Steam Deck Discord - FAQ

Steam Deck Discord's Frequently Asked Questions (FAQ)

Please note that these answers are not officially endorsed by Valve, they are curated by members of the Steam Deck Discord server. Please scroll down and review the topics and assistance provided in this document as it will answer most of your questions or provide links where you can find them.

Where are the Official Steam Deck Guides / FAQs / Help?

Refurbished Steam Decks

https://store.steampowered.com/sale/steamdeckrefurbished/

Steam Deck Basic Use & Troubleshooting Guide inc Cleaning Guide and more https://help.steampowered.com/en/fags/view/69E3-14AF-9764-4C28

Docking the Steam Deck (With the Official Dock and Troubleshooting) https://help.steampowered.com/en/fags/view/4C18-08B5-DEC9-3AF4

Steam Deck FAQ

https://www.steamdeck.com/en/faq

Steam Deck Developer FAQ

https://partner.steamgames.com/doc/steamdeck/faq

Steam Deck Recovery Instructions (and Recovery Image)

https://help.steampowered.com/en/fags/view/1B71-EDF2-EB6D-2BB3

https://help.steampowered.com/en/fags/view/65B4-2AA3-5F37-4227

Recovery images (use the latest): https://steamdeck-images.steamos.cloud/recovery/

Steam Deck Desktop FAQ

https://help.steampowered.com/en/fags/view/671A-4453-E8D2-323C

Steam Deck Support + Raising Steam Support Ticket

https://help.steampowered.com/en/wizard/HelpWithSteamDeck

SteamOS, Proton/Game and Steam Client Issues

https://github.com/valvesoftware/steamos/issues

https://github.com/ValveSoftware/Proton/issues

https://github.com/ValveSoftware/steam-for-linux/issues

Other Repositories

https://github.com/orgs/ValveSoftware/repositories

Valve Return Hardware and Packaging Guide(s)

https://help.steampowered.com/en/faqs/view/04AE-8A9A-F64E-D165 https://help.steampowered.com/en/faqs/view/307F-A625-1F33-3247

Great on Deck Guidance / Verified Games - Steam Deck Games

https://store.steampowered.com/greatondeck/ https://www.steamdeck.com/en/verified

Steam Deck Windows Resources (and Drivers)

https://help.steampowered.com/en/fags/view/6121-ECCD-D643-BAA8

Steam Local Network File Transfers

https://help.steampowered.com/en/fags/view/46BD-6BA8-B012-CE43

Using the Steam (Game) Backup Feature

https://help.steampowered.com/en/fags/view/4593-5CB7-DC3C-64F0

Valve's Official Steam Deck Hardware Overview

https://www.youtube.com/watch?v=SsqvY0buseQ

How to Repair/Replace the Steam Deck Hardware

https://www.ifixit.com/Device/Steam_Deck https://www.ifixit.com/Parts/Steam_Deck

Packaging Steam Deck for Return to Valve & Warranty Info

https://help.steampowered.com/en/fags/view/307F-A625-1F33-3247

https://help.steampowered.com/en/fags/view/04AE-8A9A-F64E-D165

https://help.steampowered.com/en/fags/view/339C-BC5C-3D89-53D9

Proton FAQ (What is it? What's a Prefix, etc.)

https://github.com/ValveSoftware/Proton/wiki/Proton-FAQ

What about Unofficial - But Useful - Sites?

Decky Loader Plugins

https://decky.xyz/

https://decky.xyz/discord (for decky and plugin support)

Best/Recommended Steam Deck Settings for Games

https://sharedeck.games/

Third Party Steam Deck Intro Animations and Videos

https://steamdeckrepo.com/

Current Steam Deck Store Game Proton Settings / Does <x> game work on Deck?

https://www.protondb.com/

Does the Game I want to Play's Anti-Cheat work on the Steam Deck? https://areweanticheatyet.com/

Steam Deck Hardware Wiki / Resources

https://github.com/NKkrisz/Steam-Deck-Hardware

Unlocking the BIOS for Overclocking, Undervolting, Higher TDP and Faster RAM

https://www.stanto.com/games/unlocking-the-steam-deck-bios-for-under-voltage-and-over-clocking/https://www.stanto.com/steam-deck/how-to-unlock-the-lcd-and-oled-steam-deck-bios-for-increased-tdp-and-other-features/

Visual Steam Deck Guides

https://www.youtube.com/@10MinuteSteamDeckGamer/videos

When is the next Steam Sale?

https://steamdb.info/sales/history/

Where do I get custom cases / skins / other aesthetic mods?

Amazon, Aliexpress, Etsy, or direct from the third party site such as JSaux / Extremerate / dbrand.

My Flatpak / Discover Store Won't Update

Switch to Desktop Mode.

Open up a konsole terminal.

Type in the following:

- sudo flatpak repair
- Hit enter on the keyboard
- flatpak update

You will need to have set a password that you remember with 'passwd' first, if you haven't already.

My Steam Deck's Audio No Longer Works Properly / Is Muted

Try this, it will reset all sound settings to their defaults. Go to desktop mode, open a terminal Konsole app and type the following, pressing enter/return after each line:

rm -rf ~/.config/pipewire

rm -rf ~/.config/wireplumber

rm -rf ~/.local/state/wireplumber

rm -rf ~/.config/pulse

systemctl --user daemon-reexec

systemctl --user restart pipewire pipewire-pulse wireplumber

Now reboot your steam deck.

Why is my Bluetooth (and maybe WiFi) Performing Badly when Docked?

There is increasing evidence that third party (non valve) Steam Deck Docks are interfering with the Bluetooth of the Steam Deck.

This can happen when the dock has not properly shielded the USB-C implementation, USB3 is known to 'cause problems' or 'interference' with the 2.4Ghz frequency range, this includes both WiFi and Bluetooth.

While a list of these docks is still being identified, you can easily determine if your dock is causing this problem by unplugging the power from your dock, and unplugging the dock from your steam deck, and checking if you still have problems with Bluetooth or WiFi on your deck.

Docks known with this issue:

- JSAUX HB0609 6-in-1 Multifunctional Docking Station (Link)
- LISEN 10-IN-1 Docking Station for Steam Deck OLED&ROG Ally X&Legion Go, Dual Cooling Fan 5 USB Ports and 4K@60Hz, 100W Charging Port Support ROG Ally 30W Mode, Gigabit Ethernet Fit for Steam Deck OLED (Link)

The official Valve Steam Deck Dock does not have this problem.

I'm Running out of RAM on my Steam Deck, What can I Do?

The Steam Deck LCD can be modified to have 32gb of RAM. Though this modification is not for the faint of heart and requires solid soldering and desoldering skills, it also requires maintaining a modified BIOS file. Instructions will not be provided here.

Alternatively as of the more recent SteamOS versions, the Steam Deck uses compressed zram to get 'more RAM' from its current limitation, and uses a 1 gigabyte swap file as backup. If you're running modified games or if the game is particularly taxing, you can still end up running out of RAM.

You can increase the backup swap file, but make sure that you have enough storage space to do so in your 'home' partition. The commands you can do are as follows, assuming you want an **8GB Swap file**.

sudo swapoff /home/swapfile sudo rm /home/swapfile sudo fallocate -l 8G /home/swapfile sudo dd if=/dev/zero of=/home/swapfile bs=1M count=8192 sudo chmod 600 /home/swapfile sudo mkswap /home/swapfile sudo swapon /home/swapfile

You can then check if it's worked by running:

cat /proc/swaps

These commands are run one per line, hitting 'enter' or 'carriage return' after the command. The 'sudo' command elevated privileges to the 'root' or 'administrator' user and works by setting a password for the 'deck' user in desktop mode, you can do so by typing 'passwd', you will not see any output as you type in your password, make sure you make a note of it.

Will the Steam Deck Download Files When it is in Sleep / Shut Down / Hibernation?

No.

The Steam Deck is a PC, and PCs do not behave in this manner. Consoles manage this by not actually turning off, but PCs do not behave in this manner whatsoever.

Should I be Concerned About Leaving the Deck on Charge, or Using the Steam Deck while it's Charging?

No.

"If your device has been left on the charger for long periods of time, it may report less than 100% charge. This is normal. We allow the battery to slowly discharge after long periods of time under charge to optimize long-term battery health." - from

https://help.steampowered.com/en/fags/view/69E3-14AF-9764-4C28

However, there is a known 'bad batch' of Steam Deck LCD batteries that can be more inclined to 'puff up' or fail sooner. These are **HF8095** models.

You can check what battery you have by either:

- 1. Opening up the steam deck and looking
- 2. Running the following in a konsole terminal:
 - a. upower -i /org/freedesktop/UPower/devices/battery BAT1
- 3. Running 'Battery Info' from the Discover Store / Flathub
 - a. https://flathub.org/apps/com.her01n.BatteryInfo

Replacement batteries are available from ifixit. Batteries sold on aliexpress or amazon are unofficial and may not correctly report their capacity.

How long does the Battery Last in the LCD Deck vs OLED Deck?

The amount of time that the battery lasts varies.

The Steam Deck LCD battery is approximately 10wh less than that in the OLED Steam Deck. The OLED Steam Deck also has some optimisations with its APU and follows a different manufacturing process. It has a number of things going for it that reduces power consumption.

Approximately, the LCD Steam Deck lasts 1hr 30min under demanding games, such as Cyberpunk 2077 with all of the settings high, whereas the Steam Deck OLED lasts up to twice that in the same situation.

With conservative use and limiting the TDP (power), say with a game such as VA-11 Hall-A, the battery can last 7 to 9 hours or so.

Can I fit the Steam Deck OLED Battery into the Steam Deck LCD?

No.

Someone tried:

https://www.ifixit.com/Answers/View/823192/Could+I+put+the+new+Steam+Deck+OLED+battery+into+the+original+Deck?permalink=comment-964165

"I have tried it. Everything fits perfectly, but Steam Deck (LCD) does not recognize the battery from OLED version. The LED indicator starts to blink, and when you boot the Deck with the charger in, it does not show the battery level. So, if somebody could make software for Steam Deck LCD that will make it think it is OLED version, it could work.

Yea, it boots, but without battery, just from the charger itself. And it purely works from the charger: it takes it as there is no battery in steam deck. Good news - steam deck can work just on a power delivery mode. Bad news - battery from OLED is not supported (even though fits absolutely perfect, and the polarity of the battery cable is the same, and the number and placement of pins is the same)"

It is likely the MAX chip's firmware that is preventing the battery from being used.

What File system should my microSD card be formatted to?

<u>ext4 with casefolding</u>. This is so that wine/proton has better performance when trying to find files due to case sensitivity reasons.

The Steam Deck can format your microSD card for you to this format.

What should I set the UMA Frame Buffer to?

"The UMA Frame Buffer Size when set to Auto (default setting) allows the system to manage the amount of shared memory for graphics. In this configuration, the size of the UMA frame buffer should scale depending on the amount of available system memory, enabling the system to perform in an optimal state. Therefore, it is recommended to leave the setting on Auto, which is ideal for most types of video processing workloads.

That being stated, some games may not yet be optimized for integrated graphics. In such cases, missing and/or low-resolution textures could be observed in game, or a warning message about the GPU not meeting requirements may appear during launch. These issues could be potentially resolved by manually setting the UMA frame buffer size. As an example, for systems equipped with 8GB of RAM or more, set the UMA buffer size to 1GB or 2GB."

Source:

https://www.amd.com/en/resources/support-articles/fags/PA-280.html

How do I upgrade the Steam Deck OLED or LCD to 32gb of RAM?

LCD: https://www.youtube.com/watch?v=nmobr6YEhWE

OLED: https://www.youtube.com/watch?v=9qvP IOP48M

How do I Access the Steam Controller when Using a Web Browser?

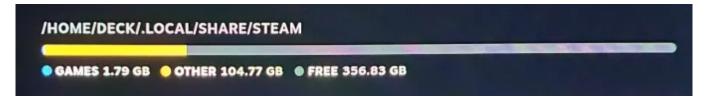
You might want to use Amazon Luna, GeForce Now, XBox Game Pass or another web browser game with your Steam Deck controller in either Desktop or Gaming Mode.

Provided that you have installed the browser as a flatpak, you need to run one of these commands in a konsole terminal depending on which web browser you're using:

- Firefox
 - flatpak --user override --filesystem=/run/udev:ro org.mozilla.firefox
- Chrome
 - flatpak --user override --filesystem=/run/udev:ro com.google.Chrome

- Microsoft Edge
 - flatpak --user override --filesystem=/run/udev:ro com.microsoft.Edge

What's Taking up the Storage on my Steam Deck?



Storage on the steam deck can be taken up by:

- Games
- Shader cache
- Proton Prefixes
- Files that you download in desktop mode
- Software that you download via FlatHub on the Discover store in desktop mode
- Any other operating system files

Proton prefixes are created for every game that you install via Steam, or that you install using Steam as a 'non steam game'. You also create wine prefixes and sometimes proton prefixes, when you install games via Lutris, Heroic Game Launcher, Bottles, etc.

It is not a good idea to try to move prefixes or flathub installed software to your microsd card. The best solution is to upgrade your m.2 nvme SSD storage or uninstall / delete files.

There are minimal files left over from uninstalling games and uninstalling software. You can try installing 'bleachbit' to regularly clean files: https://flathub.org/apps/org.gnome.baobab or Filelight https://flathub.org/apps/org.kde.filelight to try to see where storage is in use. This software may not be able to see into the 'discover store' flathub files though.

What do the LED Colours on the Steam Deck OLED Mean?

- Red LED with 3 quick flashes
 - Unit does not have enough battery charge to boot.
- Green LED
 - Battery is fully charged.
- White LED, static
 - Unit is charging.
- Orange LED
 - Unit is slow-charging, power supply is not providing 15v at 3a, 45w.

- Red LED, static or red LED flashing while turned on
 - Unit is too hot, CPU temperature is over 90degC
- Blinking White LED (briefly)
 - Unit is in the process of booting or it is in crisis mode.
- Blinking Blue LED
 - Unit is applying updates.
- Not lit
 - Unit is not plugged in or doesn't recognise the power supply.

Where can I find my Game's Files?

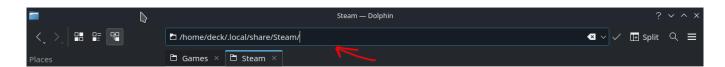
In SteamOS when a game or software is installed from Steam, it will install game related files in two locations. If the game is a windows game it will be installed in:

- /home/deck/.local/share/Steam/steamapps/common/

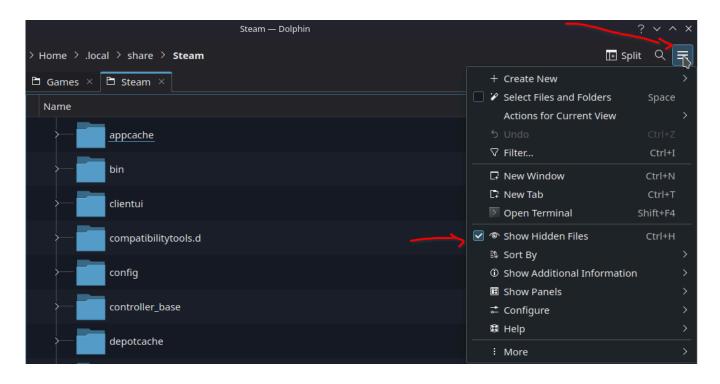
And its proton prefix will be in:

- /home/deck/.local/share/Steam/steamapps/compatdata/

Because these folders have a `.` at the start they are hidden (.local), do not remove this dot. You can either directly navigate to it by typing in the folder path:



Or you can unhide hidden folders and files:



If the game is a native Linux game, it will not have a prefix.

The prefix will not be under the game's name, but it will be under its application identifier number (appid). You can easily look this up at SteamDB.

A 'prefix' contains all of the simulated 'Windows' installation, such as your 'my documents' folder, 'appdata', and 'program files' folders, etc. If you're needing to modify files in this location, especially with an installer, it's usually better to use 'protontricks' because then you're editing it as though you're running windows in that folder. Running protontricks will also show you the appid for each game installed in a list.

How do I mod (a typical windows game) on the Steam Deck?

This can be different depending on the game which you're modifying. Some games, for example, you would mod with 'Vortex Mod Manager' on windows, and it would handle a lot of this for you. Others may ask you to extract a .zip file into the game's folder.

It is difficult to directly give guidance on modding a particular game, however you can ask your question on the Steam Deck discord and someone will likely help you so long as you give information as to:

- What mod you want to apply
- What game you want to apply it to
- Where you have your game and how you installed it

Posting this in a #help thread is the best way to get assistance.

Tips about Running Software on SteamOS Games

Some information that may help you get started on this:

- Proton is a version of Wine, it's how SteamOS runs windows games and software on SteamOS

- Games installed via Steam, Lutris, Heroic Launcher or Bottles use 'prefixes'
 - Prefixes are the folders where Proton and Wine store the '<u>virtual windows</u>' files that you would normally find on a windows computer's drive
 - There is a unique prefix per game installation. It is not typical to 'share' a prefix
- ProtonTricks or WineTricks will help you to modify the contents of a prefix and run software 'within a prefix'
 - The 'tricks' software helps your mods to know where to find the game files and entries
- Attempting to run mod executables as a 'non steam game' will not be able to know or see where
 your 'Steam Game' or 'Non-Steam Game' is installed, it will be setup with its own, standalone,
 prefix.

Why Can't I View Folders or Files that start with a ".", dot or full stop?

Do not rename, change, remove, or alter any files or folders that start with a dot.

Linux uses this mechanism to hide system files and folders, and usually these are system files and folders that are important for how your SteamOS operates.

In particular, do not rename the ".local" folder. There have been several people that have done so in an attempt to solve a problem, and it causes more problems. Do not do it.

Can I play Microsoft / XBox Game Pass games on the Steam Deck?

Your options are:

- Install Microsoft Windows (see Windows Resources at the start of this document)
- Stream the game via Xbox Cloud Gaming
 - Note this guide is old, in that you do not need to add any 'beta' versions of web browsers, you can use Google Chrome or Microsoft Edge from the Discover Store in Desktop Mode
- Using the above guide, instead of using the Xbox Cloud Gaming URL, change the URL to:
 - https://www.xbox.com/remoteplay
- Use <u>Greenlight</u> (XBPlay has been discontinued)
- Install waydroid and use an android app instead.

I am having problems with my SD Card

My SD Card Won't Format in the Steam Deck

I Can No-Longer Write to my SD Card

There are a lot of counterfeit SD Cards out there. They report say, 1 Terabyte of storage, they look like they have 1 Terabyte of storage, you have even been able to write 1 Terabyte to it, but your games won't load, you can't copy from it, and it simply doesn't work?

Or you're trying to format it on the Steam Deck and it refuses, but "it formats on my phone / switch / computer!".

Go to desktop mode, run the following command in a konsole terminal:

sudo f3probe -n -t /dev/mmcblk0

This will test if your SD Card is genuine and if it is reporting the correct size. If you get any errors here, then return the SD Card to where you bought it, or if you cannot, then swallow the loss and make sure you buy from a known good, brand company and seller, especially check who is selling it when buying from Amazon.

If it passes that check, then run the following after making sure the SD Card is unmounted.:

- sudo fsck -y /dev/mmcblk0p1

This attempts to repair your SD Card and in most cases fixes problems, you may lose some data.

If neither of these work, or if your SD Card is stuck 'read only' then there's nothing else that can be done, your SD Card has reached the end of its life, replace it.

Can I use the Steam Deck as a Controller on a PC or Console?

Short answer: No.

The Steam Deck is a computer. By default its USB-C port operates in 'host' mode, this means that you connect peripherals and accessories to it, or video-out. It does not connect to another device as an 'accessory'.

The long answer: Kinda, maybe.

The Steam Deck's controller is connected internally via USB over a ribbon cable and it uses two microcontrollers to handle this and its functionality. It is not trivial to expose this over the Steam Deck's USB-C port, while the Steam Deck's USB-C port can act in both XHCI and DRD (Dual Role Device) which means it can act as a host or a peripheral.

For the Steam Deck to act as a peripheral and as a controller to another device, it would have to:

- Be able to pass through the USB of the internal Steam Deck Controller over USB-C
- Identify as a Steam Controller over USB-C
- Wholly own the USB-C port to this functionality
- Have a driver setup and configured to do this in Linux

At the time of writing, this (the driver) does not exist.

An alternative is to use Steam Link (see elsewhere in this FAQ) to simply stream the game from the PC you want that's running your Steam game, and make sure the audio is coming out of the host computer, and use your Steam Deck over the network as a joypad.

You can also <u>attempt to use 'VirtualHere'</u> which will capture USB data and attempt to send it over your network to your remote computer. [<u>alternate guide</u>]

Lucaber also wrote custom software 'deckjoy' for the SteamDeck to act as a PC controller when the SteamDeck is in 'USB DRD' mode.

Does the Steam Deck need a Screen Protector?

No.

Unless you know that you are not going to be carrying your Steam Deck in its case, or using a case at all, or if you intend on using it in abrasive environments such as on the beach. Or if you're putting the screen up against very sharp objects you are unlikely to need a screen protector. When you drop the Steam Deck it is more likely to fall on its bumper buttons or on the joysticks than the actual screen due to how the Steam Deck is designed.

Will a Screen Protector work with an Etched Screen?

No. You will completely negate the benefits of the etched screen because you're filling it with the glue of the screen protector, buying a screen protector when you have an etched screen is a waste.

Will a Screen Protector Really Protect the Screen?

Only from heavy scratches, and a screen protector should only be intended if you intend on replacing the screen protector when it is scratched. Owning one because you believe it to be protecting your screen when you never intend to sell it on, or never put it in a situation where the screen is at risk is a bit of a sunk cost fallacy.

The screen protector will also not protect from heavy impacts, see this post in <u>#accessories on the Steam Deck Discord</u> where the screen protector survived a direct impact, but the screen did not as it passed through the force of the hit, and another <u>incident on reddit</u>.

How do I Stream my Computer's Desktop?

I'm Having Trouble Using Remote Play for my Game

How do I Stream from my PC to my Steam Deck?

Steam supports streaming games via 'Remote Play', this is based on 'Steam Link'. Steam Link is a separate app, and although it has a <u>store page</u>, it does not have a direct download in Steam and you have to use an alternate URL..

You can get Steam Link for:

- Android
- Windows
- Linux From Discover Store / Flathub, works on Steam Deck
- MacOS / iOS
- Meta Quest
- Raspberry Pi

There is also a public repo.

This will allow you to connect to/from any computer running Steam with Remote Play enabled (or running Steam Link) without having to select a game. The options should let you choose if you connect with Steam in 'big picture' mode or not, and if it does not give you that option, you can minimise/exit Steam Big Picture mode once you connect.

If you're trying to use multiple controllers with Steam Link you may need to disable Steam Input.

There's an alternative to Steam's solution called <u>Sunshine</u> and <u>Moonlight</u> which is a custom client and server solution that you will have to set up manually.

Why Doesn't my Battery Charge to 100%? Is it Okay to Leave My Steam Deck in the Dock / Connected to Power?

"If your device has been left on the charger for long periods of time, it may report less than 100% charge. This is normal. We allow the battery to slowly discharge after long periods of time under charge to optimize long-term battery health."

- Taken from the Steam Deck Basic Use & Troubleshooting Guide

How do I set a 'sudo' Password?

Switch to desktop mode and open a 'konsole' terminal.

Type passwd

Enter a password, this sets a password for your 'deck' user in desktop mode.

You will not see what you input, so be careful what you type and make a note of it.

I've Forgotten my 'deck' User Password for 'sudo' - help?

Try following this guide: https://youtu.be/B1qfldP2Ayo

What are the Steam Deck Power On Options?

- Boot Manager
 - Volume and Power
- BIOS Options including Boot Manager and EFI loader
 - Volume + and Power
- A/B Volume Selection / Erase User Data
 - **(...)** and Power
- EC/Battery Reset
 - Plug in power/charger while turned off:
 - (...) and Volume + (hold)
 - Then disconnect Power, still holding buttons
 - LED flash blue (on OLED) / LED flashes 3 times (on LCD)
 - Release buttons
 - Plug in the power and turn on
- Hard Reboot / Restart
 - Power held for 10+ seconds
- NVRam reset and battery storage mode, also BIOS reflash recovery mode with the right file on USB storage.
 - While turned off with power/the charger disconnected:
 - (...) and Volume (hold)
 - Press the power button once with buttons held
 - Release buttons
 - Plug in the charger

The (. . .) is the three dot button underneath the right trackpad.

How can I transfer files from my Windows PC to my Steam Deck?

The Steam Deck will format your SDCard to ext4, which is a Linux filesystem that Windows cannot read.

A simple way to transfer files between your computers, since they run different operating systems, can be over your local network. If your Steam Deck is connected to WiFi and your PC is connected to WiFi, or your Steam Deck is connected to WiFi and your PC is connected via Ethernet, all of this tends to be all on the same local network and so they can communicate to one another without the use of the internet.

A quick method to do this is laid out here: https://www.youtube.com/shorts/pvEZELnbPol

Which uses 'ssh' and 'sftp', which is a secure method of transferring files and accessing the terminal of your Steam Deck remotely. You can even use this to transfer files between your Steam Deck and your phone, or to reboot your Steam Deck from another computer when the screen is off.

You can enable ssh/sftp by running:

- sudo systemctl start sshd

To have it persist on reboot, run:

- sudo systemctl enable sshd

You can then use software such as filezilla:

- https://filezilla-project.org/download.php?show_all=1

To connect directly to the IP address of your Steam Deck so long as you're on the same network.

Can I use a USB-C to USB-C Cable from my PC to the Steam Deck? By default, no.

With a little modification? Sometimes.

Using functionality called "MTP" if SteamOS hasn't updated in such a way that disables the functionality, you can use a plugin loading system called <u>Decky</u>, and its plugin from the Decky Store called <u>DeckMTP</u> to be able to plug in a USB-C cable and transfer files to your Steam Deck.

The USB port of your Steam Deck needs to be in "Dual Role" mode, this is set in the BIOS of the Steam Deck.

Why doesn't my Steam Deck connect to my WiFi?

Or

Or

Why does my Steam Deck keep disconnecting from my WiFI?

Why is my WiFI Download Speed Poor?

Assuming that you're using SteamOS and not Windows there are several reasons why your Steam Deck may not connect to your WiFi, here are a few of them:

- The antenna for the WiFi in the Steam Deck LCD is a piece of wire connected to the chip, at the bottom of the LCD steam deck inside. If you sit the Steam Deck in a dock, particularly a metal one, this can cause problems with the signal
- WiFi Power Management settings can often cause problems, you can enable 'Developer Mode' in the Steam settings in gaming mode and then disable it. Often this solves the problem.

- Your WiFi access point may have a configuration problem:
 - The 'encryption' method may be incompatible with the Steam Deck (for example WEP as opposed to WPA-PSK or WPA2-PSK
 - Your BSSID (WiFI access point name) is the same on 2.4Ghz and 5Ghz bands, you should separate these out into different BSSIDs and try connecting to 2.4Ghz or 5Ghz separately
 - Your WiFi standard is old, such as 802.11g as opposed to 802.11n, or 802.11a
 - You are too far away from the WiFi access point, or you have too much metal, or too many thick walls in between you and the WiFi access point
- The WiFi (2.4 Ghz) is congested / there's too much interference.
 - Microwaves, DECT phones, Bluetooth and other WiFi access points can cause a lot of noise and reduce power available to connect to WiFi access points.
 - The access point is 'spreading' the 5 Ghz channel across 160Mhz (HT160), some have theorised that the chip in the LCD Steam Deck only supports HT80, this is an access point / router / gateway configuration you would have to change (if supported) or switch to using only 2.4Ghz for the Steam Deck.

As you can see there can be a number of reasons why, and they are not always the Steam Deck's fault. Often the problem can be your networking setup rather than the Steam Deck itself, **even if other devices connect "just fine"**, because devices vary in quality and configuration. For example with the wireless router available from Quantum Wifi.

The Steam Deck OLED uses a different WiFi chip and mostly does not have this problem. There can be some issues when the BSSID shares 2.4 Ghz and 5 Ghz, and there can be disconnects if you're connecting to a 6 Ghz access point, but 2.4 Ghz and 5 Ghz are mostly stable.

There have also been identified issues with home WiFi networks setup as 'mesh' networks and connecting to them with the Steam Deck (mainly OLED). This appears to be because the Steam Deck OLED connects to the 'originating' access point which may be further away, than a mesh node closer. It is not entirely clear why this happens.

Overall it can be a better idea to have either a dedicated 2.4Ghz or 5Ghz (the OLED also supports 6Ghz) access point setup for the Steam Deck that does not use mesh networking.

For a couple of 'last resort' options you can:

- Press the 'Steam' button
- Go to 'System'
 - Under 'System Settings'
 - o Enable 'Developer Mode'
- Go to 'Developer'
 - o Under 'WiFi'
 - Disable 'Enable Wifi Power Management'
 - Enable 'Force WPA Supplicant WiFi backend'

Restart the Steam Deck.

This may change any misbehaviour that you see involving your WiFi connection.

What is the Purpose of the Indent on the outside of the Official Steam Deck Case?

To store the Steam Deck charger / power supply.

Will a certain / How well does a Steam game run on the Steam Deck?

There are a few ways that you can look up whether or not a game will run or run well on the Steam Deck.

- Check the status of the games in your library via the official tool
- Visit SteamDB to find out if a Steam game is verified, playable or unsupported
- If the game is listed on Steam, check ProtonDB
- Look up the game on WineHQ
- Check if the game uses an anti-cheat method where the dev's <u>haven't enabled the linux</u> anti-cheat

Any games added to the Steam Deck / Steam as a "non-steam game" may need the controls altering. If you need help with "Steam Input" to configure your inputs, check out the Steam Deck Discord's #steam-input channel.

How fast/slow will using an SD card be? Which should I buy?

The Steam Deck's SD card reader supports the UHS-1 interface, so transfer wise the Steam Deck can **only handle 104MB/s.**

Any SDCard you use may as well only support UHS-I SDR104 at SDCard Specification 3.01

Valve also go into detail about storage on the Steam Deck at this timestamp on the linked youtube video: https://youtu.be/SsqvY0buseQ?t=474

The actual speed of a microSD card can vary depending on the manufacturer, the standard it follows and how well the microcontroller chip on the microSD card performs these actions. This means that you can, say, buy a microSD card above an 'A1' and it may perform faster in accessing or finding data, but not necessarily faster than an 'A1' card at transferring data.

So it's hard to answer as it can also vary from game to game and how it accesses the game data. According to benchmarks from The Phawx, it ranges from a couple of seconds (for smaller indie games) to about 50% longer on larger titles. For example, Portal 2 went from 17 seconds on the SSD to 30 seconds on the SD cards.

A 512GB SanDisk Ultra microSD was sent out by Valve for these reviews. It is not yet known if a faster card (e.g. SanDisk Extreme) would make any difference in load times. It is possible that an SDCard may have faster IOPs rather than transfer speed in itself.

Here's a comprehensive table on times we have found so far, compiled from Phawx and Dave2D's reviews:

	Mix of 256/512 SSD (in seconds)	Unspecified microSD (in seconds)
Doom Eternal	17	19
Street Fighter IV	16	16
Street Fighter V	21	22
They Are Billions	51	51
Cyberpunk 2077	42	54
Portal 2	17	30
Dead Cells	11	13
Ghostrunner	8	20

How did People Know Where They Were in the Steam Deck Pre-Order Queue?

There was no official way, but check out <u>this calculator from discord user Moo</u> that can give you a *very rough* estimate. It is recommended to try both Moo's and Gecked's methods on the calculator.

Can I Get Help with a Question/Problem I have?

On the Steam Deck discord it is good etiquette to directly ask your question, with any pleasantries posted around it. If your question has a lot of technical detail, photographs or video, it is best to post or create a thread in the #help section. Then someone can come along and help, if you find that you do not have a response within say, a day, it could be that people are busy or they haven't seen the thread. You could ask the question in another room on the discord server and link to your thread so they can find more information about it.

Will non-Steam games run on the Steam Deck?

Or

How do I get Amazon Games / GOG / Ubisoft / EA / Epic Game Store / Rockstar Launcher / Battle.net Launcher Games Running on Steam Deck?

Or

How do I Run a Windows Exe / Application on the Steam Deck?

There are several ways you can run a non-steam game on the Steam Deck:

- Lutris
- Heroic Games Launcher
- Bottles
- Adding the game/installer as a non-steam game

Adding games to Steam directly as a 'non-steam' game is not advised, it may work, and you can set a 'compatibility layer' as Proton to try to get it to work, but the best method is to use one of the other methods. This is because Steam will typically delete the prefix the game is installed into if you remove the icon from Steam, and Proton, which it uses by default, has optimisations in place that looks for Steam IDs which your non-steam game will not have. Using Lutris, Heroic Games Launcher or Bottles gives you the opportunity to use Wine or WineGE which is better practice for running non Steam games.

Lutris has 'game install scripts' that may not be best suited for the Steam Deck, you may be better installing the game in Lutris manually.

Heroic Games Launcher expects you to be using a store like Amazon, Epic Games or otherwise. Lutris supports other games stores.

Gamepass games will not run or install on the Steam Deck, <u>but you can stream them</u>. You can also use GeForce Now on the Steam Deck.

For a general look at other programs or emulators you may want to use on Deck, check out <u>FlatHub</u>, which is accessible via the Discover store in desktop mode.

Note that if you are "running an exe" and this is actually a 'Visual C++ Runtime' installer or a 'mod' that you will need to run it inside the prefix for the game you have installed, otherwise you will be creating a separate prefix and it will not see the game files.

Note: see "How do I mod (a typical windows game) on the Steam Deck?"

Can I Run Fortnite on the Steam Deck?
Only in Windows.

Can I run Valorant on the Steam Deck?

Only in Windows 10. This is due to the anti-cheat that it uses, it also will not run in Windows 11 because it requires Secure Boot to be enabled. Which is not currently possible, however there is an <u>unofficial</u>

<u>proof of concept that you may try</u>. It is best advised to raise a Steam Support ticket and ask Valve. If enough people do, then maybe we can get it.

Can I play Grand Theft Auto V online on the Steam Deck?

Only in Windows, at the time of writing, unless Rockstar changes their anti-cheat method.

Is BattlEye / Easy Anti Cheat supported in SteamOS on the Steam Deck?

Yes, but the game developer has to enable it. There are runtimes available if the game developer enables it.

Is EA Anti-Cheat supported on the Steam Deck?

Only in Windows, EA have purposely blocked SteamOS.

Can I use Discord on the Steam Deck?

To use Discord on the Steam Deck, first go to Desktop Mode, then install <u>Discord</u> through the Discover app. Now, launch the Steam Client on Desktop Mode and click "Add a game" at the bottom left, then "Add non-Steam game". In the list, select Discord and hit OK. Now, if you return to Gaming Mode, you'll find Discord in the "Non-Steam Games" category of your library and can launch it normally.

Can I replace/repair < component > in my Steam Deck?

You cannot replace the APU.

You can replace the RAM in the original Steam Deck LCD model, but you will need to modify the BIOS to support it, perpetually.

You can replace the WiFi chip in the original Steam Deck LCD model.

You can replace the RAM in the Steam Deck OLED, but the chips are not readily available and you have to buy 1,000 at a time, and you will need to modify the BIOS to support it, perpetually.

You can replace the screen on the Steam Deck LCD, there's the DeckHD mod (but their support is poor and they haven't been delivering the actual product) and there's rumours of an OLED mod in the works (check #hardware-mods on the Steam Deck Discord).

Officially, Valve only endorses using MicroSD cards. However, while Valve has shown support towards the right to repair movement and providing access to replacement parts, they discourage you from opening your Steam Deck to replace components. This teardown video from Gamers Nexus shows you the insides and will let you judge by yourself if you're willing to attempt the operation.

iFixIt is the official source of replacement parts for the Steam Deck, and if you want to replace a component, you can find tutorials from them <u>here</u> as they post them.

iFixIt sells parts such as SSDs, trigger buttons, bumper buttons, enclosures, batteries, screens (etched and glossy) and other components to be able to repair the Steam Deck yourself.

It is relatively straightforward to replace and repair the parts, it requires patience, care and the appropriate and correct tools.

The SSD in the Steam Deck LCD 512GB model is known to be the Kingston OM3PDP3512B-A01.

Who will be shipping my Steam Deck?

If you're in the US or Canada, FedEx will be shipping your Steam Deck. In the EU or the UK, DHL, Royal Mail or GLS will ship your Deck depending on location and availability. Shipping is free.

Order emails will go out on a weekly basis every Monday, in the order they were made. This information related to the Steam Deck LCD order when it was first released.

For more information on shipping, please check out Valve's official Hardware Shipping FAQ.

How do I get a virtual keyboard in Desktop Mode?

Launch the Steam client on Desktop Mode then hold STEAM + X - this will work even with the Steam client minimised.

Which Power Supply or Charger Should I Use?

The Steam Deck requires **15 volts (v) at 3 amps (a)**, supplied via USB Power Delivery (<u>USB-PD</u>). This provides a **total of 45 watts (45w)**.

To prevent damage to the Steam Deck, whatever you plug into the Steam Deck to charge it, should provide 15v at 3a.

This is typically stated on the power supply or charger that you are using.

The Charger says 65w / 100w is this enough?

You cannot base this decision on wattage alone. With USB-PD the charger / power supply negotiates the power it can supply, it is entirely possible that your laptop, phone or other charger can provide other USB-PD profiles, but not the 15v at 3a required for the Steam Deck. Check the specifications of the charger you are using.

It has been known for non-official chargers to "seemingly work" for a period of time (maybe months) and then suddenly "does not work". This can be the nature of electronics, unless you're checking the definitive output of the charger to be what it states it is, you could be underpowering the Steam Deck.

Standalone USB-C cables can also be problematic when they do not follow standards. If you're using a non-official charger, then typically a USB-C cable that supports "alt mode" will be able to carry sufficient power to charge the Steam Deck. Though finding a certified USB-C cable that follows the appropriate standard is difficult, a way to tell if it's appropriate is by how thick and reinforced the cabling is, you want/need thick copper wiring within the cable to carry the power over a distance, and try not to use excessively long USB cables, and make sure they're not 'thin'.

Can I use the Nintendo Switch Charger on the Steam Deck?

No.

The Nintendo Switch charger is not adequate, it provides 15v at 2.3a, which is not enough. There are people that have had their Steam Deck damaged from repeated use of it.

You should also avoid using a charger that provides less than 45w, such as a macbook air charger.

What USB-C Cable Should I Use?

You will either want a 'DisplayPort Alt Mode' supporting USB-C cable, if you want to support the carrying of DisplayPort video output, or you will want a USB PD 60w 3A cable. Either should be USB-IF certified.

You can find a list of certified manufacturers and cables here:

- https://usb.org/products

Example naming conventions:

- USB 2.0 (Legacy): 480 Mbps (No fast charging)
- USB 3.2 Gen 1 (SuperSpeed): 5 Gbps
- USB 3.2 Gen 2 (SuperSpeed+): 10 Gbps
- **USB4 (Gen 2x2)**: 20 Gbps
- **USB4 Version 2.0:** 80 Gbps

With the PD ratings:

- **USB PD 60W** (3A, No E-Marker)
- **USB PD 100W or 240W** (5A, Requires E-Marker)

Note: The Steam Deck does not support Thunderbolt.

Why Won't My Steam Deck Power on / Charge?

Make sure that you are using the official Steam Deck Charger / Power Supply. This will provide the required 15 volts at 3 amps, which is 45 watts, via USB-PD.

Not using the official Steam Deck Charger / Power Supply can cause the power charging circuitry to enter a 'bad state' where the battery either will not charge, or the Steam Deck will not power on. This is typically demonstrated with the Steam Deck turning on either only with the power supply connected, or it

turns on, but the screen is blank, and the trackpads respond, and the fans spin, but it does not boot up fully.

You can try the following to remedy this:

- Open up the Steam Deck, disconnect the battery, wait about 10 minutes, reconnect the battery, connect the official charger and then hold the power button for 15 seconds, and power on the Steam Deck
- Fully discharge the battery by leaving it turned on, then plug it up to the charger and fully charge the steam deck (approx 6 hours) and then turn on the Steam Deck.
 - If this does not work, do it again but do the first method with disconnecting the battery
- Open up the Steam Deck and inspect the chips on the board, notably around the MAX chips as these handle battery charging and USB power. It has been known that these components overheat and become damaged, and need to be replaced.
- Use the '<u>crisis mode</u>' to reset the Steam Deck BIOS and embedded controller settings, without doing a BIOS flash.
- Replace the battery, you can buy a new one from ifixit.
- Replace the Steam Deck charger, you can buy a new one from ifixit.
- Flash the BIOS with a BIOS Backup using a chip programmer, in some cases the problem is that the embedded controller/BIOS has gotten itself into a bad state, and only <u>recovery with a backup</u> of your original BIOS with its settings, serial number, etc. will recover it. You can <u>make a BIOS</u> if you do not have a backup available.

Ultimately this is a **hardware** problem, it is not a fault of **software**, and as such there's no command you can run to 'fix' this.

If your Steam Deck is still under warranty, contact Steam support to have them fix it. If it is not under warranty then the cost can be approximately £180-\$180-€180 because you receive a motherboard replacement. Fixing the MAX chips yourself can be cheaper if you have a soldering station / reflow station and can find the chips online, but it is not for the faint of heart.

How do I get the most performance out of the games that I am emulating?

Like modding your game, this varies from game to game, from emulator to emulator. There are a lot of options and settings for the specific emulator that you are using.

The best, general solution that can be given is to look up the wiki or website for the emulator that you are using, and check the compatibility for the game you are playing, and if there are any recommended settings, mods or patches, or any other advice.

Emulators are always in development and their performance can change with each version, always check the settings of the emulator.

You can also ask in the <u>#emulation room</u> on the Steam Deck discord.

Where can I buy skins for my Steam Deck?

Dbrand, mk2skins and aliexpress.

Which dock should I buy?

The official Steam Deck Dock is available, it comes with a power supply.

The Valve dock offers:

- Variable refresh rate and HDR output on supported displays.
- HDMI-CEC features (TV remote input, TV wake up and TV input switching).
- USB3 (×3), Gigabit Ethernet, HDMI 2.0 & DisplayPort 1.4 ports.
- Ongoing firmware updates, fixes and feature upgrades. VRR and CEC support are fairly recent additions.
- Unrestricted airflow to the rear intake vent, unlike some poorly designed third-party docks.
- Support for the <u>Killswitch</u> case and <u>Deckmate</u> attachment using their respective third-party adapters.
- An extra OEM 45W power supply (PD3.0 15V=3A).

If any of those features are important to you, then the official dock is a worthy investment

I am Having Problems Outputting to a Screen from my Steam Deck

Make sure the HDMI cable is <u>Premium High Speed Certified</u> or the DisplayPort cable is <u>DP40</u> or <u>DP80</u> and <u>VESA certified</u>. Make sure the dock is on the latest firmware update, and that the power supply being used is at least PD3.0 45W (15V=3A) or higher (ideally the official one that came with the dock). Using HDMI to DisplayPort, or DisplayPort to HDMI converter cables are 'out of specification' and do not work properly. Try not to use them.

I am Still Having Problems Outputting to a Screen from my Steam Deck Assuming that you are solely using HDMI:

- 1. Disconnect power to the dock and remove the steam deck from the dock.
- 2. Remove HDMI cables from the dock.
- 3. Make sure you are using HDMI certified cables at every point. These should be minimum "Premium High Speed HDMI" or "Ultra high Speed HDMI cable", https://www.hdmi.org/resource/cables There's no such thing as a "hdmi 2.0" cable or similar. Certified cables use these particular phrases.
- 4. Connect power to the dock.
- 5. Power up your steam deck, get to gamescope/gaming mode

- 6. Plug the HDMI cable from whatever devices/tv into the dock
- 7. Turn on the television and any interim devices.
- 8. Plug the steam deck into the dock

You can also try:

With nothing connected to the steam deck go to:

Steam button -> Settings -> Display -> Advanced -> External display safe mode and enable it.

How do I dual boot with Windows?

Windows drivers for the Steam Deck are available here: https://help.steampowered.com/en/fags/view/6121-ECCD-D643-BAA8

At the time of writing, Dual-Boot with SteamOS was not yet available.

User baldsealion has written a good guide for this and using Windows on the Steam Deck: https://baldsealion.com/Steam-Deck-Ultimate-Windows-Guide/index.html

Should I run Windows from my microSD?

No.

Running an operating system, especially Windows (but also Linux) can reduce the lifespan of a microSD card significantly, a microSD card has a limited / finite number of 'writes' that it can perform, and running an operating system from the microSD card uses this up fairly quickly. Depending on how much the microSD card was already used, this can be from a couple of months to within a year.

How do I undervolt/overclock my steam deck and what RAM timings should I set?

The latest versions of the Steam Deck BIOS allow for undervolting and overclocking the Steam Deck from the BIOS. By default you cannot change the RAM timings in the BIOS. Adjusting settings in the BIOS beyond the defaults requires modifying the Steam Deck BIOS. There are many different ways to do this, but the 'safest' way is outlined by user Stanto in their blog post. They have further blog posts going into more detail. The blog also covers how to unlock higher TDP/PPT values.

How can I Update my BIOS or Recover without a BIOS backup?

The Steam Deck BIOS has a 'crisis mode' which can reset most settings, but also you can use it to flash the BIOS regardless of which operating system you're running. There are details on user Stanto's <u>blog</u>.

Recovering without a BIOS backup is a more involved process and requires knowledge of hexadecimal editing, again more on Stanto's <u>blog</u>.

How can I Backup my Steam Deck BIOS?

Your Steam Deck comes with a tool called h2offt which is used to update and flash the BIOS of your Steam Deck.

Your BIOS is unique to your Steam Deck once it is updated, and contains information such as your Steam Deck's serial number.

You should backup your Steam Deck, in case you ever need to recover it with a chip programmer.

From a konsole terminal in desktop mode on the Steam Deck you can run the following command:

sudo /usr/share/jupiter_bios_updater/h2offt /home/deck/biosbkp.bin -O

This will put a backup called 'biosbkp.bin' in your "Deck" home folder on your Steam Deck. Copy this off your Steam Deck onto USB storage or another computer so that you can use it to restore your BIOS in future if you need to.

Should I get the OLED or LCD Steam Deck?

Ultimately, the Steam Deck OLED is the latest version of the Steam Deck at the time of writing, it has a number of improvements to it beyond an OLED screen. This is listed out below.

You can buy the Steam Deck from: https://store.steampowered.com/steamdeck
There are refurbished Steam Decks available from:
https://store.steampowered.com/sale/steamdeckrefurbished/

Steam Deck OLED Improvements

Updated APU to 6 nm for better efficiency

- Updated memory to 6400 MT/s, improving latency and power management
- Increased thermal module thickness and performance
- Increased active area to 7.4" (from 7.0")
- Updated refresh rate to 90Hz (from 60Hz)
- Updated peak brightness to 1000 nits
- Updated touchscreen polling rate to 180Hz, improved latency and accuracy
- Updated WiFi / Bluetooth module
- Added support for WiFi 6E
- Added support for Bluetooth 5.3, supporting newer codecs such as aptX HD and aptX low-latency
- Added third antenna near the top of the device for better Bluetooth performance, including when docked
- Added support for wake from Bluetooth controllers
- Improved bass response for an overall flatter sound profile
- Added support for using onboard microphone array simultaneously with the 3.5mm headphones connector
- Adjusted analog stick top material and shape for increased grip and dust build-up resistance
- Adjusted analog stick post material to improve interaction feel with front cover and reduce wear
- Improved reliability of analog stick touch detection
- Improved responsiveness and tactility of shoulder buttons switch mechanism
- Adjusted D-pad snap ratio and diagonal interactions
- Redesigned trackpad for improved fidelity and edge detection
- Greatly improved trackpad haptics feel and precision
- Improved battery capacity from 40Wh to 50Wh
- Improved battery chemistry for faster charging, from 20% to 80% in as little as 45 minutes
- Changed charging LED to WRGB
- Added support for waking up from initial unboxing by long-pressing power button instead of requiring AC power
- Adjusted power supply cable length from 1.5m to 2.5m
- Added logo to power supply
- Reduced total system weight to ~640g, or ~5% less than Steam Deck
- Rear cover screws now thread into metal
- Adjusted rear cover screw heads to Torx[™], as well as other materials and geometry tweaks on the heads to reduce stripping risk
- Lowered number of screw types throughout system
- Reduced step count required for common repairs
- Improved bumper switch mechanism drop reliability
- Moved bumper switch to joystick board for easier repair
- Improved display repair/replacement to not require taking rear cover off
- Greatly improved memory power management firmware
- Added preliminary support for open-source BIOS and EC firmware
- Improved resume time by roughly 30%

- Shortened heat pipe and changed fan design improving heat dissipation and thermals
- Overclocking and undervolting introduced into the BIOS (and now in LCD BIOS)
- Overall runs cooler than LCD Steam Deck which can allow its clocks to boost higher for longer.