** > **OK** to return to the game.

- a. **Optional:** You can enable Anisotropic Filtering to preserve detail at extreme viewing angles. See this example:



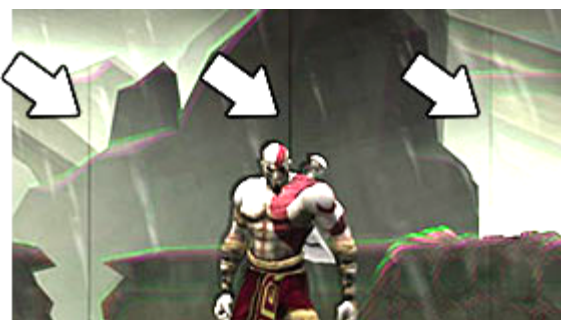
Set “*Anisotropic Filtering*” to 8x or 16x for best results:



3. See if the higher resolution is to your liking. Also, play the game some to find out if your computer can handle it at this higher resolution. You'll likely need to return to the video settings and test other resolutions to see what looks good and runs well.
4. Lastly, you may run into visual issues once the resolution has been increased. Continue reading below.

## Fixing upscaling issues

Now that you've increased the resolution of the game, you may notice weird graphical issues. See the examples below:



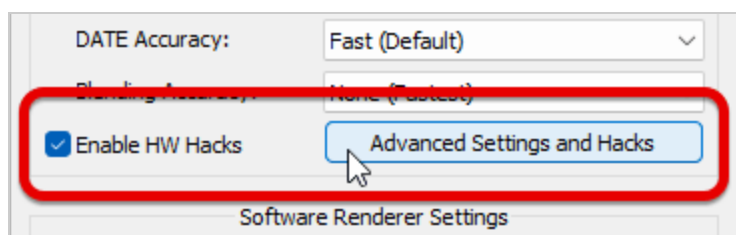
*Visual issues in God of War*



*Visual issues in Phantasy Star Generation 2*

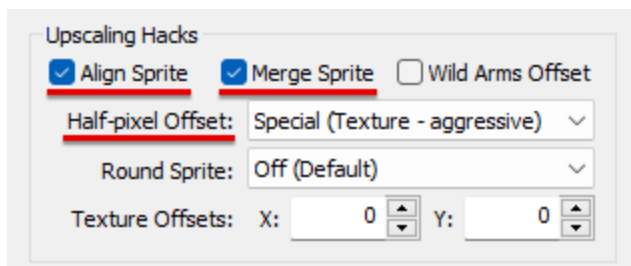
These graphical issues are normally made up of obstructive vertical lines. This has an easy fix!

1. Go to **Config > Video (GS) > Plugin Settings**.
2. Put a check in **Enable HW Hacks**, as shown below:



Then click **Advanced Settings and Hacks**.

3. Follow this picture:



Put a check in **Align Sprite**, put a check in **Merge Sprite**, and set “*Half-pixel Offset*” to **Special (Texture - aggressive)**.

- a. Side note: If you *don't* have the resolution upscaled, these options will be shaded out and unclickable. Hence, you need to upscale it first (read the section above).
4. Click **OK** > **OK** to return to the game. The graphical issues should be gone now.
  - a. If the visual issues are still present, try switching to different resolutions (*explained in the section above*). You could also try switching the renderer (*found at the top of the Video Plugin Settings*).

## Q: Games get stuck at the loading screen!

You may find that some games get stuck at the loading screen when you try to load them. There are several possible factors to this problem. Try running through this checklist:

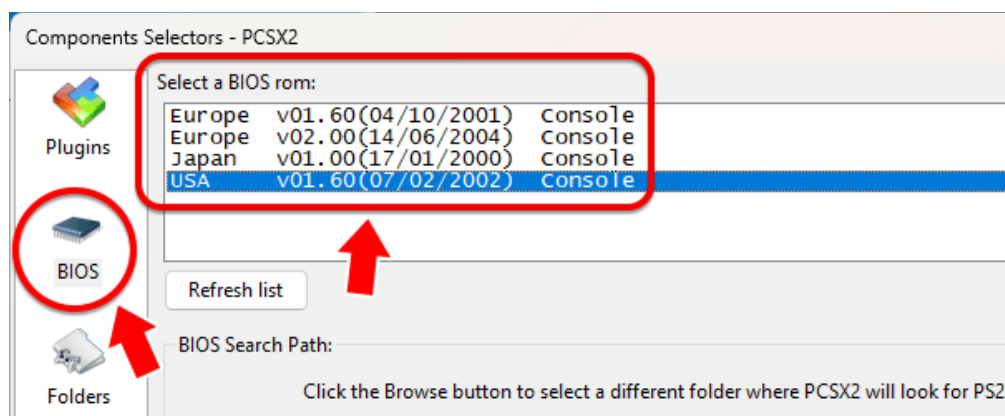
1. Download other games and try loading them. Rule out if this is a game-specific issue or a global issue with all your games. If it's a global issue, PCSX2 may not be setup correctly or PCSX2 may not be compatible with your computer.
2. Make sure the file format of your game is supported by PCSX2 and extracted from its archive. I talk more about this below in “*My PS2 game is not an ISO. Help!*”
3. It's possible the problematic game is partially corrupt or a bad file. Try downloading it from other websites.
4. You may be able to fix it by tweaking around settings. Try YouTube videos about black screen troubleshooting:  
[https://www.youtube.com/results?search\\_query=pcsx2+fix+black+screen](https://www.youtube.com/results?search_query=pcsx2+fix+black+screen)

## Q: I hear sound but get a black screen!

If you load a game and you hear the game's audio but get a black screen, you possibly either have a BIOS issue or a video issue.

## Resolving BIOS issues

1. Firstly, I recommend using my BIOS files. Just to rule out if the BIOS files you downloaded from another website are no good.
2. Go to **Config > Plugin/BIOS Selector**. Then click the **BIOS** icon.
3. You'll arrive in the BIOS section:

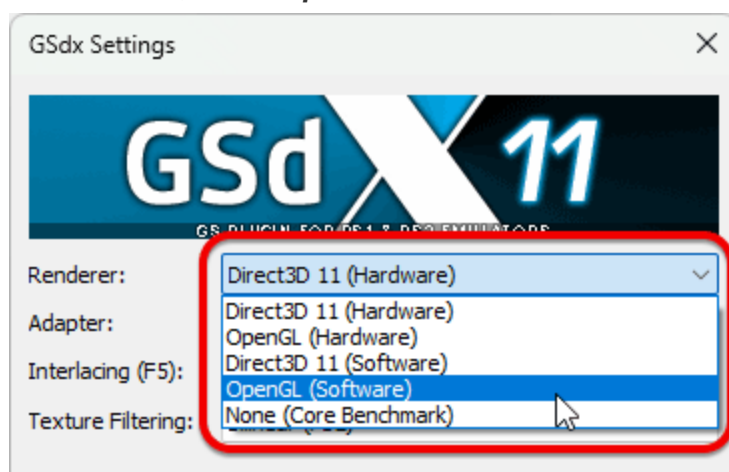


Select the BIOS according to the region for the game you're trying to play. For example, if you're trying to play a USA game, select the USA BIOS.

4. Click **Apply** then **OK**. Then restart your game.

## Resolving black screen video issues

1. Go to **Config > Video (GS) > Plugin Settings..**
2. In "Renderer", select **OpenGL** - as shown below:



3. Click **OK** then restart your game. If this is a video-related issue, this should fix it.

If it's not fixed, perhaps try **Software** as the renderer. If that doesn't fix it, I'm afraid PCSX2 may not be compatible with your device. However, if the black screen is the result of the game crashing (you don't hear audio), that's a different issue. Try black screen troubleshooting:

[https://www.youtube.com/results?search\\_query=pcsx2+fix+black+screen](https://www.youtube.com/results?search_query=pcsx2+fix+black+screen)

## Q: My PS2 game is not an ISO. Help!

PCSX2 only supports games (a.k.a. disc images) in ISO, BIN, IMG, MDF, and NRG. Or more specifically, the filename of your game needs to be "*Shadow of Colossus.iso*", "*Shadow of Colossus.bin*", etc. Keep reading if the PS2 game you downloaded is not in these formats.

### Wait, I don't see file extensions

Windows hides file extensions by default. Here are directions on how to enable them:

[https://www.youtube.com/watch?v=leOBJfEDs\\_4&feature=youtu.be](https://www.youtube.com/watch?v=leOBJfEDs_4&feature=youtu.be)

### If your game is in ZIP, RAR, 7Z

These formats are forms of compression, and your PS2 game is inside of it! You need to extract it. Windows can extract ZIP files by default - here's a YouTube video with directions: <https://www.youtube.com/watch?v=6ISxgrCOWok&feature=youtu.be&t=1m1s>.

To extract a RAR or 7Z file you can use 7-Zip [<http://www.7-zip.org>] (it's free).

### If your game is in UIF, DAA, CDI, XBX, B51, BWI

These ISO formats are exclusive to specific burning software. Google around to find what program is associated with that format. Once found, install it and burn the game to a DVD. However, if you want my opinion, I say just forget about it. You should try to download the game from somewhere else to get it in ISO or BIN format. Working with these proprietary ISO formats is too much trouble.

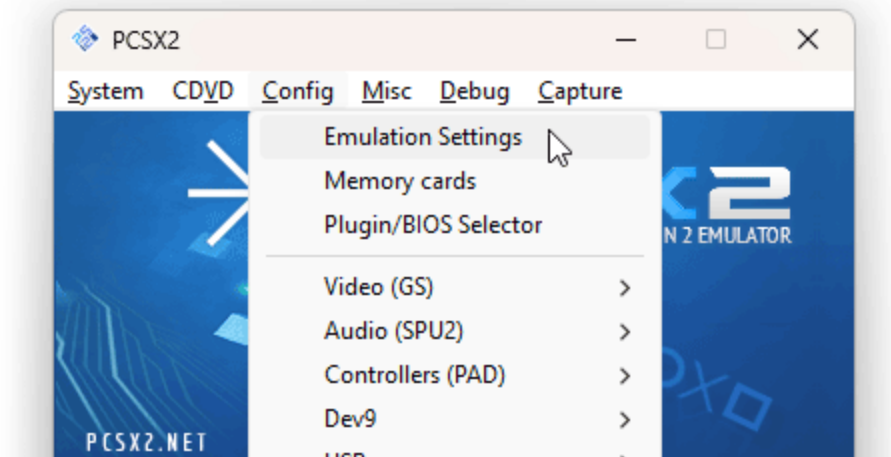
## Full screen

Press **Alt+Enter** to enter full screen. Press **Alt+Enter** again to go back to window mode. You can also double-click on the screen to toggle between window mode and fullscreen.

## Improving speed

With today's computers you don't need to use PCSX2's speed hacks. The default settings are fine for most people. Maybe if you're on a Windows tablet or a budget laptop, you'd need to make use of the speed hacks if you find that games are running slow.

PCSX2 makes adjusting game performance very easy with a simple slider. First, access the video plug-in settings by going to **Config > Emulation Settings**, as shown below:



Look towards the bottom left for this slider shown below:



The default setting is “2 - Safe (Default)”. Hovering over the slider pops up this information:

*Presets apply some speed hacks that may boost speed on underpowered systems, or speed up games that have unusual performance requirements. Uncheck this box to apply settings manually.*

- 1) Safest - No speed hacks. Most reliable, but possibly slow setting.
- 2) Safe - Default. A few speed hacks known to provide boosts, with minimal to no side effects.
- 3) Balanced - May help quad core CPUs.
- 4) Aggressive - May help underpowered CPUs on less demanding games, but risks causing problems in other cases.
- 5) Very Aggressive - May help underpowered CPUs on less demanding game, but is likely to cause problems in other cases.

6) *Mostly Harmful* - Harsh application of speed hacks. May help a very small set of games that have unusual performance requirements, but have adverse effects on most others. Not recommended for underpowered PCs.

Try moving the slider to “3”, click **OK**, and see if your game is running better. If it's still slow, try “4”. If that doesn't help, then I hate to break it to you but your system is not fast enough to handle PCSX2.

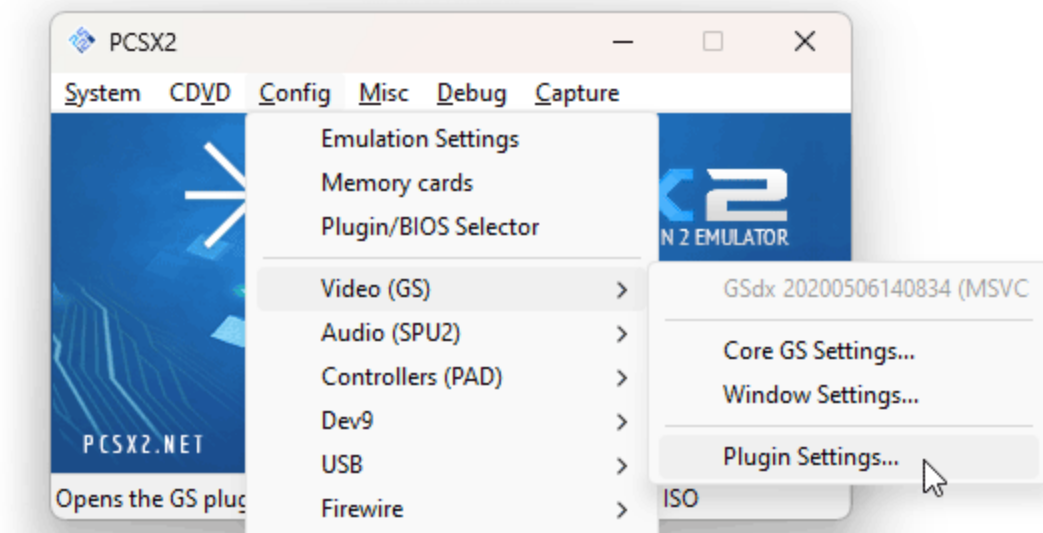
\*If you have the *opposite* problem where your game is running too fast, make sure you didn't accidentally press the **Tab** key to enable fast forward. Otherwise, adjusting the slider to a lower number should help correct the game's speed (perhaps “1 - Safest”).

## Fixing graphic glitches in 2D games

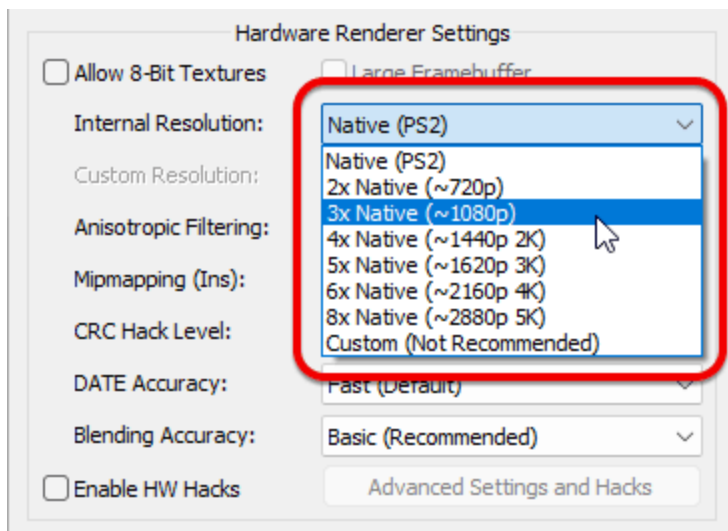


The default settings in PCSX2 cause 2D games to have weird graphic glitches around the bounding boxes of graphics and sprites. See above for an example. There's an easy fix for this.

1. Go to **Config > Video (GS) > Plugin Settings**, as shown below:



2. Select the “*Internal Resolution*” drop-down selection, as shown below:

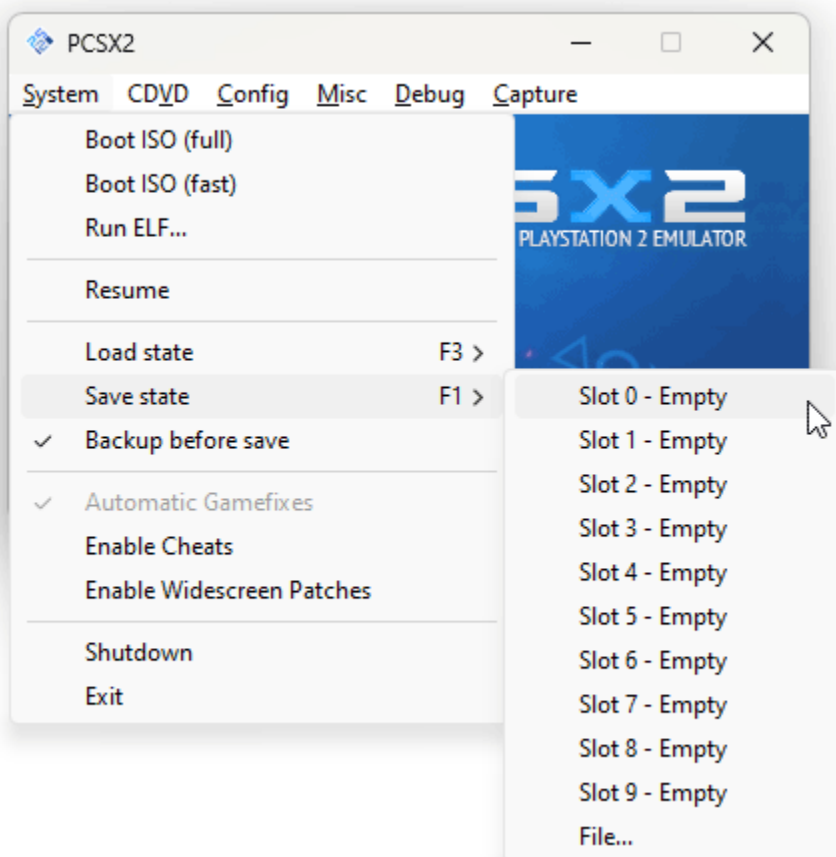


Choose **2x Native**.

3. Click **OK** and see if that fixes the graphical glitches. If it doesn't, go back and select **3x Native**. Either of those options should fix it.
4. **Note:** Increasing the internal resolution will most likely cause your 3D games to slow down. You would need to adjust the internal resolution every time you switch between playing your 2D and 3D games.

## Save states

*Save states* is a feature that saves the exact spot you are in any game. You can use this feature manually by going into the File menu or by quick keyboard shortcuts.



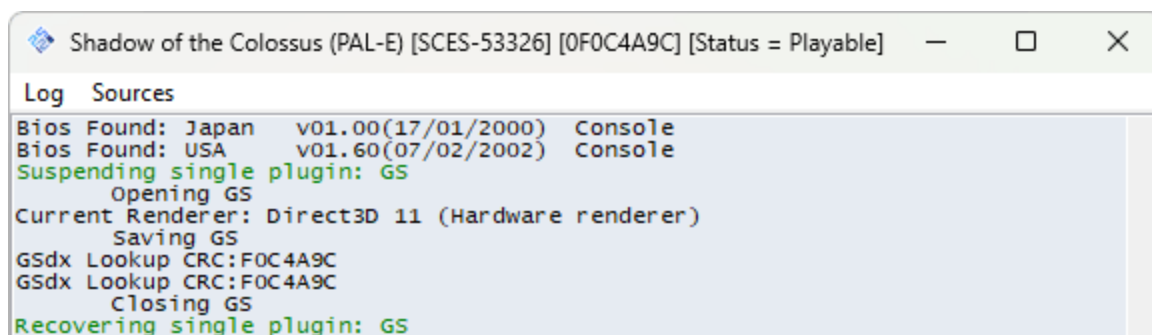
- **Capturing a state:** To capture a save state go to **System > Save state** and choose any of the 10 slots. These slots are reserved to allow you to save up to 10 different save states. The keyboard shortcut for saving states is **F1**.
- **Loading a state:** To load a state you previously saved, go to **System > Load state**. Then choose the slot where your save resides. The keyboard shortcut for loading saves is **F3**.

**New to emulation?** If you're new to video game emulation, I don't want to confuse you into thinking that save states are what you're *supposed* to use as the only means to save your progress with PCSX2. Save states are an optional feature. You can still save your game at save points as you would on a real PlayStation 2. Although I do recommend using both save states and in-game saving so that you always have a backup. In-game saves are loaded at the game's title screen (like on a real PS2) - they're *not* loaded via the System menu.

## Fast forward

Fast forward is the feature that speeds up the game. To access it, press the **Tab** key. To end the fast forwarding, press the **Tab** key again.

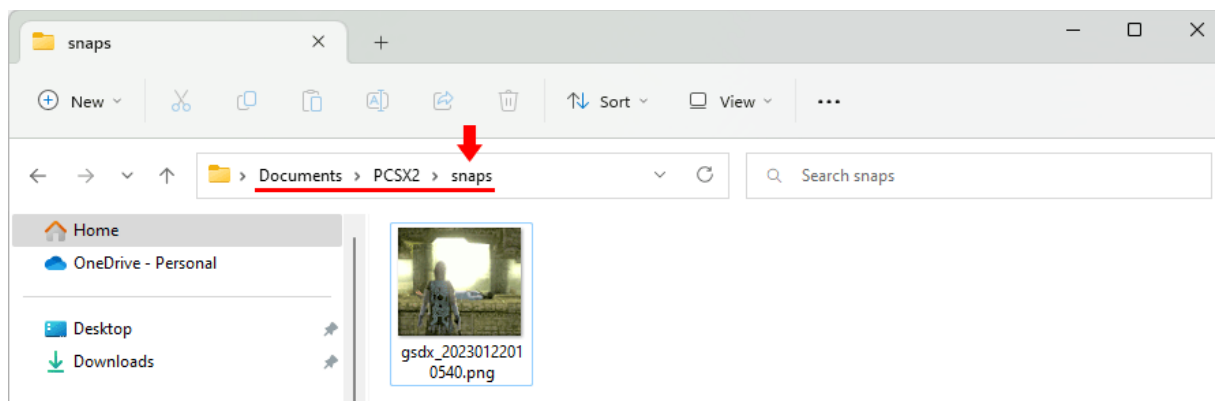
## Hiding the annoying console window



Unless you're an advanced user who cares about console logs, this thing is an eye sore. You can hide it by going to **Misc > Show Console**.

## Capturing screenshots

Simply press the **F8** key to capture a screenshot. PCSX2 will save the screenshot in your current resolution and with your current video settings as a PNG image. The screenshot is saved to the "snaps" folder. To find the snaps folder on your computer, go to your "Documents" folder then "PCSX2" > "snaps" - as shown here:

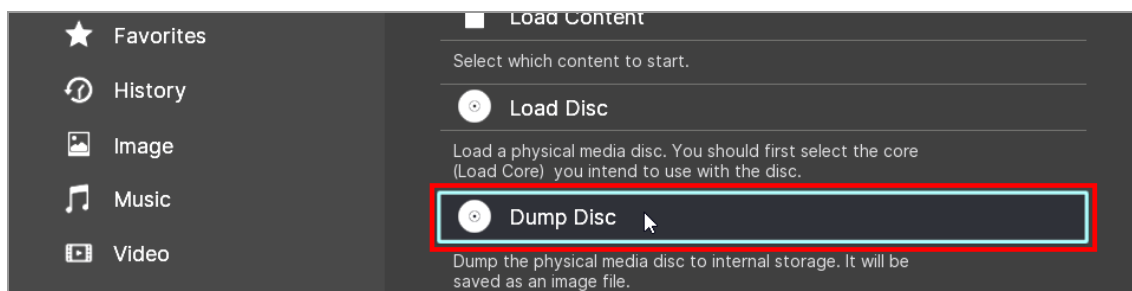


To capture a screenshot via the menu, go to **Capture > Screenshot**. PCSX2 won't give you an indication that the screenshot was captured.

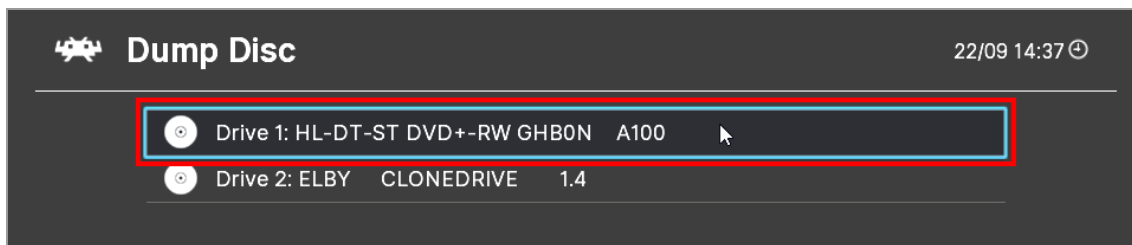
## Backing up your PS2 games to ISO

Perhaps you prefer using your own PlayStation 2 games instead of downloading them from the Internet? Or maybe you just want to keep backup copies of your PlayStation 2 games? Whatever the case, here's how you can dump your games:

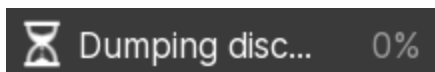
1. Download & install *RetroArch for Windows*: <https://retroarch.com/>. It's the #1 multi-system emulator. I have a tutorial for *RetroArch for Windows* as well: <https://fantasyanime.com/emuhelp/retroarch-windows>
  - a. Note: During RetroArch's installation, setting a custom destination for RetroArch matters. It'll be easier for you to find RetroArch if you select an easy-to-find folder such as *Documents*. Otherwise, RetroArch defaults to your *AppData* folder deep in your C drive, which can be a little annoying to locate.
2. Put your game CD in your computer's DVD-ROM drive.
3. Open RetroArch and select **Dump Disc**:



4. On the next screen, select your DVD-ROM drive (the first option, most likely).



5. You're going to see this progress bar appear on the lower-left of the screen:



Depending on the speed of your DVD-ROM drive, this will probably take 5-20 minutes to finish.

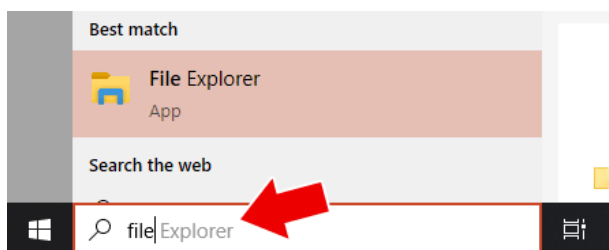
6. When RetroArch finishes dumping your game CD, the progress bar will disappear. It doesn't prompt you with an alert sound or anything. If your DVD-ROM was humming during the dumping, you'll know RetroArch finished when your DVD-ROM's humming sound stops.
7. RetroArch dumps the ISO of your game CD in its Downloads folder. So the next step is locating the *Downloads* folder. This is why in step #1 I noted to install RetroArch in an easy-to-find location. If you installed RetroArch in, say, your *Documents* folder, go to ***Documents > RetroArch > Downloads*** to find your game CD's ISO file. Otherwise,

RetroArch is in the *AppData* folder. Here's how to find it:

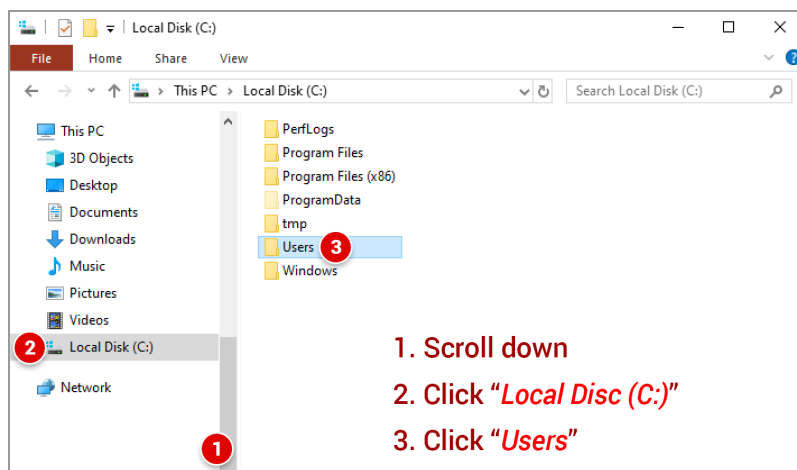
- a. Open the Windows File Explorer. The easiest way to open it is to click the folder icon in your home row of apps:



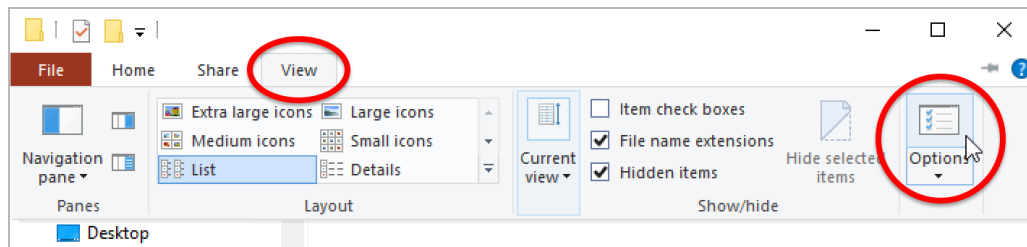
If a folder icon isn't present, you can also do this: in the “*Type here to search*” area type “*file*” and you'll see a File Explorer app appear at the top of the search results:



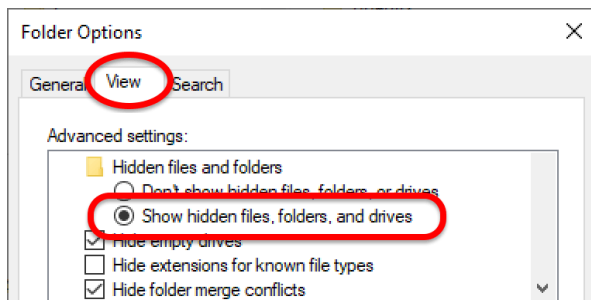
- b. In the left panel, look for **Local Disc (C:)**. Click on it, then in the main panel click **Users**:



- c. Next, double-click on the folder for the user you are currently signed in as.
- d. In your 'user' folder, currently “*AddData*” is hidden. We need to make hidden folders visible. Click on **View** then **Options**:

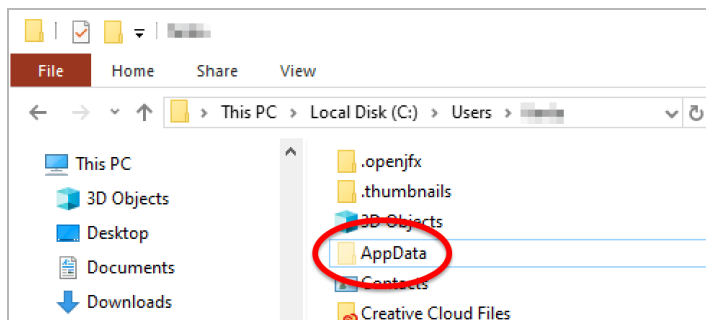


Then click the View tab then click the radio bullet for **Show hidden files, folders and drives**:



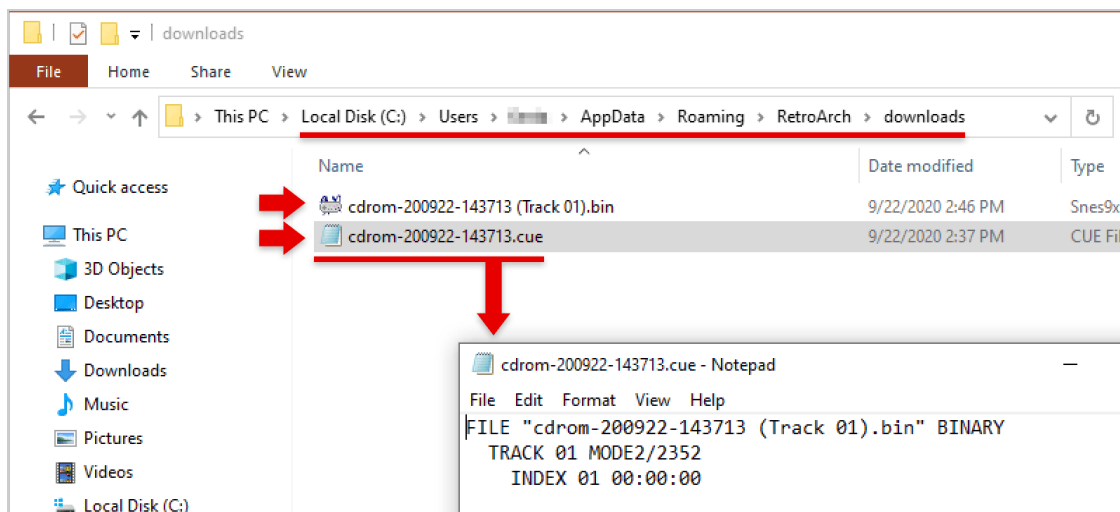
Click **Apply** then **OK**.

- e. The “AddData” folder should now be visible:



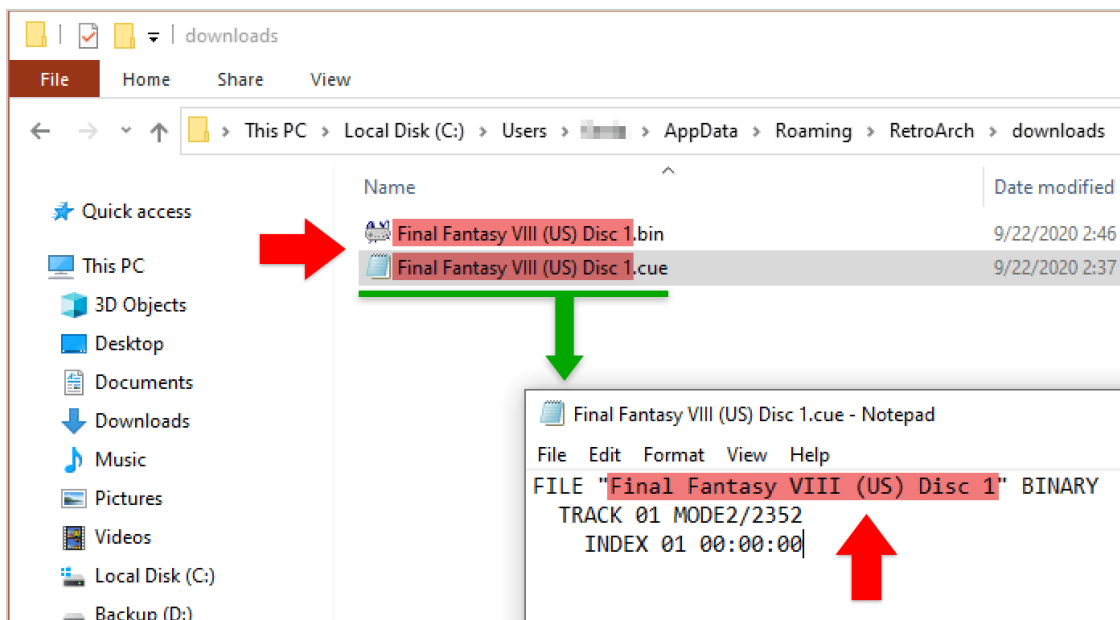
Double-click on it. Then double-click on **Roaming > RetroArch > Downloads**.

8. Now we're in the *Downloads* folder! You should see a BIN file and a CUE file with a weird filename like “cdrom-200000-1000000” - as shown below:



Double-click on the CUE file and choose to open it in Notepad. You'll see the text that's shown in my picture.

9. Next, rename the CUE file and BIN file to the name of your game. Open the CUE file in Notepad to rename the ISO as well. You can name these files to any name you want. The only requirement is that both files & the name in the CUE file must be the same exact name. Look here:



...these three instances need to be changed to the same name.

10. That's it! You've successfully dumped your PlayStation 2 game. You can use it in any PlayStation 2 emulator or any multi-system emulator that supports PlayStation 2.

## Finding ISOs

In my links page [<http://fantasyanime.com/links#roms>], I have some good links to sites where you can download ISOs. If you want to try to find more sites than what's in my collection of links, just Google around. For example, if you want to download *Shadow of the Colossus* just Google "*download shadow of the colossus ps2*".

However, an even better use of Google is to search Reddit. People upload PlayStation 2 games to cloud platforms all the time. You'll only find these links to such valuable resources on Reddit. Try search phrases such as "*reddit download playstation 2*".

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Thank you for reading my tutorial! If you have questions you can email me or message me on social media [<http://fantasyanime.com/contact>].