Overview

In this complementary document to my video essay *Fatal Frame 4: The Terrifying Lost Chapter*, I want to offer a few tips & tricks on how to get the game running on the Dolphin GameCube emulator on Windows 10 (it will very likely also work on older windows version as well as on all systems Dolphin supports, so Mac, Android and other Windows versions as well).

Fatal Frame 4 as I said in the video, was never officially translated, so you will need to acquire the fan-translation that I've talked about in the video. Other than that, it's not known to be a problem case to emulate, so it should run fine on different OSs just as well.
There are also many different emulators, some of which are more designed to streamline the emulation process and make it easier, offer directly integrated shaders that simulate CRT screens (some of them are quite good, like CRT Royale), as well as emulate multiple consoles at ones in an all-in-one solution, like RetroArch (Which can also use Dolphin's framework to emulate it automatically). So should that sound like a more appealing solution for you or should you run into trouble with my settings, I recommend trying this emulator.

What you need

- Dolphin GameCube Emulator (version used for this video: 5.0-14344)
https://dolphin-emu.org/download/

For recording the footage in the video, I used this specific version of the Dolphin emulator, but there are newer ones available. The settings in those might slightly differ to the ones in the screenshots I'm showing though.
https://dolphin-emu.org/download/dev/acc7d3710d60552769f61f4b44bc8533a940df36/

- ROM File of the game or fan translation
So, legally you have to backup your own physical copy of Mask of the Lunar Eclipse to ISO (or another container the emulator can read), but if you possess it, you're fine to download it from an alternate source on the web at your own discretion! (Be careful with ROM sites, they can be a bit iffy sometimes) 👍
And again, if you don't own it, I won't stop you and companies don't dare to hound you either (see last section)... ¯_(ツ)_/¯

You can find the Fan-translation on Archive.org:
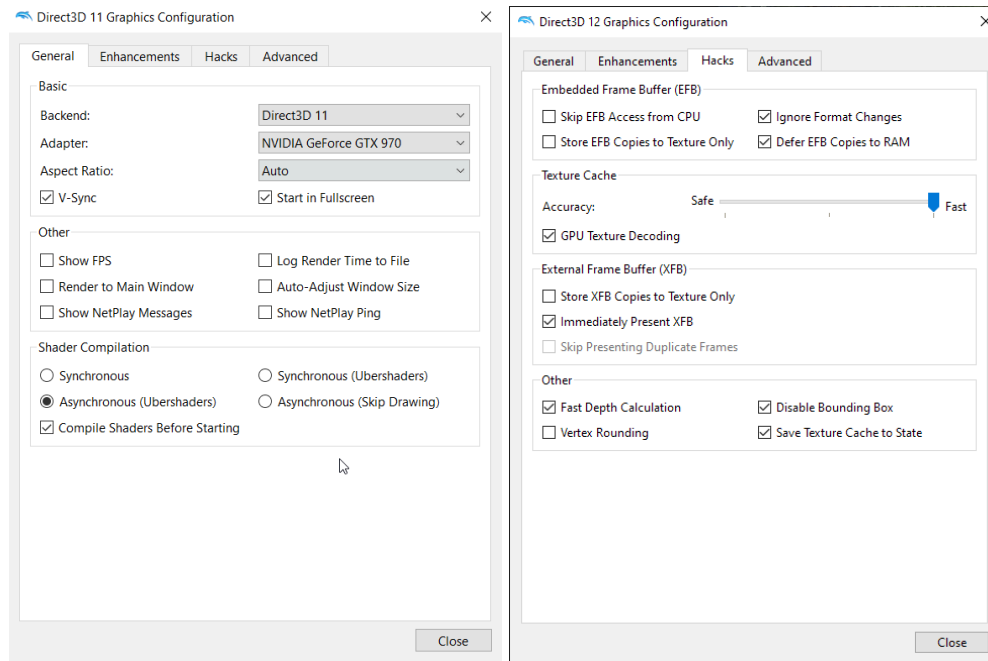https://archive.org/details/fatalframe4eng_202003

- A gamepad with gyroscope
Such as a PS4/PS5 or Xbox One gamepad.

Emulator steps and settings

This section explains step by step how to set up the Dolphin emulator for Mask of the Lunar Eclipse once you have all the resources. First of all, install and open the emulator.

Options -> Graphics Settings

You can use Direct3D 12 if you have it available, but it will work just as well with OpenGL. Set Aspect Ratio to Auto (don't force 16:9, because the game comes with native widescreen support in the options menu). Activate V-Sync and Asynchronous (Ubershaders), as well as activate "Compile Shaders Before Starting"

Switch over to the "Hacks" tab and put in the settings from the screenshot on the right.

Options -> Graphics Settings -> Enhancements
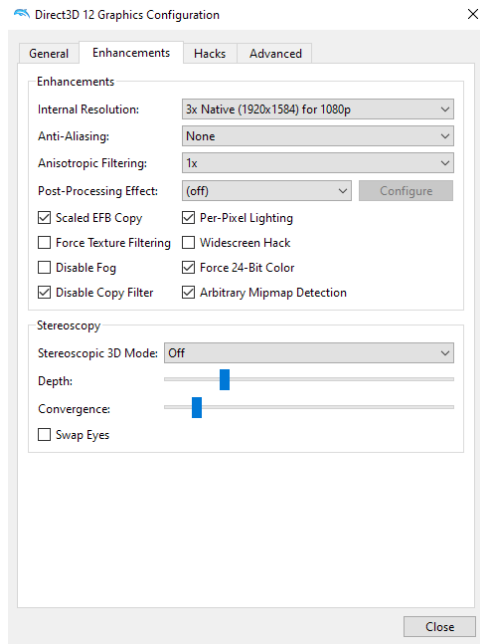
This is the setup for good upscaling as you see in the video for 1080p resolution. 3x Native Texture resolution and some other nice little visual amplifications but without any additional texture filtering or shaders / postprocessing or any of that which alters the aesthetic look of the game.

Options -> Configuration
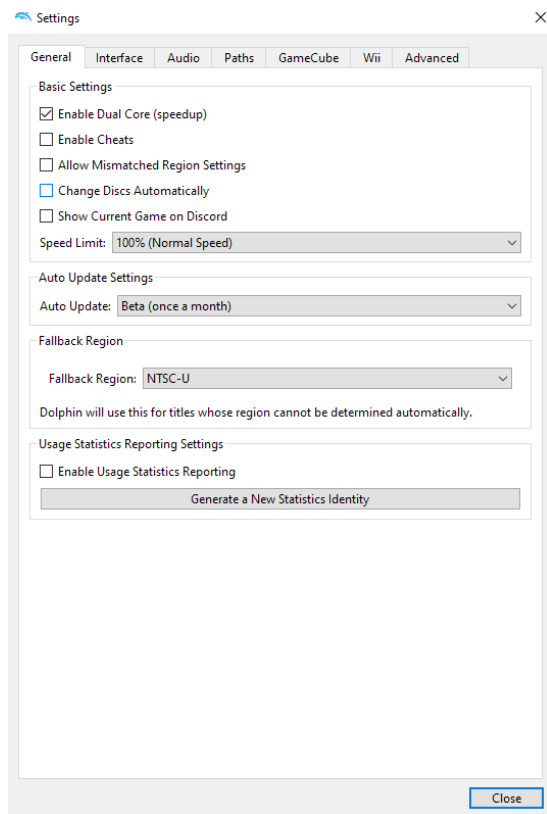
Under the "Config" menu, for anyone with a newer CPU (pretty much anything newer than Intel 6XXX or Ryzen 1XXX) I also strongly recommend you turn on "Enable Dual Core (Speedup)", the option right at the top.

This will allow Dolphin to take advantage of multi-core CPU setups, which can be a big help, especially on older hardware.

Memory Cards

A memory card should already be set up, but in case you want to create a new file for a new memory card, you can do that under Config->GameCube
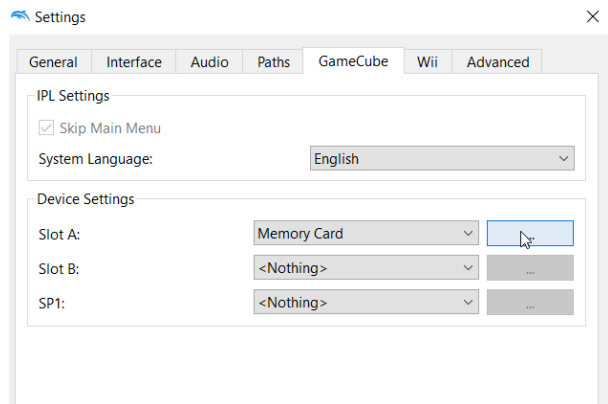
Alternatively, you can of course also save your game with Save States. Very convenient, you have 8 slots at your disposal that you can save the game with *at any time* by pressing Shift+F1-F8 and load accordingly with F1-F8*.* The Emulator just dumps the entire state of the RAM in a file and takes it from there.

You also have multiple slots available in the "Emulation" menu. Try it out, it can be quite helpful when an emulated game has the tendency to crash (or when a game is just *unfair* at times).

Controllers and Motion Controls (The slightly tricky part)

When it comes to **controllers,** you set up your individual controller by opening the Config->Controllers menu. But for this game, it's important to set up a controller that has a gyroscope function in order to emulate the Wii's motion controls. This needs to be done with an external application.
I used DS4Windows, which you can download, for instance, on Sourceforge:
https://sourceforge.net/projects/ds4windows.mirror/

Go ahead and install the program, and set up the gamepad you're using, such as a PS4/PS5 or Xbox One gamepad following the instructions and guides available. Once the controller is set-up, go to the settings and check the "Enable Server" checkbox in the "UPD Server" tab, then set the IP Address to 127.0.0.1, and Port to 26760, as in the image below:
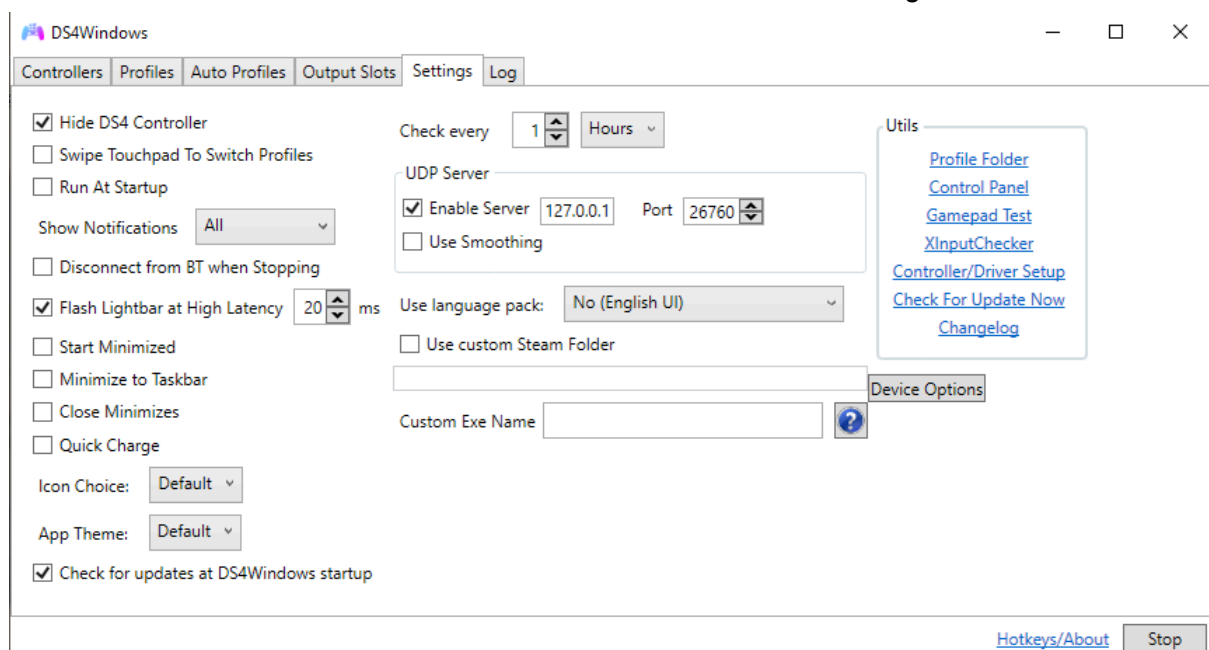

With this enabled, when you plug in your DS4 controller while the program is running, this turns your controller into an FTP server that Dolphin can "listen" to.

Back to Dolphin

Then in Dolphin, after you click the controller settings icon at the top of the main window, click the "Alternate Input Sources" button at the bottom of the window that appears. Then in the resulting panel, "Add" the info that you just entered in DS4Win [127.0.0.1 :: 26760] see below:
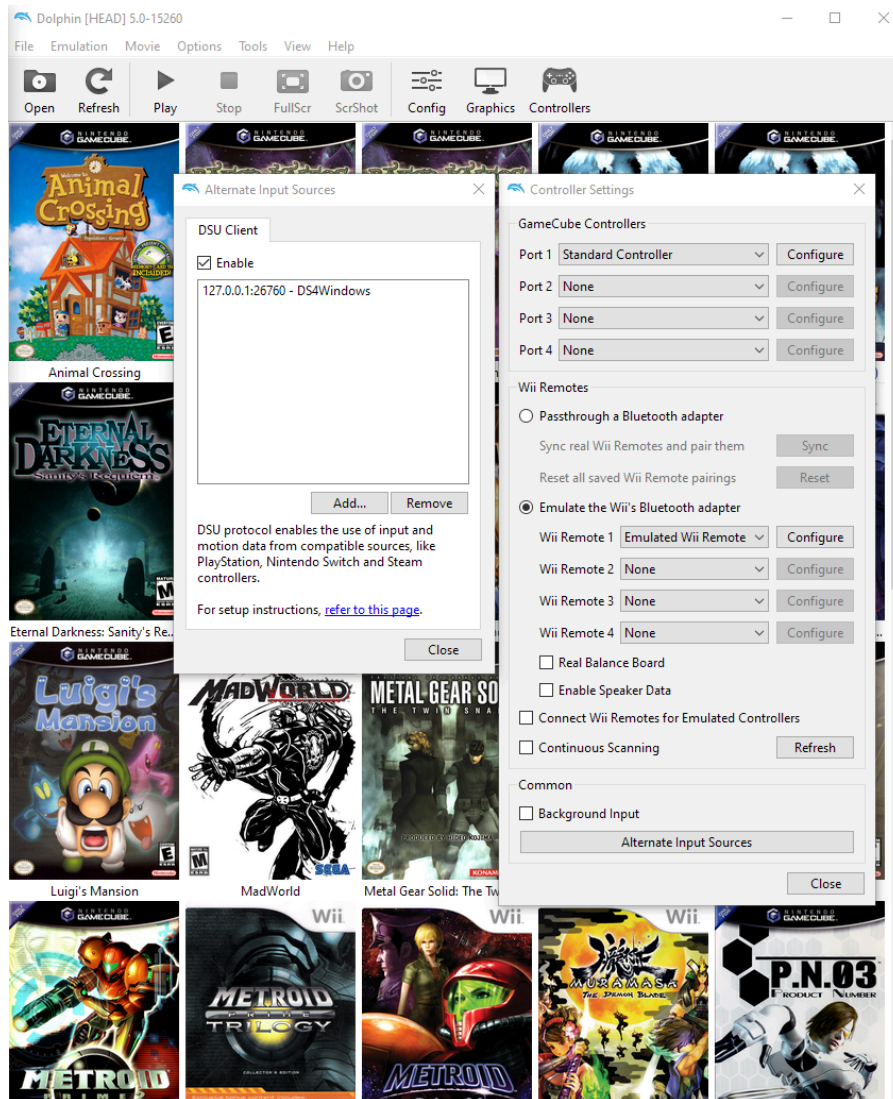
Then all you gotta do is confirm the controller settings for the Wii in Dolphin, make sure all the button inputs are bound, and confirm the "Motion Input" tab to make sure Dolphin is reading the controller gyro.
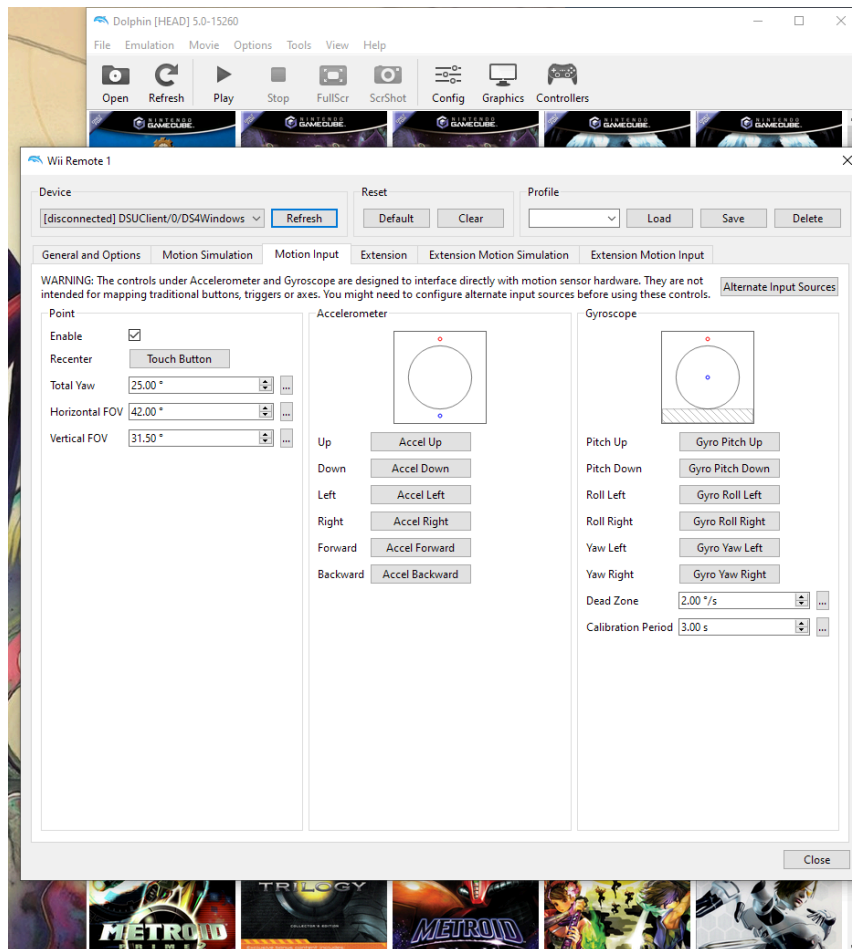
Sounds a bit complicated maybe, but it's very doable, and that's really it. You have emulated the Wiimote, and if everything is set up correctly, this works *surprisingly* well in Fatal Frame 4!

Compatibility and Playing Other Games with Dolphin

These settings here should be ace for Mask of the Lunar Eclipse; but for anyone who wants to try other games in Dolphin, the devs maintain a compatibility wiki that contains entries for each game, along with any settings changes you might need to make to get it running optimally: https://dolphin-emu.org/compat/

That's about it!
Enjoy Mask of the Lunar Eclipse in neat HD graphics!

On The Legality of Emulation & Abandonware

Abandonware is software that is, as the word describes, abandoned and virtually impossible to acquire through legal channels and especially directly through the owner of the game (or software).

Is it legal? Short answer is no – but if you wonder why there are abandonware sites that keep being operated is because abandonware is software that has no legal representative anymore. So basically No Plaintiff, No Judge applies here and there are no court cases relating to it.

This is even far more lenient for users because:

1) Emulators themselves will always be completely legal to download and use. No ambiguity here, it's legal to reverse-engineer console tech as long as you don't use any proprietary hardware or code to do it. _(This is why every emulator has that disclaimer about needing to find the BIOS file on your own)_

2) _Downloading and possessing a ROM file on your computer is 100% legal_, and has an established precedence. This falls under the same umbrella as, say, creating a backup copy of standalone PC software you've purchased -- **this is one of your core rights as an end-user**. _(This is also the main reason why every software company has moved into SaaS subscriptions now, because they don't want you actually "owning" anything, even the ephemeral code on your hard drive.)_

3) There is a lot of leeway given to the individual end-user. According to the current legal precedent, it's only illegal to facilitate the distribution of this software (IE running a web server where people you don't personally know can download roms / software, or trying to sell bootleg consoles with emulated software pre-loaded, et al). For the individual downloader, even if they might be violating copyright by doing so _on paper_, _it's still not considered illegal_ because of how cracking down on rom downloads would infringe upon the "backup copy" rights mentioned in (2).

–> Because keep in mind: **Game companies desperately do not want to actually try this issue in court**, because they're deathly afraid of what legal precedents could be established if they were to _**lose**_. Thus why emulation and abandonware has existed in this untouched legal gray-area for so long.

So, you must of course yourself decide how _lawful good_ you are, but if you are not as rigid as Judge Dredd then engaging in video game preservation in this way is a noble and virtually risk-free endeavor. Still, you will of course do so at your own risk.

Disclaimer

I've tested these settings on my own and one other computer, so they are direct results of my experiences with getting those games running on different systems. There's of course no 100% guarantee that it will run on your machine, but in case you run into problems, there's plenty of resources out there for the avid fixer. Google is your friend. As I said, if the emulator I use doesn't work, try getting into RetroArch, it's pretty reliable and a bit more streamlined in its user experience.

I might update this document over time. (Or move the whole emulation/restoration instructions effort eventually over to a Wordpress or a tumblr)

Thanks a lot and I hope you enjoy this spooky Survival Horror J-Horror Gem in its fullest glory.