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Game ROMs should be placed within the roms folder as configured in RetroArch. Many users sort their ROMs into subfolders named after the system which the ROMs belong to, which results in a folder arrangement such as: roms/ Atari - 2600/ Atari Game 1.zip Atari Game 2.zip Atari Game 3.zip Nintendo - Nintendo Entertainment System/ NES Game 1.zip Sega - 32X/ 32X Game 1.zip 32X Game 2.zip etc. etc. This arrangement is not required and you are free to organize your ROMs as you prefer. Playlists (or Collections as they are sometimes referred to) are the lists of games and other content that can be generated automatically by the RetroArch playlist scanner, generated by a third-party playlist utility or script, or edited by hand in a text editor.RetroArch Playlist ScannerRetroArch incorporates a ROM scanning system to automatically produce playlists. Each ROM that is scanned by the playlist generator is checked against a database of ROMs that are known to be good copies.In order for content to be correctly scanned, you must: Have a compatible core already downloaded and installed Update Core Info Files via Online Updater Update Databases via Online Updater Restart RetroArch if any of the above was just done Finally, If those conditions are met but content is still not being added automatically to a playlist, consider submitting an issue report on github.Designating which core to useRetroArch will attempt to detect and use the correct core for use with the ROMs that are used as part of a playlist. Under some circumstances, it may be useful to manually set a particular core for one of its playlists. This can be accomplished within the Playlists submenu in the RetroArch settings. Each playlist is a plain text file with an extension of .lpl. RetroArch 1.7.5 and later uses a JSON playlist format, although the backwards compatibility remains for the deprecated "6-Line" playlist format.Note: The paths in playlist files need to use the correct 'slash' character for the user's platform. Linux, OS X, and Android systems including Lakka and LudOS require forward slashes /, while Windows and DOS systems require backslashes \.Hint for Windows Users The built-in Notepad editor cannot work with cross-platform text files such as RetroArch playlist files. Many users and developers recommend the free Notepad++ as a replacement although most alternative text editors will also work. JSON Playlist FormatThe following example is a single-entry MAME 2003-Plus playlist for Alien Arena -- the silent version of this game is available through the RetroArch Content Downloader found in the Online Updater menu. The playlist is named MAME 2003-Plus.lpl which means it will match the existing icon for that core's playlists in the RetroArch assets pack and display it for the playlist for menu drivers that implement playlist icons. The Alien Arena romset is located at C:\retroarch\downloads\alienar.zip; note that the backslashes are doubled in JSON-formatted playlist entries so that the value of the path entry is C:\\retroarch\\downloads\\alienar.zip.MAME 2003-Plus.lpl { "version": "1.0", "items": [{ "path": "C:\\retroarch\\downloads\\alienar.zip", "label": "Alien Arena", "core_path": "DETECT", "core_name": "DETECT", "crc32": "01ACE2AB|crc", "db_name": "MAME 2003-Plus.lpl" }] } Alert You can omit the CRC or Serial for a manually created playlist entry by using the word DETECT instead, although it may limit your ability to use Netplay for this playlist entry. 6-Line Playlist Format (Deprecated)Warning This playlist format is deprecated and may not always be supported by RetroArch in the future. New playlists should be created in the JSON format. Each entry in a playlist must be composed of 6 lines:MAME 2003-Plus.lpl C:\retroarch\downloads\alienar.zip" Alien Arena /tmp/cores/mame2003_plus_libretro.so DETECT 01ACE2AB|crc MAME 2003-Plus.lpl The path to the ROM. This can either be an 'absolute' path or a path relative to the current working directory. The display name (you can use any name here) The path to the core, this libretro core will be used to launch the ROM. You can use the word DETECT in place of the core path here. Once this is done you can set the core to be used for this playlist via the RetroArch GUI. The displayname of the core, not really useful, we keep it there because the history list is also using this format CRC or Serial number for database and other matching purposes. You can omit the CRC or Serial for a manualy created playlist entry by using the word DETECT here instead, although it may limit your ability to use Netplay for this playlist entry. The name of this playlist, ending in the extension .lpl RetroArch can display three types of thumbnails for games in playlists, depending on the specific RetroArch menu driver in use: In-game snapshots Title screen snapshots Boxart RetroArch thumbnail packs RetroArch provides packs of thumbnails suitable for use with many emulated systems. These thumbnail packs are recommended for most users and can be installed connecting to the internet and using the built-in thumbnails updater, available from the online update menu within the RetroArch settings interface.These packs can be downloaded manually from and individual thumbnails from within the packs can be downloaded from thumbnails Users who wish to use their own thumbnails can do so by naming PNG image files according to the RetroArch naming convention.Thumbnail paths and filenamesThumbnails should be stored in subfolders within the configured RetroArch thumbnails directory within a subfolder named exactly the same as the playlist, except without .lpl at the end. Example: If your playlist is named Atari - 2600.lpl, then your Atari 2600 root thumbnail folder should be called thumbnails/Atari - 2600/.Within this root thumbnail folder called Atari - 2600, you should then create subfolders named Named_Boxarts, Named_Snaps, or Named_Titles for boxart/cover art, in-game snapshots, and title screens, respectively.The thumbnail filename should exactly match the game's title as listed in the playlist with an important exception. The following characters in playlist titles must be replaced with _ in the corresponding thumbnail filename: &*/:`?\|Example: If your content is named Q*bert's Qubes in the playlist, then its thumbnails should be named Q_bert's Qubes.png and stored at these paths: thumbnails/ Atari - 2600/ Named_Boxarts/ Q_bert's Qubes.png Named_Snaps/ Q_bert's Qubes.png Named_Titles/ Q_bert's Qubes.png Regardless of whether you download the RetroArch thumbnail packs or use your own custom thumbnails, you can use the RetroArch GUI to set which type of thumbnail to display. In order to change this setting, go to Menu Settings, and change the Thumbnails option to reflect the type of thumbnail you wish to display. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but in any way that suggests the licensor endorses you or your use. ShareAlike — If you remix, transform, or build upon the material , you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Reddit and its partners use cookies and similar technologies to provide you with a better experience. By accepting all cookies, you agree to our use of cookies to deliver and maintain our services and site, improve the quality of Reddit, personalize Reddit content and advertising, and measure the effectiveness of advertising. By rejecting non-essential cookies, Reddit may still use certain cookies to ensure the proper functionality of our platform. For more information, please see our Cookie Notice and our Privacy Policy. News News News Steam News News News News Game ROMs should be placed within the roms folder as configured in RetroArch. Many users sort their ROMs into subfolders named after the system which the ROMs belong to, which results in a folder arrangement such as: roms/ Atari - 2600/ Atari Game 1.zip Atari Game 2.zip Atari Game 3.zip Nintendo - Nintendo Entertainment System/ NES Game 1.zip Sega - 32X/ 32X Game 1.zip 32X Game 2.zip etc. etc. This arrangement is not required and you are free to organize your ROMs as you prefer. Collections as they are sometimes referred to are the lists of games and other content that can be generated automatically by the RetroArch playlist scanner, generated by a third-party playlist utility or script, or edited by hand in a text editor.RetroArch Playlist ScannerRetroArch incorporates a ROM scanning system to automatically produce playlists. 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By accepting all cookies, you agree to our use of cookies to deliver and maintain our services and site, improve the quality of Reddit, personalize Reddit content and advertising, and measure the effectiveness of advertising. By rejecting non-essential cookies, Reddit may still use certain cookies to ensure the proper functionality of our platform. For more information, please see our Cookie Notice and our Privacy Policy. RetroArch is the reference frontend for the libretro API. Popular examples of implementations for this API includes video game system emulators and game engines as well as more generalized 3D programs. These programs are instantiated as dynamic libraries. We refer to these as "libretro cores", libretro is an API that exposes generic audio/video/input callbacks. A frontend for libretro (such as RetroArch) handles video output, audio output, input and application lifecycle. A libretro core written in portable C or C++ can run seamlessly on many platforms with very little to no porting effort. While RetroArch is the reference frontend for libretro, several other projects have used the libretro interface to include support for emulators and/or game engines. libretro is completely open and free for anyone to use. libretro API header Latest binaries are currently hosted on the GitHub. To reach developers, either make an issue here on GitHub, make a thread on the forum, chat on discord, or visit our IRC channel: #retroarch @ irc.freenode.org. You could create a post in Reddit with Technical Support flair. See our Documentation Center. On Unix, man-pages are provided. More developer-centric stuff is found here. RetroArch attempts to be small and lean while still having all the useful core features expected from an emulator. It is designed to be very portable and features a gamepad-centric and touchscreen UI. It also has a full-featured command-line interface. In some areas, RetroArch goes beyond and emphasizes on not-so-common technical features such as multi-pass shader support, real-time rewind (Braid-style), video recording (using FFmpeg), run-ahead input latency removal, etc. RetroArch also emphasizes being easy to integrate into various hardware frontends. RetroArch has been ported to the following platforms: Android (2.x to most recent version) Apple iOS Apple macOS (PPC, x86-32 and x86-64) Apple tvOS Blackberry DOS Emscripten (WebAssembly and JavaScript) FreeBSD Haiku Linux Original Microsoft Xbox Microsoft Xbox 360 (Libxenon/XeXDK) Microsoft Xbox One Microsoft Xbox Series S/X Miyoo NetBSD Nintendo NES/SNES Classic Edition Nintendo GameCube Nintendo Wii Nintendo Wii U Nintendo 3DS/2DS OpenBSD OpenDingux PlayStation2 PlayStation3 PlayStation4 PlayStation Portable PlayStation Vita Raspberry Pi ReactOS Redox OS RetroFW RS90 SerenityOS Solaris Windows NT 3.5 Windows 95 Windows 98 Windows 2000 Windows Millennium Windows Vista Windows 7 Windows 8 Windows 10 There are no true hard dependencies per se. On Windows, RetroArch can run with only Win32 as dependency. On Linux, there are no true dependencies. For optimal usage, the following dependencies come as recommended: GL headers / Vulkan headers X11 headers and libs, or EGL/KMS/GBM OSX port of RetroArch requires latest versions of Xcode to build. RetroArch can utilize these libraries if enabled: nvidia-cg-toolkit libfreetype2 (TTF font rendering on screen) RetroArch needs at least one of these audio driver libraries: ALSA OSS RoarAudio RSound OpenAL JACK SDL PulseAudio PipeWire XAudio2 (Win32, Xbox 360) DirectSound (Win32, Xbox 1) CoreAudio (OSX, iOS) To run properly, RetroArch requires a libretro implementation present; however, as it's typically loaded dynamically, it's not required at build time. Console ports have their own dependencies, but generally do not require anything other than what the respective SDKs provide. Your videocard needs to at least support the OpenGL 1.1 spec. Shaders: N/A Menu driver support: MaterialUI, XMB, Ozone and RGUI should all work correctly. XMB won't have shader pipeline effects because of the aforementioned lack of shader support. Your videocard needs to at least support the OpenGL 2.1 spec. Shaders: You can choose between either NVIDIA Cg shaders (deprecated, requires separate runtime to be installed on your system), or GLSL shaders. Menu driver support: MaterialUI, XMB, Ozone and RGUI should all work correctly. Your videocard needs to at least support the GLES 2.0 feature spec. Shaders: You will be able to use modern Slang shaders with this driver. Menu driver support: MaterialUI, XMB, Ozone and RGUI should all work correctly. Your videocard needs to at least support the Direct3D11 11.0 spec. The card also needs to support the Shader Model 4.0. Shaders: You will be able to use modern Slang shaders with this driver. Menu driver support: MaterialUI, XMB, Ozone and RGUI should all work correctly. Your videocard needs to at least support the Vulkan 1.0 spec. Shaders: You will be able to use modern Slang shaders with this driver. Menu driver support: MaterialUI, XMB, Ozone and RGUI should all work correctly. The default configuration is defined in config.def.h. It is not recommended to change this unless you know what you're doing. These can later be tweaked by using a config file. A sample configuration file is installed to /etc/retroarch.cfg. This is the system-wide config file. RetroArch will on startup create a config file in $XDG_CONFIG_HOME/retroarch/retroarch.cfg if it does not exist. Users only need to configure a certain value if the desired value deviates from the value defined in config.def.h. To configure joypads, use the built-in menu or manually configure them in retroarch.cfg. Instructions for compiling and installing RetroArch can be found in the Libretro/RetroArch Documentation Center. CRT SwitchRes will turn on, on the fly. However, you will need to restart RetroArch to disable it. With CRT SwitchRes enable RetroArch will start in 2560 x 480 @ 60. If you are running Windows, before enabling the CRT SwitchRes option please make sure you have installed CRTEmudriver and installed some modelines. The minimum modelines for all games to switch correctly are: 2560 x 192 @ 60.000000 2560 x 200 @ 60.000000 2560 x 240 @ 60.000000 2560 x 224 @ 60.000000 2560 x 237 @ 60.000000 2560 x 256 @ 50.000000 2560 x 254 @ 55.000000 These modelines replacing 2560 with your desired super resolution. The above resolutions are NTSC only so if you would be playing any PAL content please add PAL modelines: 2560 x 192 @ 50.000000 2560 x 200 @ 50.000000 2560 x 240 @ 50.000000 2560 x 288 @ 50.000000 2560 x 237 @ 50.000000 2560 x 254 @ 55.000000 2560 x 480 @ 50.000000 Some games will require higher PAL resolutions which should also be installed: 2560 x 512 @ 50.000000 2560 x 576 @ 50.000000 Ideally install all these modelines and everything will work great. The default super resolution is 2560. It is displayed just under the CRT switch option, which can be found in video settings. This can changed within the retroarch.cfg. The only compatible resolutions are 1920, 2560 and 3840. Any other resolutions will be ignored and native switching will be activated. If native resolutions are activated you will need a whole new set of modelines: 256 x 240 @ 50.006977 SNESpal 256 x 240 @ 60.006977 SNESntsc 256 x 448 @ 50.006977 SNESpal 512 x 240 @ 50.006977 SNESpal 512 x 448 @ 50.006977 SNESpal 256 x 240 @ 60.098812 SNESntsc 256 x 448 @ 60.098813 SNESntsc 512 x 240 @ 60.098812 SNESntsc 512 x 448 @ 60.098813 SNESntsc 256 x 192 @ 59.922745 MDntsc 256 x 224 @ 59.922745 MDntsc 320 x 240 @ 59.922745 MDntsc 320 x 448 @ 59.922745 MDntsc 320 x 480 @ 59.922745 MDntsc 256 x 192 @ 49.701458 MDpal 320 x 240 @ 49.701458 MDpal 320 x 448 @ 49.701458 MDpal 320 x 480 @ 49.701458 MDpal 256 x 288 @ 49.701458 MSYSpal 256 x 246 @ 60.098812 NESntsc 256 x 240 @ 50.006977 NESpal 640 x 237 @ 60.130001 N64ntsc 640 x 240 @ 60.130001 N64ntsc 640 x 480 @ 60.130001 N64ntsc 640 x 288 @ 50.000000 N64pal 640 x 480 @ 50.000000 N64pal PSXpal 384 x 252 @ 49.759998 PSXpal 640 x 252 @ 49.759998 PSXpal 640 x 540 @ 49.759998 PSXpal 640 x 237 @ 59.941002 PSXntsc 256 x 480 @ 59.941002 PSXntsc 352 x 240 @ 59.820000 Saturn/SGFX NTSCp 704 x 240 @ 59.820000 SaturnNTSCp 352 x 480 @ 59.820000 SaturnNTSCi 704 x 480 @ 59.820000 SaturnNTSCi 352 x 288 @ 49.701458 SaturnPALp 704 x 288 @ 49.701458 SaturnPALp 352 x 576 @ 49.701458 SaturnPALi 704 x 576 @ 49.701458 SaturnPALi 240 x 160 @ 59.730000 GBA 320 x 200 @ 60.000000 Doom // Arcade 400 x 254 @ 54.706841 MK 384 x 224 @ 59.637405 CPS2 These modelines are more accurate giving exact hz. However, some games may have unwanted results. This is due to mid-scanline resolution changes on the original hardware. For the best results super resolutions are the way to go. Some arcade resolutions can be very different from consumer CRTs. It is resolution detection to ensure MAME games will be displayed in the closest available resolution but drawn at their native resolution within this resolution. Meaning that the MAME game will look just like the original hardware. MAME ROMs that run in a vertical aspect like DoDonPachi need to be rotated within MAME before resolution switching and aspect correction will work. Do this before enabling CRT SwitchRes so that RetroArch will run in your desktop resolution. Once you have rotated any games that may need it turn CRT SwitchRes on. The links below belong to our official channels. Links other than this may have been created by fans, independent members or followers. We seriously recommend using our official channels only. Page 2 You can't perform that action at this time. RetroArch, a popular front-end for emulators, has revolutionized the way we play classic games on modern devices. With its vast library of games and user-friendly interface, RetroArch has become the go-to platform for retro gaming enthusiasts. In this article, we will explore five iconic games that can be played on RetroArch, highlighting their unique features, gameplay, and why they remain beloved by gamers of all ages. RetroArch offers a wide range of classic games, including Super Mario Bros., The Legend of Zelda, Sonic the Hedgehog, Street Fighter II, and Castlevania. These games have been meticulously emulated to provide an authentic retro gaming experience. RetroArch's user-friendly interface and customizable controls make it easy to play classic games on modern devices. The platform's vast library and community-driven development ensure that new games and features are constantly being added. RetroArch is available on multiple platforms, including Windows, macOS, Linux, Android, and iOS, making it accessible to a wide range of users. Super Mario Bros. (NES) Released in 1985 for the Nintendo Entertainment System (NES), Super Mario Bros. is one of the most iconic platformers of all time. This game follows the adventures of Mario and his brother Luigi as they navigate through the Mushroom Kingdom to rescue Princess Peach from the clutches of Bowser. With its tight controls, charming graphics, and addictive gameplay, Super Mario Bros. set the standard for platformers and remains a beloved classic among gamers. On RetroArch, players can experience the original game with precise emulation, complete with the nostalgic charm of the NES. Gameplay and Features Super Mario Bros. features 32 levels, each with its unique challenges and obstacles. Players must navigate through underground tunnels, castles, and forests, while avoiding enemies like Goombas and Koopa Troopas. The game's power-ups, such as mushrooms and fire flowers, add a strategic layer to the gameplay, allowing players to access new areas and defeat enemies with ease. With RetroArch's customizable controls, players can enjoy the game with a modern twist, using their preferred controller or keyboard layout. The Legend of Zelda (NES) Another iconic game from the NES era, The Legend of Zelda, is an action-adventure game that follows the journey of Link as he attempts to rescue Princess Zelda from the evil Ganon. Released in 1986, this game introduced many innovative features, such as a open-world environment, puzzles, and a variety of items to collect. On RetroArch, players can experience the original game with its challenging gameplay, cryptic puzzles, and memorable soundtrack. Gameplay and Features The Legend of Zelda features a vast open world, complete with forests, mountains, and dungeons to explore. Players must gather items, such as the boomerang and bombs, to overcome obstacles and defeat enemies. The game's puzzle-solving mechanics, such as finding hidden doors and secret areas, add a layer of depth to the gameplay, making it a true classic among gamers. With RetroArch's save state feature, players can save their progress at any point, allowing them to experiment with different strategies and approaches. Sonic the Hedgehog (Genesis) Released in 1991 for the Sega Genesis, Sonic the Hedgehog is a platformer that revolutionized the genre with its fast-paced gameplay and colorful graphics. This game follows the adventures of Sonic, a blue hedgehog with super speed, as he attempts to stop the evil Dr. Eggman from taking over the world. With its smooth controls, catchy soundtrack, and challenging level design, Sonic the Hedgehog remains a beloved classic among gamers. On RetroArch, players can experience the original game with its precise emulation, complete with the nostalgic charm of the Genesis. Gameplay and Features Sonic the Hedgehog features six zones, each with its unique challenges and obstacles. Players must navigate through loops, tunnels, and cliffs, while avoiding enemies like Badniks and bosses. The game's power-ups, such as rings and shields, add a strategic layer to the gameplay, allowing players to access new areas and defeat enemies with ease. With RetroArch's customizable controls, players can enjoy the game with a modern twist, using their preferred controller or keyboard layout. Street Fighter II (Arcade) Released in 1991, Street Fighter II is a fighting game that revolutionized the genre with its diverse character roster, special moves, and competitive gameplay. This game follows the adventures of Ryu, Ken, and other fighters as they compete in a global tournament to become the world's greatest fighter. With its tight controls, balanced gameplay, and iconic characters, Street Fighter II remains a beloved classic among gamers. On RetroArch, players can experience the original game with its precise emulation, complete with the nostalgic charm of the arcade. Gameplay and Features Street Fighter II features eight playable characters, each with a unique set of moves and abilities. Players must master the game's combos, throws, and blocks to emerge victorious in the tournament. The game's competitive gameplay, complete with ranked matches and high scores, adds a layer of depth to the gameplay, making it a true classic among gamers. With RetroArch's online multiplayer feature, players can compete against each other, reliving the nostalgic experience of playing Street Fighter II in the arcade. Castlevania (NES) Released in 1986 for the NES, Castlevania is an action-platformer game that follows the adventures of Simon Belmont as he attempts to defeat the evil Count Dracula. With its challenging gameplay, atmospheric soundtrack, and Gothic graphics, Castlevania remains a beloved classic among gamers. On RetroArch, players can experience the original game with its precise emulation, complete with the nostalgic charm of the NES. Gameplay and Features Castlevania features six stages, each with its unique challenges and obstacles. Players must navigate through castles, forests, and ruins, while avoiding enemies like bats and ghosts. The game's power-ups, such as the whip and holy water, add a strategic layer to the gameplay, allowing players to access new areas and defeat enemies with ease. With RetroArch's save state feature, players can save their progress at any point, allowing them to experiment with different strategies and approaches. RetroArch is a front-end for emulators, allowing players to run classic games on modern devices. It works by emulating the original hardware of the consoles, providing a precise and authentic gaming experience. RetroArch offers a wide range of classic games, including platformers, action-adventure games, fighting games, and more. The platform's library includes games from iconic consoles like the NES, Genesis, and arcade machines. To get started with RetroArch, simply download and install the software on your device. The system requirements vary depending on the platform, but generally, a modern computer or mobile device with a decent processor and RAM is required. Players can then download and install the desired cores and games, and start playing. In conclusion, RetroArch offers a unique and authentic retro gaming experience, with its precise emulation, customizable controls, and vast library of classic games. The five games highlighted in this article, Super Mario Bros., The Legend of Zelda, Sonic the Hedgehog, Street Fighter II, and Castlevania, are just a few examples of the many iconic games available on the platform. With its user-friendly interface, online multiplayer feature, and community-driven development, RetroArch is the perfect platform for retro gaming enthusiasts to relive their childhood memories and discover new classic games. Welcome to the world of Retroarch, a powerful and versatile emulator that allows you to relive the nostalgic experience of playing classic video games. Whether you're a seasoned gamer looking to revisit your favorite childhood titles or a curious newcomer eager to explore the rich history of gaming, Retroarch is the perfect platform for you. Unlike traditional gaming consoles that are limited to playing games designed for specific hardware, Retroarch offers a wide range of emulators that enable you to play games from various systems, including NES, SNES, Game Boy, Sega Genesis, and more, all on a single device. With this user-friendly interface and extensive library of games, Retroarch is the go-to solution for retro gaming enthusiasts. But how do you get started with Retroarch? In this guide, we'll walk you through the step-by-step process of downloading and setting up Retroarch on your device, as well as how to download and play games using Retroarch. By the end of this tutorial, you'll be ready to embark on a journey down memory lane and enjoy countless hours of retro gaming fun. So, grab your controller, dust off your favorite games, and let's get started with Retroarch! Step 1: Download Retroarch The first step in enjoying the world of retro gaming with Retroarch is to download the emulator itself. Follow these simple instructions to get started: Open your preferred web browser and navigate to the official Retroarch website. On the website's homepage, locate the "Downloads" section. Choose your operating system from the available options, such as Windows, Mac, or Linux. Click on the download link corresponding to your chosen operating system. Wait for the download to complete. The file size of Retroarch may vary depending on the platform and version. Once the download is finished, you're ready to move on to the next step and install Retroarch on your device. Remember to choose the appropriate version that matches your operating system to ensure compatibility. Downloading Retroarch from the official website is highly recommended to ensure you have the latest stable version and minimize the risk of downloading potentially harmful or modified versions from unreliable sources. Additionally, the official website provides comprehensive documentation and support for any troubleshooting you may encounter along the way. Now that you have successfully downloaded Retroarch, let's proceed to the next step and learn how to install it on your device. Step 2: Install Retroarch Now that you have downloaded the Retroarch emulator, it's time to install it on your device. Follow these instructions to install Retroarch: Locate the Retroarch installer file that you downloaded in the previous step. Double-click on the installer file to begin the installation process. Follow the on-screen prompts and select your preferred installation options. Choose the destination folder where you want to install Retroarch on your device. Click "Install" to start the installation process. Wait for the installation to complete. The duration may vary depending on the speed of your device. Take a moment to ensure that all the necessary files and components have been successfully installed. During the installation process, you may be prompted to choose additional options, such as language preferences or the creation of desktop shortcuts. Feel free to customize these settings according to your preferences. It's worth noting that Retroarch is an open-source project and regularly receives updates and improvements from its dedicated community of developers. To ensure you have the latest version of Retroarch, check for updates periodically or enable automatic updates if available in the settings. Now that you have Retroarch installed on your device, you're one step closer to reliving the glory days of classic gaming. In the next step, we'll guide you through the process of setting up Retroarch to optimize your gaming experience. Step 3: Set Up Retroarch After successfully installing Retroarch on your device, it's time to set it up to ensure optimal performance and usability. Follow these steps to get Retroarch up and running: Launch the Retroarch application on your device. You can usually find it in your list of installed programs or search for it in the application menu. When Retroarch opens, you'll be greeted with a welcome screen. Use the arrow keys or the on-screen navigation to navigate through the menu. Select "Settings" to access the Retroarch settings. In the Settings menu, you'll find various options to configure Retroarch to your liking. Take some time to explore the settings and customize them according to your preferences. Some key settings to consider adjusting include the display resolution, audio settings, and input configurations. You can also adjust the settings to your satisfaction, navigate back to the Main Menu. From the Main Menu, select "Load Content" and navigate to the folder on your device where you have stored your game ROMs. Select the game you want to play and Retroarch will load it into the emulator. Now that you have successfully set up Retroarch and configured it to your liking, you're ready to start downloading and adding games to your Retroarch library. In the next step, we'll guide you through the process of downloading games and adding them to Retroarch. Step 4: Download Games Now that you have set up Retroarch, it's time to start building your library of retro games. Follow these steps to download games for Retroarch: Before downloading games, make sure you understand the rules and regulations regarding game ROMs in your country. It is essential to only download games that you own the original physical copy of or have obtained legally. Search for websites that offer ROMs for the systems you want to emulate using your preferred search engine. Visit reputable websites that are known for providing reliable and safe ROM downloads. Some popular websites include EmuParadise, CoolROM, and The Old Computer. Navigate through the website's menus or search function to find the specific game you want to download. Click on the download link or button. Wait for the download to complete, click on the download link or button. Wait for the download to complete. The speed of the download will depend on your internet connection and the size of the game file. It is important to note that retro game ROMs are typically in the form of zipped files. Therefore, you may need to extract the game files using a file extraction tool like WinRAR or 7-Zip before proceeding to the next step. By following these steps, you can safely and legally find and download games to play on your Retroarch emulator. In the next step, we will guide you through the process of adding games to your Retroarch library. Step 5: Add Games to Retroarch Now that you have successfully downloaded your desired games, it's time to add them to Retroarch so you can start playing. Follow these steps to add games to your Retroarch library: Launch Retroarch on your device if it's not already open. From the Main Menu, select "Load Content." A new window will open, displaying your file directory. Use this window to navigate to the folder where you have stored your downloaded game ROMs. Select the game you want to add to Retroarch and click "Open." Retroarch will then load the game into the emulator. Once you've added the games, they will be visible in your Retroarch library. Retroarch supports various file formats for game ROMs, including .zip, .sfc, .smc, .gba, and more. However, it's worth noting that some systems may require specific file formats or BIOS files to run properly. If you encounter any issues when adding games to Retroarch, double-check that you have downloaded a compatible ROM file and that it is placed in the correct directory. Additionally, consult Retroarch's documentation or forums for troubleshooting guidance specific to your situation. With your games successfully added to Retroarch, you're now ready to relive the magic of retro gaming. In the final step, we'll show you how to play your retro games on Retroarch. Step 6: Play Retro Games on Retroarch Now that you have your games added to Retroarch, it's time to dive into the world of retro gaming. Follow these steps to play your retro games on Retroarch: Launch Retroarch on your device if it's not already open. From the Main Menu, select "Load Content." Navigate to the game you want to play and select it. Retroarch will load the game into the emulator. Once the game is loaded, you can use the controls on your device or connect a game controller to begin playing. Customize the game settings, such as display filters or shaders that add visual enhancements, to suit your gaming preferences. Enjoy playing your favorite retro games on Retroarch! Retroarch offers various features and options to enhance your gaming experience. From save states that let you resume your game from where you left off to shaders that add visual enhancements, you can tailor Retroarch to suit your gaming preferences. Remember to explore Retroarch's settings and documentation to discover additional features and fine-tune your gaming experience. If you encounter any issues or need assistance, Retroarch's community forums and support resources are a valuable source of information and assistance. Now, with Retroarch set up and your retro games ready to be played, it's time to immerse yourself in the nostalgia and excitement of classic gaming. Get ready to relive your favorite games and new gaming adventures, all on the versatile Retroarch platform. Congratulations! You've successfully learned how to download, install, set up, and add games to Retroarch, allowing you to embark on new gaming adventures with the plethora of classic games available on the platform. With its user-friendly interface, extensive compatibility, and customizable features, Retroarch is a fantastic emulator for rediscovering the joy of classic gaming. Remember to always download games from reputable sources and ensure that you have the legal rights to play them. Respecting copyright laws is crucial to support game developers and protect intellectual property. As you navigate through Retroarch, don't hesitate to explore its advanced settings and features. Experiment with different display options, controller configurations, and other enhancements to tailor your gaming experience to your liking. Retroarch's active community and forums are invaluable resources for troubleshooting, discovering new features, and connecting with fellow retro gaming enthusiasts. Whether you're reliving childhood memories or discovering classic games for the first time, Retroarch opens up a world of gaming possibilities. So grab your favorite controller, load up some retro games, and get ready for countless hours of nostalgic fun. Thank you for following this guide. Happy gaming! RetroArch is intended to be easily controlled with a controller. RetroArch uses the overall term controller which encompasses the various joypad, gamepad, joystick, and others. What is a RetroPad? RetroArch maps real-world controller inputs to a virtual controller called a RetroPad . A RetroPad resembles the common modern controller layout, and has a D-pad 4 face buttons with an ABXY layout like a SNES gamepad (that is: A-right, B-bottom, X-top, Y-left) Select / Start buttons two shoulder buttons (L1, R1) two trigger buttons (L2, R2) and two analog sticks like a Sony DualShock, which can also be used as a button (L3, R3). You don't have to map all of the RetroPad buttons to a real world button. If your real controller has less buttons than a DualShock, then the virtual RetroPad will have some unmapped buttons, that's perfectly fine. If your real controller has more buttons, the extra buttons may be set as freely configurable hotkeys. Conceptually, all RetroPad buttons can behave as analog (pressure sensitive), but the hardware typically only supports this for the trigger buttons. Gyroscope, acceleration, and illumination sensors may be supported, very much depending on the driver and the core. Controller autoconfiguration¶ Most well-known controllers should work out of the box via the RetroArch autoconfiguration profile database. If the controller can be autoconfigured, the configuration profile will determine a keyboard and the RetroPad abstraction as well as between a keyboard and RetroArch's hotkeys, details are below. Cores with direct keyboard input¶ Please be aware that some cores, for example arcade emulator cores and vintage computer emulator cores, can also be configured to directly read the keyboard of interface. If you are using a core configured for direct keyboard access, it is recommended to use the Game Focus mode (default: Scroll Lock) to disable those bindings while using the keyboard device, or unbind the conflicting RetroPad-and-hotkey bindings if only a few keys are needed. Otherwise, keyboard input will be captured by the RetroArch hotkeys and the core will not get the input. Tip Controls with keyboard interfaces can also benefit from defining a Hotkey Enable button. If this hotkey is defined, other hotkeys will not be activated unless it is pressed. Manual RetroPad binding¶ If your gamepad is not recognized by autoconfiguration or if you would like to change its RetroPad binding, use the menu. Navigate to Settings Input and navigate to RetroPad Binds Navigate to Port 1 Controls Select Set All Controls Press the buttons as required. Tip If you have several different controllers you wish to use, you will most likely want to set up local-multiplayer with games that support it: Navigate to Settings Input Navigate to your Input Port Select RetroPad Binds then you will find the option to set binds for multiple users. Let's set-up User 1's controller: Navigate to Port 1 Controls Select Device Index Select which currently plugged-in controller will be assigned to this player. After you finish, go back, select Port 2 Controls and repeat for user 2. In case of multiple controllers, RetroArch will assign them by default in the order they are presented by the operating system. For more customization, use the device reservation options to explicitly assign a controller to a player. Hotkeys¶ Hotkeys are combinations of buttons you can press in order to access options such as saving, loading, and exiting games. Hotkey binds can be configured at Settings Input Hotkeys . If you map Enable Hotkeys to a button, it will require that button to be held in order to trigger any hotkeys. Tip To unbind (effectively, disable) a hotkey, press Del on your keyboard or the Y button on the left one of the 4 buttons) on the RetroPad. To reset a hotkey to its default, press Space on your keyboard or the Start button on the RetroPad. Remapping controls for individual cores or content¶ Core Controls Remapping allows how the core receives input rather than how the gamepad is coded, for example you can tell an individual core to switch button A and B on the RetroPad for gameplay, but you can still use "A" to select in the RetroArch menu off "B" to go back. This is opposed to changing the gamepad binds, which would also make "B" select and "A" back in the RetroArch GUI. Remapping controls for a single core or game: Start content with the core for which you want to remap controls Go to Quick Menu and then Controls Configure the buttons the way you want Select Save Core Remap File OR, if you want to save this remapping for the current game only, select Save Game Remap File Default RetroArch keyboard bindings¶ Key bindings cheat sheet¶ Commands as of 2025-05-12 superimposed on US laptop keyboard. For most key bindings see the following sections. General controls are valid both in-game and in the menu. These controls are valid both in-game and in the menu¶ User 1 Keyboard RetroPad Mapping Menu Action Move cursor up Move cursor down Move cursor left Move cursor right Enter key is mapped to Select button in-game) Scan one page up Scroll one page down Return to the previous screen Select Item Scan content / Remove highlighted input bind Search Reset to default Scroll to previous letter Scroll to next letter Scroll to top Scroll to bottom Range mapping of hotkeys. Analog sticks are also able to control the menu. If needed, additional hotkeys can be disabled in Settings Input Menu Controls, along with several other customization options. Hotkey controls¶ Hotkey binds use the combinations at Settings Input Hotkeys . If you have several key bindings you can also be mapped to controller buttons. Keyboard Input In-Game Action Exit RetroArch Fast forward toggle Fast forward hold Pause Frame advance Slow motion Rewind Reset Menu toggle Save state Show FPS Load state Desktop menu Decrease current state slot Increase current state slot Take screenshot Mute Grab mouse Volume Up Volume Down Fullscreen toggle Next shader Previous shader Netplay toggle play/spectate Cheat toggle next Cheat toggle previous cheat Platform-specific controls¶ Nintendo Switch¶ USB keyboards and mice: All keyboards seem to work. Not all mice seem to work. Mouse compatibility sheet. Touch mouse emulation: The Switch touchscreen can be used for mouse control like a laptop touchpad. The following gestures are supported: Touch finger tap move the pointer (relative) single short tap left mouse click dual finger short tap* right mouse click dual finger drag drag'n'drop (left mouse button is held down) *: hold one finger, short tap with another 2025-05-20 PX-68K is a Sharp X68000 emulator. This is a Japanese home computer from the late '80s/early '90s that was used by Capcom as devkits for their arcade games. It played host to many popular games from the likes of Namco, Konami and Capcom. Core available now for Windows, macOS, Linux, Android and iOS. For more information, read our article on this release here.