
Retropie: Wii and GameCube Game Support

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RetroPie: Wii and GameCube Game Support

This tutorial explains how to get Wii and GameCube games working. This method only applies to PC installations of RetroPie and is incompatible with Raspberry Pi installations.

This tutorial is related to the [RetroPie PC Installation Guide](#).

Emulator Installation

We'll use the Dolphin emulator, which is dedicated to Wii and GameCube games. Specifically, we'll use **lr-dolphin**, a RetroArch core for Dolphin that provides good integration with RetroPie, particularly for controller management.

In your EmulationStation interface, go to the **RetroPie** menu, then **RetroPie setup**. In the window that appears, navigate to **Manage packages > Manage experimental packages > lr-dolphin > Install from source**.

Once installation is complete, exit the RetroPie setup tool.



Important: If you followed the [PC and Steam Games with RetroPie](#) tutorial, you probably manually configured `/opt/retroPie/configs/all/emulationstation/es_systems.cfg` to add PC game entries. If so, you **must** now manually copy the **wii** and **gc** sections from `/etc/emulationstation/es_systems.cfg` to your `/opt/retroPie/configs/all/emulationstation/es_systems.cfg` file.

Adding Games



Note: Some Wii games require a Wiimote or nunchuck to be playable. If you're using a standard joystick and buttons, only games compatible with classic controllers will work, like Mario Kart Wii.

Place your Wii games in `/home/pi/RetroPie/roms/wii` and GameCube games in `/home/pi/RetroPie/roms/gc`. Supported file extensions are: `.iso`, `.wbfs`, `.elf`, `.gcm`, `.dol`, `.tgc`, `.ciso`, `.gcx`, and `.wad`.

After adding your games, restart EmulationStation and you'll see Wii and/or GameCube menus appear.

Controller Configuration

Your game controllers need to be recognized as Wii or GameCube controllers.

We'll use arcade-style controllers as an example (joystick + buttons per player). For this setup, you've likely configured RetroPie so the joystick acts as a directional pad (e.g., joystick up triggers **UP** action).

For Wii and GameCube, some games may not use the directional pad, instead using the analog stick for both menus and gameplay.

If this occurs, you can remap controls. In-game, press **Hotkey+X** to access Retroarch's **Quick Menu**. In the **Controls** submenu, you can remap:

- Up → Control Stick Y-
- Down → Control Stick Y+
- Left → Control Stick X-
- Right → Control Stick X+

This makes the joystick act as an analog stick. Repeat for each controller (User 1, User 2...).

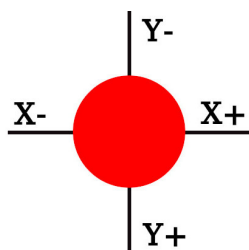


Figure 1: Analog Directions



Note: *Control Stick* refers to GameCube controls, while Wii uses *Left Stick*.

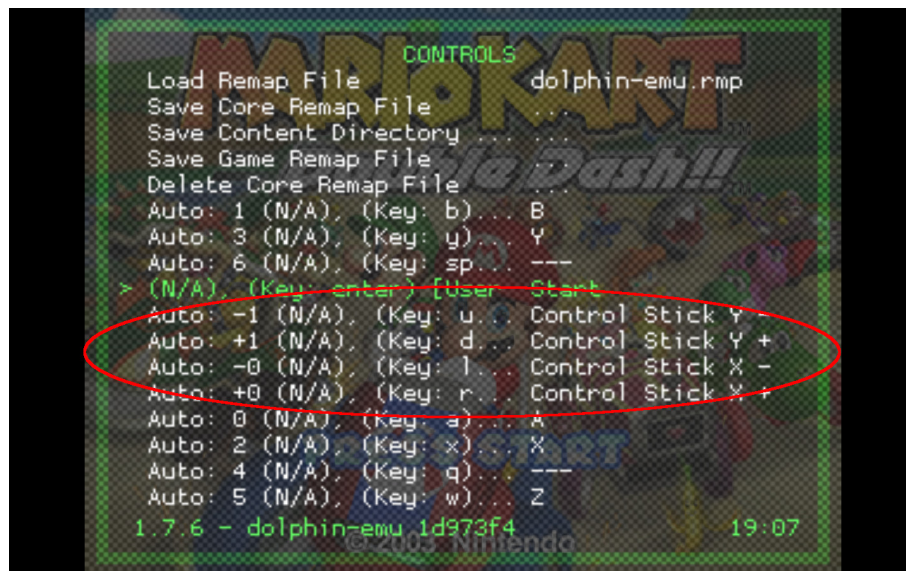


Figure 2: Analog Controller Remapping

You can then: 1. Save this mapping for all games using this emulator with **Save Core Remap File**, or 2. Save it for just one game with **Save Game Remap File**.

If you chose option **1**, repeat this process for one Wii game and one GameCube game so both systems benefit from the remapping.

You can also remap other buttons if Wii/GameCube controls don't match your arcade layout.

Press **Hotkey+X** to exit the Quick Menu when finished.

Wii-Specific Configuration

For arcade controllers to work properly with Wii emulation, configure them as Classic Controllers. In Retroarch's **Quick Menu (Hotkey+X)**, go to **Controls** and set:

- *User 1 device type* to **Wiimote + Classic Controller**
- Repeat for other controllers (User 2, User 3...)

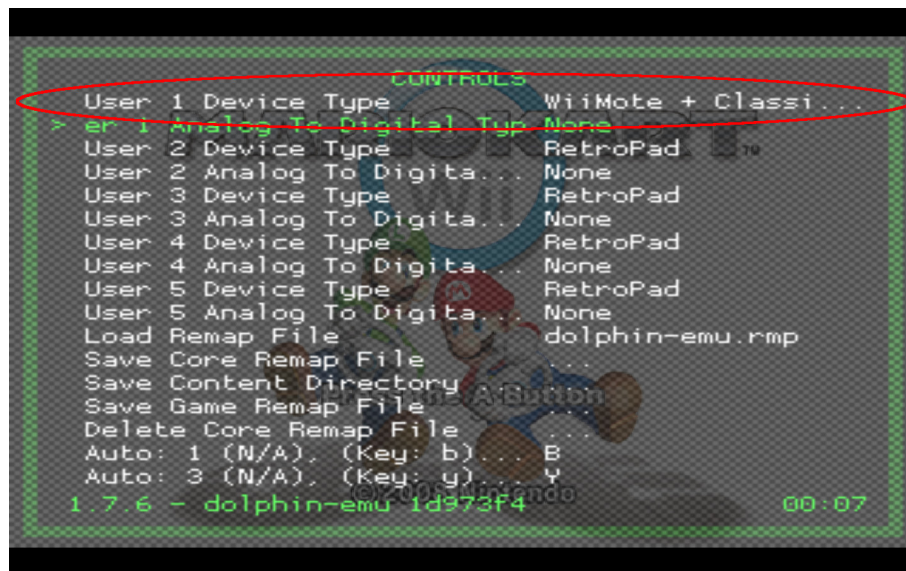


Figure 3: Wii Classic Controller

Settings

Disabling On-Screen Messages

The emulator displays informational messages (like GPU info) at game startup. To hide these in Wii games, edit `~/RetroPie/roms/wii/User/Config/Dolphin.ini` and change:

```
1 OnScreenDisplayMessages = True
```

to:

```
1 OnScreenDisplayMessages = False
```

Make the same change for GameCube games in `~/RetroPie/roms/gc/User/Config/Dolphin.ini`.

Hiding Wiimote Screens (Wii)

Some games show Wiimote usage screens at startup. For arcade setups without Wiimotes, we can replace these images.

1. Download Dolphin from <https://dolphin-emu.org> and install it on your PC.
2. Configure Dolphin to dump textures:

- Set a **Dump Folder** in **Config > Paths**
 - Enable **Dump Textures** in **Graphics > Advanced > Utility**
3. Launch your game and let it load Wiimote screens, then exit.
 4. Find the Wiimote-related textures in your dump folder (note filenames and resolutions).
 5. On RetroPie:
 - Enable **Load Custom Textures** in Retroarch's **Options** menu (**Hotkey+X**)
 - Create `~/RetroPie/roms/wii/User/Load/Textures/[GAME_ID]`
 - Add your replacement images (same names/resolutions as originals)



Important: Ensure Dolphin uses the same language on PC and RetroPie, as textures vary by language. Set language in: - PC: **Config > Wii** and **GameCube** tabs - RetroPie: Retroarch's **Options** menu

Troubleshooting

Mario Kart Wii

If you get the error “Could not write to/read from Wii system memory”, download: https://mathieu-abati.com/resources/guides/versusbox/wii_mariokart_title.tar.xz

and extract it to: `~/RetroPie/roms/wii/User/Wii`