RETRO Launcher

NEUTRINO
BY MAXIMUS32

RETRO ARCH
Port by fjtrujy

ENCELADUS
by DanielSant0s

POPStarter
by krHACKen

wLaunchELF
ISR mod by israpps

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RETROLAUNCHER
V1.0

What is RETROLauncher?

RETROLauncher is a launcher with a graphical environment for retro games, created entirely in Lua under the Enceladus development environment, together with Retroarch, POPStarter, Neutrino and wLaunchELF ISR for the execution of games/APPS.

The main objective of creating this program is to provide a user-friendly, attractive, and customizable graphical environment for managing ROMs libraries on the PS2. In addition to having all those libraries in one place and with easy access.

RETROLauncher seeks to avoid complex configurations so the settings are reduced to the minimum possible, just place the ROM and play, however all the settings are completely editable if any advanced user wants to modify them they are still there.

What do I need to run RETROLauncher?

RETROLauncher is capable of running without any ROMs/ISOs/APPS, and will even run if the Cores or ".ELF" applications are missing. However, certain guidelines are required for proper operation of RETROLauncher.

Requirements for correct execution of RETROLauncher:

* Place the "RETROLauncher" folder in the root of the USB drive. You can also place it in other directories, although in the latter case, the first time you start RETROLauncher, you will be asked if you want to relocate the configuration directories. Once the relocation process is complete, you can use RETROLauncher in the placed directory.

* If you are going to run RETROLauncher on an "exFAT" formatted USB stick, make sure you have the corresponding drivers on the PS2 Memory Card.

* For POPStarter (PS1) you must have the POPS folder in the root of the USB, as well as the binaries needed for it to run ("IOPRP252.IMG" and "POPS_IOX.PAK" respect name and capitalization), the binaries are not included with RETROLauncher for legal reasons (only POPStarter is found in the RETROLauncher files).

* It is mandatory that no two USB drives are connected simultaneously to the PS2 USB ports when running RETROLauncher. If RETROLauncher detects the existence of multiple drives in the USB ports, the program will not start and will force a restart, as well as if the USB drive is in the second USB port (this is to avoid known problems in RETROLauncher when running and manipulating directories).

* To run PS2 games from the drive, the disc must be inserted before running RETROLauncher. If the disc is inserted after starting RETROLauncher, update the list so that the game is listed in the PS2/APPS section (once listed, a reboot is required to load another DVD/CD).

* RETROLauncher can be run from various launchers, although some require additional steps.
The launchers tested were "Free MCBoot," "wLaunchELF," "OPL" (requires additional steps), and "FunTuna".

WARNING: RETROLauncher manipulates directories, reads, writes, and deletes RETROLauncher's own data, and although testing has been done, it is recommended that you do not use it with sensitive data.

It is also very important that you verify the source from which you download RETROLauncher, as it is open source and can be manipulated for malicious purposes.

RETROLauncher is your own responsibility. PLEASE BACK UP YOUR DATA BEFORE USING RETROLauncher AND DOWNLOAD THE PROGRAM FROM RELIABLE SOURCES.

What games can I launch with RETROLauncher?

RETROLauncher uses different versions of Retroarch, POPStarter, Neutrino, and wLaunchELF ISR. Therefore, games and compatibility are limited by the different cores, applications, and emulators used. RETROLauncher is only an application launcher, not an emulator (it doesn't improve game compatibility; it just launches them).

List of Emulators/APPS/Cores included in RETROLauncher:

+ Atari 2600
Core Retroarch: "stella2014_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.20.0

+ Neo Geo Pocket
Core Retroarch: "race_libretro_ps2.elf"
Version: Retroarch - Version 1.14.0

+ Nintendo Famicom (Hold circle when selecting a game to run an alternate Core)
Core Retroarch: "fceumm_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.1
Alternative Core Retroarch: "quicknes_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.0

+ Nintendo Game Boy (Hold circle when selecting a game to run an alternate Core)
Core Retroarch: "gambatte_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.20.0
Alternative Core Retroarch: "tgbdual_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.1

+ Nintendo Game Boy Color (Hold circle when selecting a game to run an alternate Core)
Core Retroarch: "gambatte_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.20.0
Alternative Core Retroarch: "tgbdual_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.1

+ Nintendo Game Boy Advance (Hold circle when selecting game, for alternate execution)
Core Retroarch: "gpsp_libretro_ps2.elf" (Support save states / High loading times)
Version: Retroarch - Version 1.20.0
Alternative Emulator: "TempGBA.elf" (Support save states / High loading times)
Version: TempGBA - Version 1.45.5 - (Not compatible with "exFAT")
Important Note: For better compatibility with games, place the GBA BIOS in the following directories, Retroarch and TempGBA will find it automatically.
Directory 1: "USB:/RETROLauncher/System/RetroarchPS2/Nintendo Game Boy Advance/retroarch/system/"
Directory 2: "USB:/RETROLauncher/System/RetroarchPS2/Nintendo Game Boy Advance/TempGBA/"

BIOS name: "gba_bios.bin"
They should look like this:
"USB:/RETROLauncher/System/RetroarchPS2/Nintendo Game Boy Advance/retroarch/system/gba_bios.bin"
"USB:/RETROLauncher/System/RetroarchPS2/Nintendo Game Boy Advance/TempGBA/gba_bios.bin"

+ Nintendo Super Famicom
Core Retroarch: "snes9x2002_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.20.0
Alternative Emulator: "SNESticle.elf" (Only runs the emulator, does not launch selected games)
Version: SNESticle – Version 0.3.4 - (Not compatible with SRAM)

+ PlayStation 1 (Requires BDMAssault drivers for exFAT)
POPStarter: "POPSTARTER.ELF"
Version: POPSTARTER - Version 13

+ PlayStation 2 (Requires configuring your OPL directory to launch games through it)
Neutrino: "Neutrino.elf"
Version: Neutrino – Version 1.6.1
Alternative execution OPL: "OPNPS2LD.elf" (Only compatible with ISOs found on the USB)

+ Sega Game Gear
Core Retroarch: "picodrive_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.1

+ Sega Master System
Core Retroarch: "picodrive_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.1

+ Sega Megadrive (Hold circle when selecting a game to run an alternate Core)
Core Retroarch: "picodrive_libretro_ps2.elf" (Support save states)
Versión: Retroarch - Version 1.19.1
Alternative Core Retroarch: "picodrive_libretro_ps2_alt.elf" (better performance / error with saving states)
Version: Retroarch - Version 1.15.0

+ Sega SG-1000
Core Retroarch: "picodrive_libretro_ps2.elf" (Support save states)
Version: Retroarch - Version 1.19.1

+ Applications ELF (Hold circle when selecting APPS, for alternate execution)
wLaunchELF ISR: "wLaunchELF 4.43x_isr.elf"
Version: Commit 53dcc8f - Released 14/03/2025
Note: If "WLE.elf" is not found when running the APPS, it will be automatically launched through Enceladus.
Alternative execution Enceladus: "Enceladus.elf"
Version: Enceladus - Released 10/02/2024

How do I use RETROLauncher?

When you start RETROLauncher, the games and apps found will be listed automatically. You just need to select an item from the list and the game or application will run.

RETROLauncher Controls:
+ To move around the menu, use the directional pad, "Up" and "Down" for slow movement, "left" and "right" for fast movement.
+ You can also use the left analog stick in the menu, "Up" and "Down" for quick movement, "Left" and "Right" to jump letters.
+ With the "L2" and "R2" buttons you can jump in the list (jump 10 titles).
+ With the button combinations "L2" + "Up" and "R2" + "Down" you can jump letters.
+ To see the number of games found press and hold "Circle".

+ To view the Covers in full screen press "Square".
+ With the right analog stick you can zoom in on the Covers.
+ To change systems you must press "L1" or "R1".
+ To run the game you must press "X".
+ To run games with alternative Cores hold "Circle" while pressing "X".

+ To update the current system list press "R3" (games can be hot added to the USB stick).
+ To restart RETROLauncher you must press "L3".
+ To configure RETROLauncher options press "START".
+ To exit RETROLauncher press "SELECT".
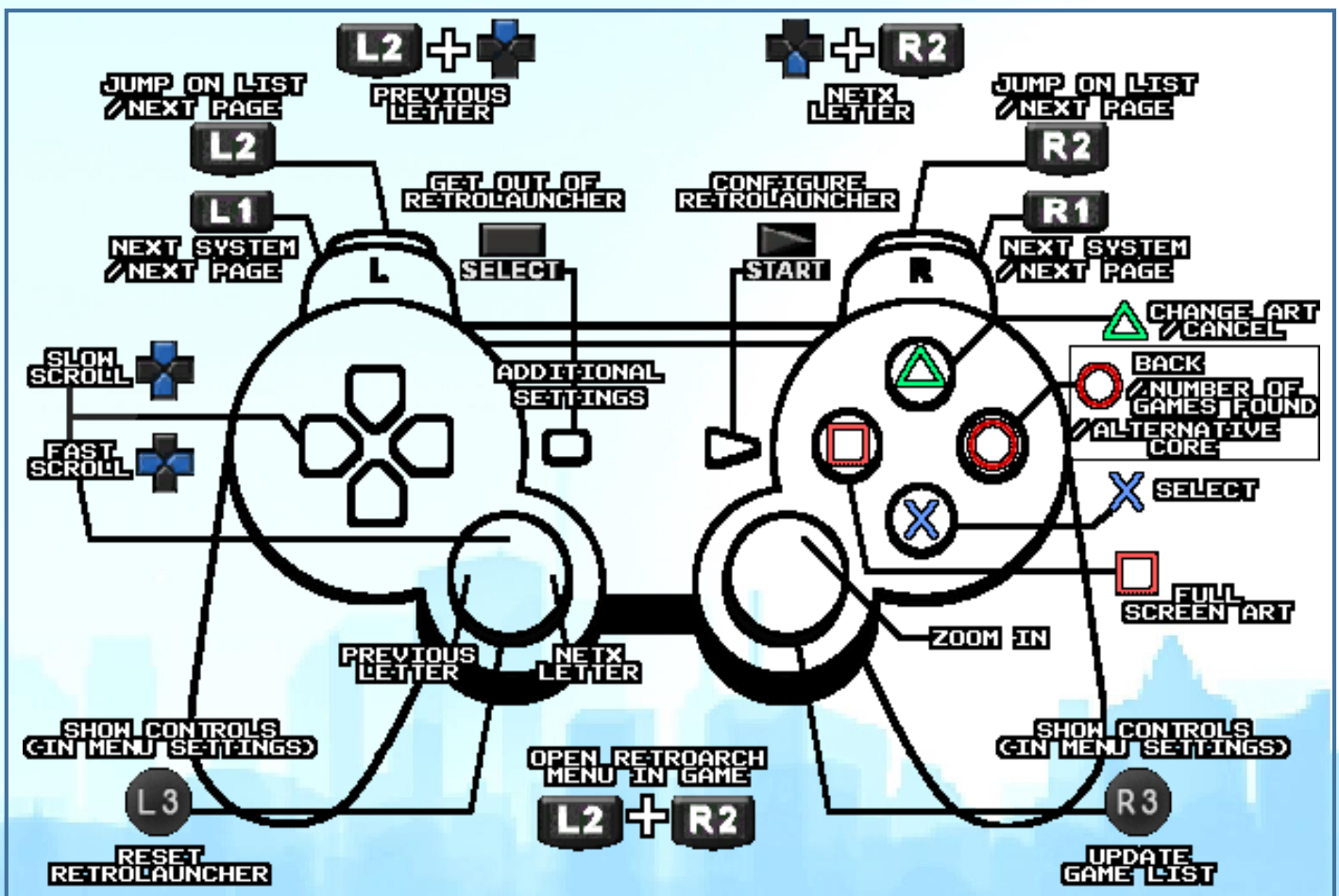
+ In the case of Retroarch, once the game is started, pressing the "L2 + R2" combination will open the Retroarch menu (if you modify Core options, save the options and restart Retroarch, do not resume the game).
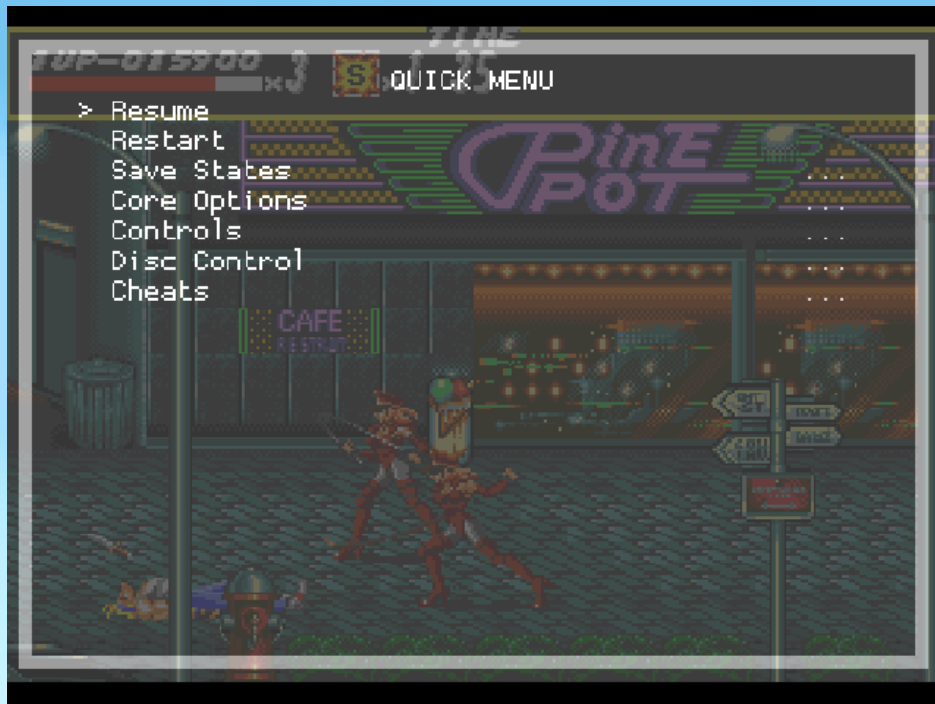
+ Once in the Retroarch menu ("QUICK MENU"), pressing "Circle" will return you to the Retroarch main menu ("MAIN MENU") where you can configure Retroarch and restart it. If you press "X" on "Restart" in the Retroarch main menu ("MAIN MENU"), you will return to RETROLauncher.

Note 1: In the case of games run with POPStarter, TempGBA and Neutrino will not return to the RETROLaucher menu unless instructed to do so by external applications such as "Free MCBoot".

Note 2: All systems save the last game executed, as well as the last positions of the rest of the systems when switching between them, this in order that when restarting RETROLauncher everything remains where you left it (please note that if you add or remove games the positions may change after restarting RETROLauncher).

How do I add games?

To add games and apps to RETROLauncher, simply copy the ROMs, ISOs or apps to the corresponding directories for each system (respecting the file extensions supported by each system).

Location of supported ROMs paths and extensions:

Roms Atari 2600:
+ Directory: "USB:/RETROLauncher/Roms/Roms Atari 2600/"
+ Supported extensions: ".a26" ".bin" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Atari 2600/Game.a26"

Roms Neo Geo Pocket:
+ Directory: "USB:/RETROLauncher/Roms/Roms Neo Geo Pocket/"
+ Supported extensions: ".ngc" ".ngp" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Neo Geo Pocket/Game.ngc"

Roms Nintendo Famicom:
+ Directory: "USB:/RETROLauncher/Roms/Roms Nintendo Famicom/"
+ Supported extensions: ".nes" ".fds" ".unf" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Nintendo Famicom/Game.nes"

Roms Nintendo Game Boy:
+ Directory: "USB:/RETROLauncher/Roms/Roms Nintendo Game Boy/"
+ Supported extensions: ".gb" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Nintendo Game Boy/Game.gb"

Roms Nintendo Game Boy Color:
+ Directory: "USB:/RETROLauncher/Roms/Roms Nintendo Game Boy Color/"
+ Supported extensions: ".gbc" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Nintendo Game Boy Color/Game.gbc"

Roms Nintendo Game Boy Advance:
+ Directory: "USB:/RETROLauncher/Roms/Roms Nintendo Game Boy Advance/"
+ Supported extensions: ".gba" ".bin"
Example: "USB:/RETROLauncher/Roms/Roms Nintendo Game Boy Advance/Game.gba"

Roms Nintendo Super Famicom:
+ Directory: "USB:/RETROLauncher/Roms/Roms Nintendo Super Famicom/"
+ Supported extensions: ".smc" ".sfc" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Nintendo Super Famicom/Game.smc"

VCDs PlayStation 1:
+ Directory: "USB:/POPS/"
+ Supported extensions: ".vcd"
Example: "USB:/POPS/Game.vcd"

ISOs PlayStation 2:
+ Directory 1: "USB:/RETROLauncher/Roms/ISOs PlayStation 2/"
+ Directory 2: "USB:/DVD/"
+ Directory 3: "USB:/CD/"
+ Directory 4: "CD:/" "DVD:/" PS2 games placed in the DVD/CD tray will be listed.
+ Supported extensions: ".iso"
Example 1: "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Game.iso"
Example 2: "USB:/DVD/Game.iso"
Example 3: "USB:/CD/Game.iso"
Note: RETROLauncher will search the root of the CD/DVD for any PS2 executables. This means that if you place a PlayStation 2 CD/DVD in the tray, RETROLauncher will list it. (It will only list it once; if you change discs after listing a CD/DVD, it will not update and you will need to restart the console). For PS2 games, it will show the game ID. If the ID is in the dictionary, it will be translated (if you want to add games to the dictionary, edit it "USB:/RETROLauncher/System/Respaldo/PS2_IDs.cfg").

Roms Sega Game Gear:
+ Directory: "USB:/RETROLauncher/Roms/Roms Sega Game Gear/"
+ Supported extensions: ".gg" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Sega Game Gear/Game.gg"

Roms Sega Master System:
+ Directory: "USB:/RETROLauncher/Roms/Roms Sega Master System/"
+ Supported extensions: ".sms" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Sega Master System/Game.sms"

Roms Sega Megadrive:
+ Directory: "USB:/RETROLauncher/Roms/Roms Sega Megadrive/"
+ Supported extensions: ".bin" ".gen" ".smd" ".md" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Sega Megadrive/Game.bin"

Roms Sega SG-1000:
+ Directory: "USB:/RETROLauncher/Roms/Roms Sega SG-1000/"
+ Supported extensions: ".sg" ".zip"
Example: "USB:/RETROLauncher/Roms/Roms Sega SG-1000/Game.sg"

ELFs APPS:
+ Directory 1: "MC0:/APPS/"
+ Directory 2: "MC1:/APPS/"
+ Directory 3: "USB:/APPS/"
+ Directory 4: "USB:/RETROLauncher/Roms/APPS/"
+ Directory 5: "CD:/" "DVD:/" PS2 games and apps placed in the DVD/CD tray will be listed.
+ Directory 6: Any application installed on the MC or USB root via SAS (Save APP System).
+ Supported extensions: ".elf"
 Example 1: "USB:/RETROLauncher/Roms/APPS/Application.elf"
 Example 2: "USB:/APPS/Application.elf"
Note: RETROLauncher will search the root of the directories listed above, as well as a sublevel of them. This means that if I place the application inside a folder in those directories, RETROLauncher will also find it and list it.
      Example 1: "USB:/RETROLauncher/Roms/APPS/Subfolder/Application.elf"
      Example 2: "USB:/APPS/New Folder/Application.elf"
      Example 3: "MC0:/APPS/Subfolder/Application.elf"

How do I configure RETROLauncher?

To configure RETROLauncher on the home screen, press "START" to access the menu. Some settings will take effect immediately, but others require saving. If changes are not saved, they will be lost when you restart RETROLauncher.
Note 1: Configurations that require a specific file to be loaded will be reset to their default settings if the files are not found after the reset.
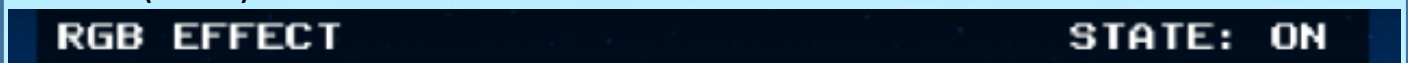**Note 2:** If you press the "R3" or "L3" buttons on the settings screen, you will see the RETROLauncher controls.

Menu settings in RETROLauncher:

Change page:

L1 PAGE 1 R1

To switch between configuration pages you must press the shoulder buttons (L1, R1) to jump between options press (L2, R2).

RGB Effect (PAGE 1):
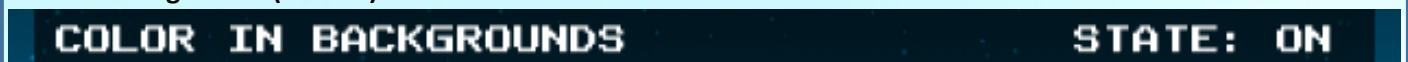
RGB EFFECT   STATE: ON

This setting turns the backlight changing effect on and off. If disabled, the colors will be fixed and will not change tones.
Note: Requires settings to be saved to apply.

Color in Backgrounds (PAGE 1):

COLOR IN BACKGROUNDS   STATE: ON

This setting turns the color layer applied to the background on and off. If you turn it off, the background will be displayed in its original color.
Note 1: If this option is disabled, the "RGB Effect" option will also be automatically disabled.
Note 2: Requires settings to be saved to apply.

Fixed Color in Backgrounds (PAGE 1):

FIXED COLOR IN BACKGROUNDS   STATE: ON
RED   0
GREEN   80
BLUE   120
TRANSPARENCY 74

This setting sets a default color for the entire RETROLauncher. Both the background and the text in all menus will be set to the defined color.
The "RED", "GREEN", and "BLUE" options correspond to the desired color. Both the text and the image in the center will automatically change to the color you are setting. This allows you to see how the color will appear when applied. The values are changed by hovering over the color and pressing the Directional Pad or the left analog stick "Right" or "Left".
Holding down "Square" can change the transparency level for menu images.
Note 1: If this option is activated and the "Color in Backgrounds" option is deactivated, the configured color will not be applied to the background, leaving it in its original color.
Note 2: If the color transparency is set to "OFF" the color system will be applied directly to the images (this method presented erroneous colors because the color red has no intermediate tones).
Note 3: If this option is activated, the "RGB Effect" option will also be automatically deactivated.
Note 4: If there is no background mask, the color will be applied to the wallpaper.
Note 5: Requires settings to be saved to apply.

List Style (PAGE 1):

> ## LIST STYLE　　　　　　　　　　　　　　　　　　SIMPLE

This setting is responsible for changing the different styles available to display the game lists. There are 7 different styles in total, and while these styles are pre-configured, the "Custom" style allows for editing.
Note: Requires settings to be saved to apply.

Customize style:
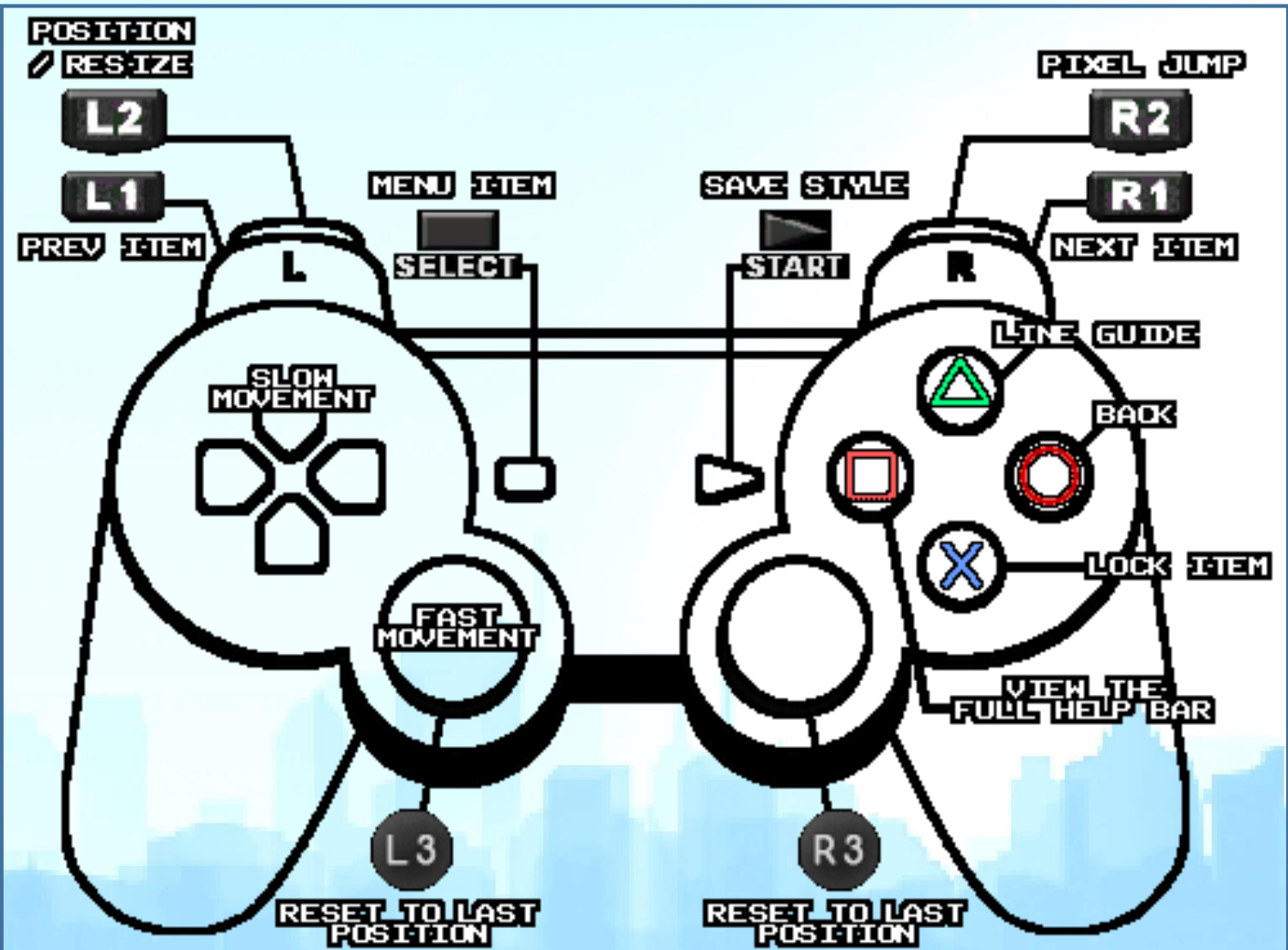
> ## LIST STYLE　　　　　　　　　　　　　　　　　⬛ CUSTOM

To customize the style, first go to "List Style", then select "Custom" (you will see "SELECT" appear next to it). Once you select "Custom", press the "SELECT" button to enter the editor.
Note: By default the editor will load the positions and elements of the currently configured style.

Editor controls:
+ Slow movements are performed with the Pad.
+ With the Left Stick you make quick movements.
+ With "R1" and "L1" you switch between the elements on the screen.
+ With "L2" you toggle between changing position and changing size (only for some elements).
+ With "R2" you change the number of pixels that will be skipped with each movement.
+ With "Triangle" you activate and deactivate the guide lines.
+ With "X" you fix the element to avoid accidental editing.
+ With "L3" and "R3" the position and size of the element are restored to that at the beginning of the edition.
+ With "Square" the help bar will be expanded showing the rest of the controls.
+ With "START" the configuration is saved.
+ With "SELECT" you access the editing submenu.
+ With "Circle" you exit the editor.

POSITION / RESIZE — L2
PREV ITEM — L1
PIXEL JUMP — R2
NEXT ITEM — R1
MENU ITEM — SELECT
SAVE STYLE — START
SLOW MOVEMENT
FAST MOVEMENT
LINE GUIDE — △
BACK
LOCK ITEM — X
VIEW THE FULL HELP BAR — □
RESET TO LAST POSITION — L3
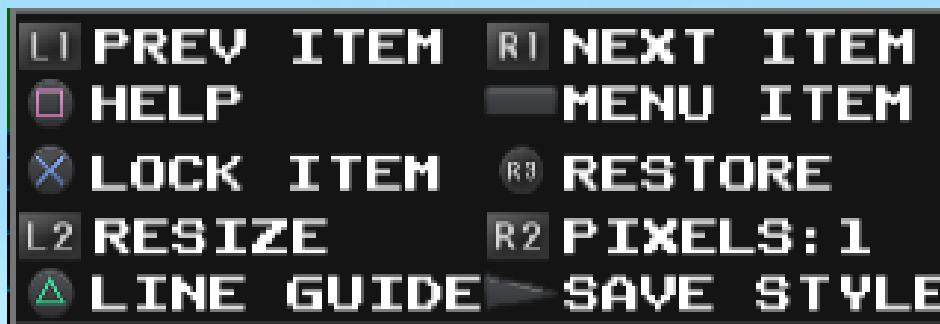RESET TO LAST POSITION — R3

Help bar:

On the edge of the screen you can see at all times an indicator bar that will help you during editing, this bar changes its position according to the editing so as not to interfere during it.

▢ HELP ▬ MENU R2 PIXELS:1 ▶ SAVE

In this bar you can see some of the basic controls of the editor, but pressing "Square" will expand the bar showing all the controls.

L1 PREV ITEM   R1 NEXT ITEM
▢ HELP   ▬ MENU ITEM
✕ LOCK ITEM   R3 RESTORE
L2 RESIZE   R2 PIXELS:1
△ LINE GUIDE ▶ SAVE STYLE

Editing submenu:

Pressing "SELECT" will open the editing submenu where you can:

+ Turn on-screen elements on or off.
+ Restore all elements to the original style position.
+ Change the type of transition the style will have.
+ Change the speed at which the transition will run.
+ Save style settings.
+ Exit the editor.

```
                          -ACTIVATE ELEMENTS-
         L1  PlaySta    LIST                ON
                        ART                 ON
                        EXTRA ART           OFF
  1.EXAMPLE OF GAME NAME COVER FLOW          OFF
  2.EXAMPLE OF GAME NAME LOGO                ON
  3.EXAMPLE OF GAME NAME CROSS BUTTON        ON
  4.EXAMPLE OF GAME NAME TRIANGLE BUTTON     ON
  5.EXAMPLE OF GAME NAME SQUARE BUTTON       ON
  6.EXAMPLE OF GAME NAME L1 BUTTON           ON
  7.EXAMPLE OF GAME NAME R1 BUTTON           ON
  8.EXAMPLE OF GAME NAME R3 BUTTON           ON
  9.EXAMPLE OF GAME NAME START BUTTON        ON
 10.EXAMPLE OF GAME NAM  SELECT BUTTON        ON
 11.EXAMPLE OF GAME NAM    -EXTRA OPTIONS-
 12.EXAMPLE OF GAME NAM  TRANSITION TYPE      1
                        TRANSITION SPEED     29
                        RESTORE ALL ITEMS
    ▬ SAMPLE / EXIT     SAVE STYLE
                        EXIT EDIT MENU
```

Note 1: If you press "X" on the "Transition Type" option you will be able to see a sample of the selected transition, there are a total of 8 transitions (some are small variants of others).

Note 2: If you press "R1" on the "ART" option, it will hide or show the shadows behind all the arts.

Note 3: The double-digit transition speed applies only to the first three transition types, ranging from 10 pixel jumps per frame to 50 pixel jumps per frame.

For all other transitions, the speed is applied at five different levels, determined by the first number in the setting (for example, if the setting is set to 29, the transition speed will be 2).

Lines Guide:

If you press "Triangle" you will see the guide lines on the screen, these lines will help you center the elements, align them with others or have a better perspective of the space on the screen.

Note: Pressing "Triangle" will toggle between the different guide line modes:

+ Mode 1: Off, no guide lines.

+ Mode 2: Element position lines with opaque background.

+ Mode 3: Element position lines plus grid with opaque background.

+ Mode 4: Element position lines without the background (more visible lines).

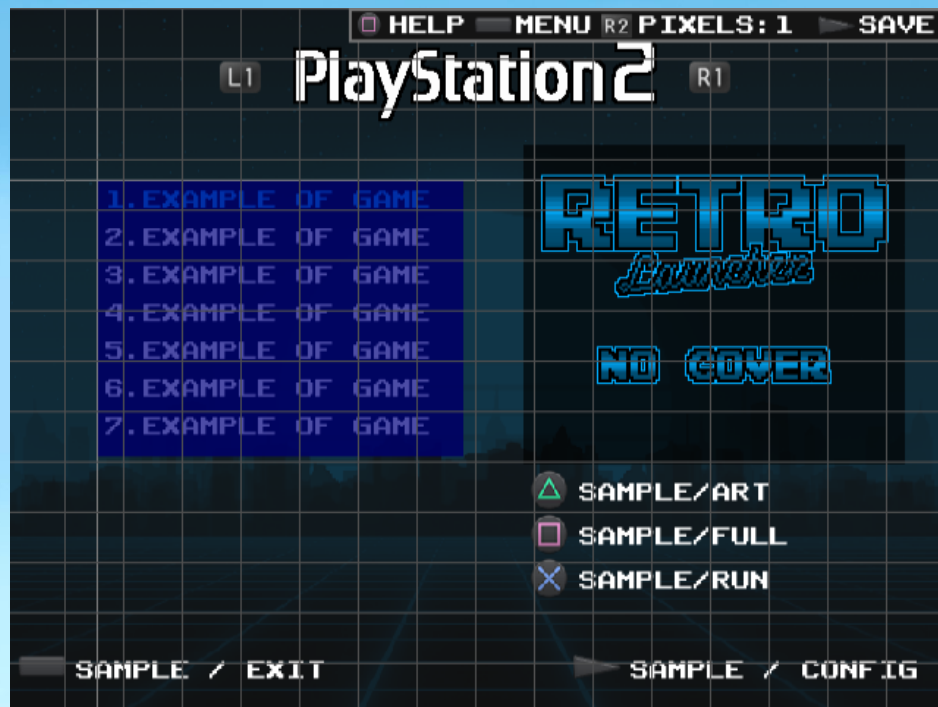+ Mode 5: Element position lines plus grid without background (more visible lines).

Box colors:

During editing you will see a colored box that will help you know at all times what element you are editing and what its status is.

+ The "Green" box indicates that the position of the element is being edited.

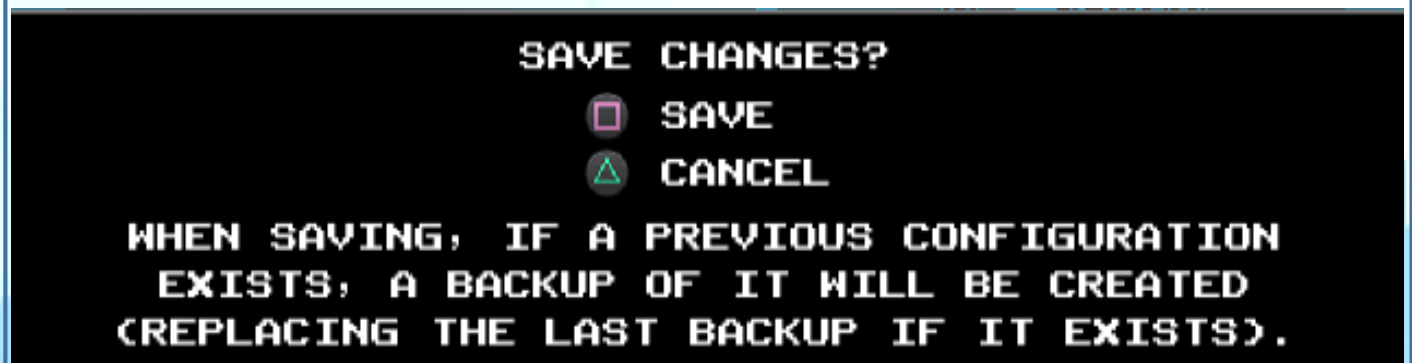+ The "Blue" box tells us that the element size is being edited.

HELP ▭ MENU R2 PIXELS: 1 ▷ SAVE

L1 **PlayStation 2** R1

1. EXAMPLE OF GAME
2. EXAMPLE OF GAME
3. EXAMPLE OF GAME
4. EXAMPLE OF GAME
5. EXAMPLE OF GAME
6. EXAMPLE OF GAME
7. EXAMPLE OF GAME

RETRO
Launcher

NO COVER

△ SAMPLE/ART
▢ SAMPLE/FULL
✕ SAMPLE/RUN

▭ SAMPLE / EXIT   ▷ SAMPLE / CONFIG

+ The "Red" box indicates that the element is locked, so its status will not be modified.

L1 **PlayStation 2** R1

1. EXAMPLE OF GAME NAME
2. EXAMPLE OF GAME NAME
3. EXAMPLE OF GAME NAME
4. EXAMPLE OF GAME NAME
5. EXAMPLE OF GAME NAME
6. EXAMPLE OF GAME NAME
7. EXAMPLE OF GAME NAME
8. EXAMPLE OF GAME NAME
9. EXAMPLE OF GAME NAME
10. EXAMPLE OF GAME NAME
11. EXAMPLE OF GAME NAME
12. EXAMPLE OF GAME NAME

RETRO
Launcher

NO COVER

△ SAMPLE/ART
▢ SAMPLE/FULL
✕ SAMPLE/RUN

▭ SAMPLE / EXIT   ▷ SAMPLE / CONFIG
HELP ▭ MENU R2 PIXELS: 1 ▷ SAVE

Save style settings:
To save the configuration, simply press "START" from the editor or select the "Save Style" option from the submenu.

SAVE CHANGES?

▢ SAVE

△ CANCEL

WHEN SAVING, IF A PREVIOUS CONFIGURATION
EXISTS, A BACKUP OF IT WILL BE CREATED
(REPLACING THE LAST BACKUP IF IT EXISTS).

Note: If a style configuration exists, saving the new configuration will create a backup copy of the previous configuration. If you accidentally save the configuration, you can restore that copy to the "USB:/RETROLauncher/System/Config/" directory under the name "style_old.cfg," rename the file to "style.cfg," and replace the existing one (you can also manually back up the "style.cfg" file to export configurations or customize RETROLauncher derivatives).

It is important that you do not save again if you intend to restore the backup copy, since each save replaces the previous backup copy.
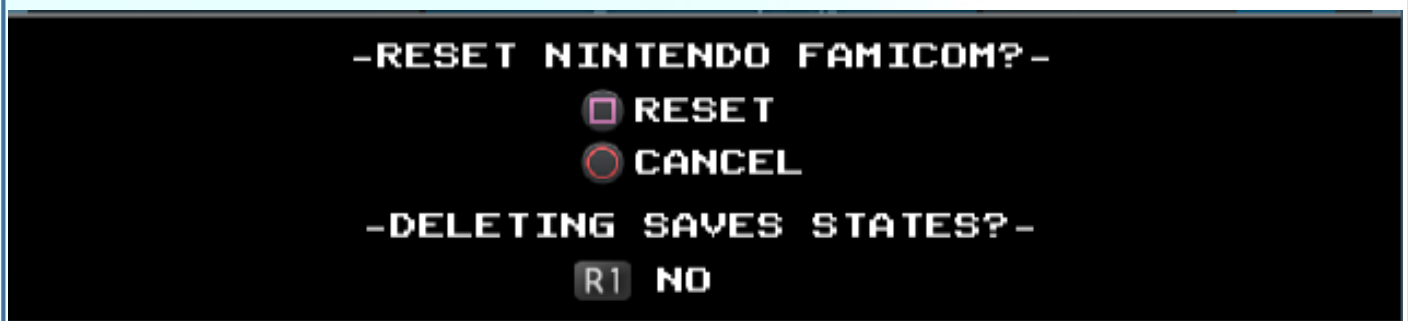
Exit the style editor:
To exit the editor, simply press "Circle" in the editor or select "Exit Edit Menu" from the submenu. If you make changes that haven't been saved, you will be asked to confirm your exit.

Activate Systems (PAGE 1):


```
            - ACTIVATE SYSTEMS -
MEGADRIVE              ON      ATARI 2600         ON
MASTER SYSTEM          ON      SEGA SG-1000       ON
GAME GEAR              ON      NEO GEO POCKET     ON
FAMICOM              ― ON      SUPER FAMICOM      OFF
GAME BOY               ON      APPS               ON
GAME BOY COLOR         ON      PLAY STATION       ON
GAME BOY ADVANCE       ON      PLAY STATION 2     ON
```

This setting is responsible for enabling and disabling the different systems. If a system is disabled, it will not appear in the RETROLauncher menu, and when switching systems, it will automatically switch to the next enabled one. Retroarch systems can be restored individually from here. To do so, hover over the system you want to restore and press "SELECT." Once done, a prompt will appear to confirm the restoration. Here, you can also indicate if you want to delete all saved games from the system you want to restore. To do this, simply press "R1" before confirming the restoration.


```
     -RESET NINTENDO FAMICOM?-
            □ RESET
            ○ CANCEL

     -DELETING SAVES STATES?-
            R1  NO
```

Note 1: It is mandatory that at least one system is activated, if all are automatically deactivated the first one will be activated.

Note 2: If you press "SELECT" on the "PlayStation 2" system you can configure your OPL directory to be able to launch games through it (It is only compatible with ISOs within the USB).

Note 3: Systems that can be restored will have a "SELECT" button icon next to them.

Note 4: Requires settings to be saved to apply.

Save Settings (PAGE 1):

```
            - SAVE SETTINGS -
```

To save the configuration, simply press "X" on this option (the configurations made on both pages will be saved).

Change page:

L1   PAGE 2   R1

To switch between configuration pages you must press the shoulder buttons (L1, R1) to jump between options press (L2, R2).

Font Type (PAGE 2):

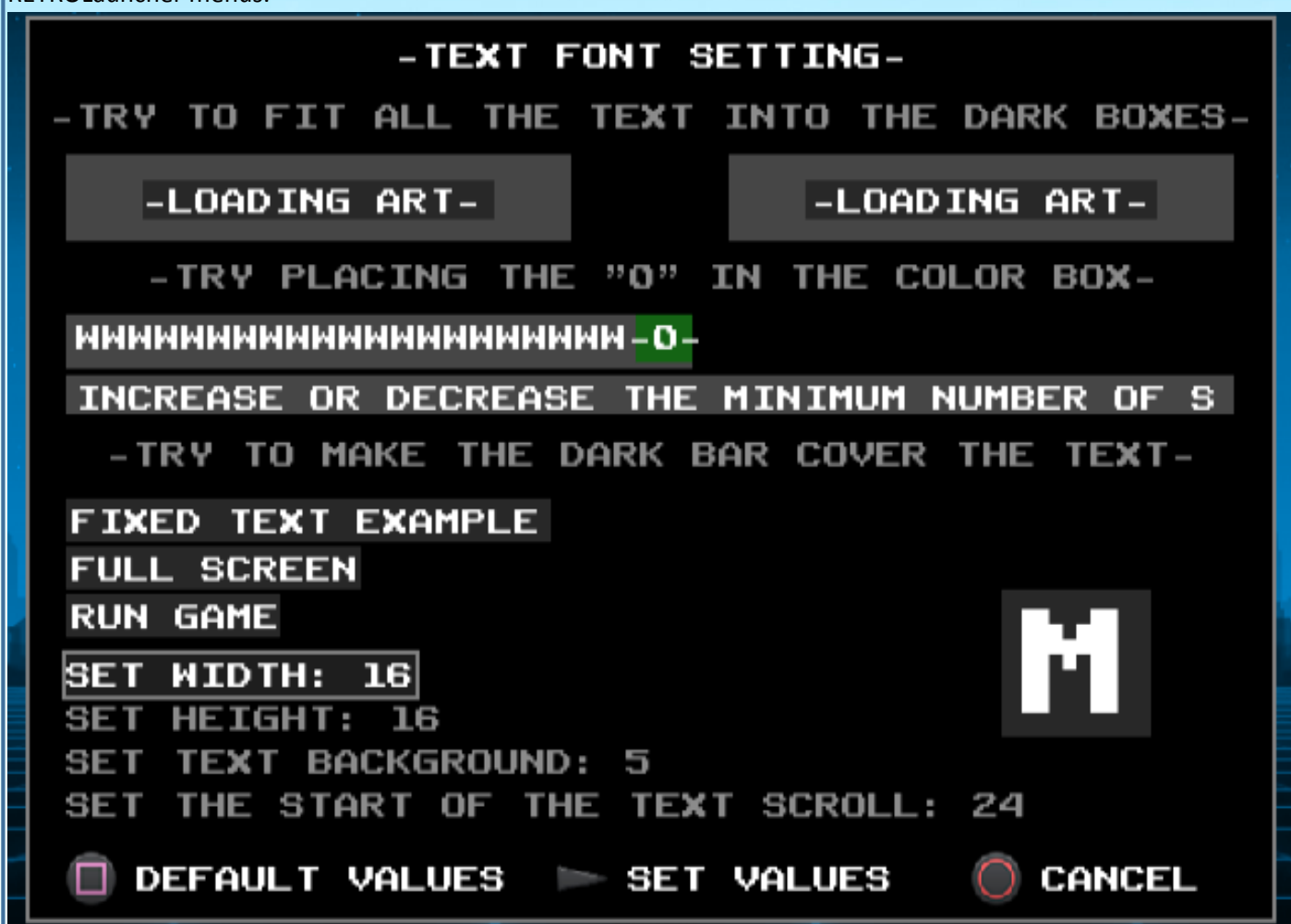FONT TYPE   ▬ 1

This setting is responsible for switching between the different text fonts found.

Some fonts do not adapt well to RETROLauncher, to try to correct this once you have selected the font press "SELECT" on the "Font type" option and a menu will open to readjust the text font.

Note: Found text sources will not be represented by name, but will only receive a number in the order in which they were found.

Text wrapping menu:

In this menu you can modify the parameters of the selected text font to try to adjust it to the different RETROLauncher menus.

```
            -TEXT FONT SETTING-
 -TRY TO FIT ALL THE TEXT INTO THE DARK BOXES-

      -LOADING ART-              -LOADING ART-

    -TRY PLACING THE "O" IN THE COLOR BOX-

WWWWWWWWWWWWWWWWWWWWWW-O-
 INCREASE OR DECREASE THE MINIMUM NUMBER OF S
   -TRY TO MAKE THE DARK BAR COVER THE TEXT-

FIXED TEXT EXAMPLE
FULL SCREEN
RUN GAME
SET WIDTH: 16
SET HEIGHT: 16                            M
SET TEXT BACKGROUND: 5
SET THE START OF THE TEXT SCROLL: 24

☐ DEFAULT VALUES    ▶ SET VALUES    ◯ CANCEL
```

Text wrapping:

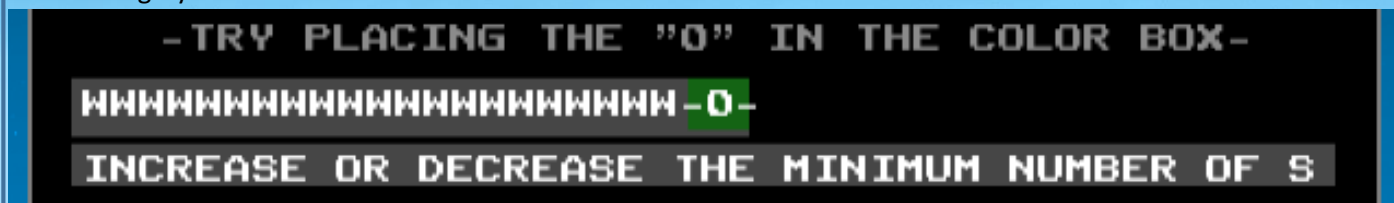**SET WIDTH:** This setting is responsible for configuring the width of the text font.

SET HEIGHT: This setting is responsible for configuring the height of the text font.

Modify the "**SET WIDTH**" and "**SET HEIGHT**" options so that both "-LOADING ART-" texts remain within the dark boxes and are completely visible.

```
 -TRY TO FIT ALL THE TEXT INTO THE DARK BOXES-

      -LOADING ART-              -LOADING ART-
```

Scroll text setting:

SET THE START OF THE TEXT SCROLL: This setting determines the character at which the text scrolling begins. This setting applies to game lists, and the width of the wrapping box will be the same as the current style setting.

Modify the "**SET THE START OF THE TEXT SCROLL**" option so that the number "0" is visible in the green box at the end of the gray box.

```
        -TRY PLACING THE "0" IN THE COLOR BOX-

WWWWWWWWWWWWWWWWWWWWW-0-

INCREASE OR DECREASE THE MINIMUM NUMBER OF S
```

Note: If the list width is too large, or if it is too small, it will automatically adjust to the maximum of the adjustment window, in order to ensure minimum and maximum scrolling of safe texts.

Adjusting shadows behind texts:

SET TEXT BACKGROUND: This setting determines the shadows behind text. This setting won't always be adjustable, if you don't get good results, it's best to disable it and leave it at 0.

Modify the "**SET TEXT BACKGROUND**" option until all texts fit within the dark bars behind them, if the dark bars do not fit all texts, leave the setting at "0".

```
      -TRY TO MAKE THE DARK BAR COVER THE TEXT-

FIXED TEXT EXAMPLE

FULL SCREEN

RUN GAME
```
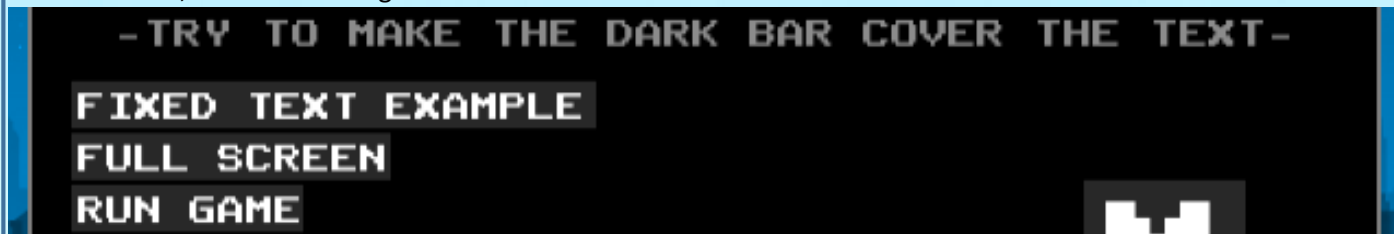
Note: When changing fonts, this value is automatically set to "0" as it is not very accurate with some text fonts and it is better to have it disabled.
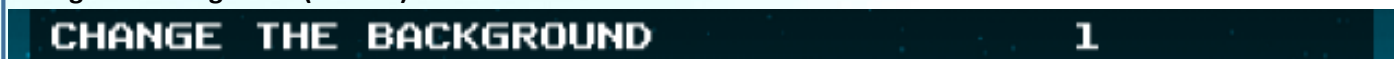
Save text setting:

To apply the changes press "START".

Note 1: If you press "Square" it restores to the default settings.

Note 2: If you cancel the setting by pressing "Circle" the changes made will be lost.

Note 3: Once you have applied the changes, save your RETROLauncher settings or they will be lost upon restart.

Change the background (PAGE 2):

```
CHANGE THE BACKGROUND                           1
```
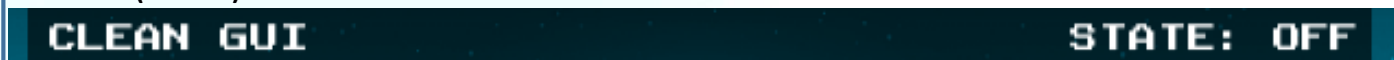
This setting is responsible for switching between the different available wallpapers.

Note 1: The wallpapers found will not be represented with their name, they will only receive a number in the order they were found.

Note 2: Requires settings to be saved to apply.

Clean GUI (PAGE 2):

```
CLEAN GUI                          STATE: OFF
```

This setting is responsible for showing or hiding the on-screen navigation buttons as well as the text that accompanies them.

Note 1: The style settings do not affect this setting, as they are independent.
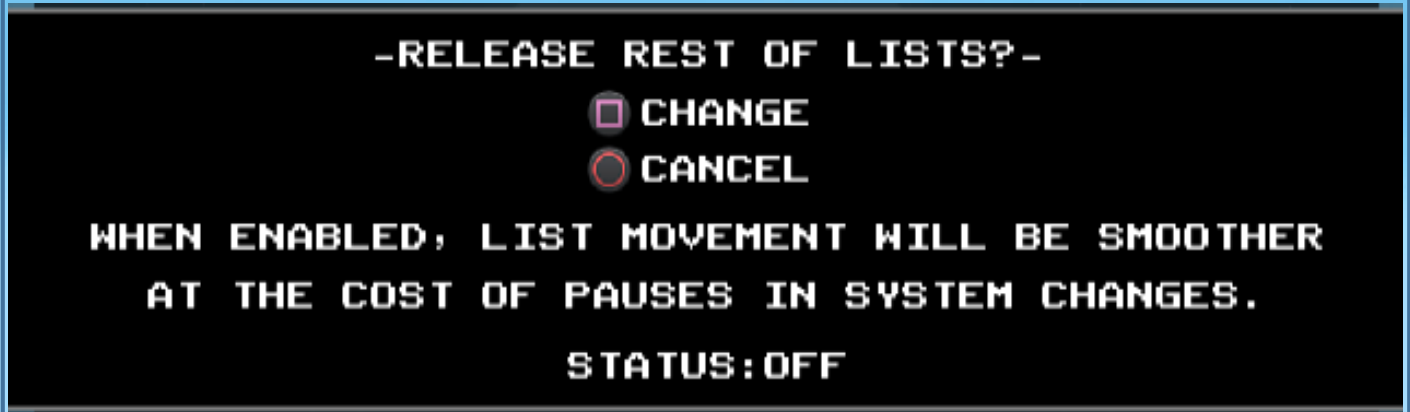
Note 2: Requires settings to be saved to apply.

Force Garbage Collection (PAGE 2):

```
FORCE GARBAGE COLLECTION          ▬ STATE: ON
```

This setting allows you to force garbage collection in your program code. It is enabled by default to make your program more stable in terms of performance. If disabled, performance may improve, but at the cost of some instability in the frames.

By pressing "SELECT" on this option you can activate the single list loading, this allows more performance when moving through the lists but at the cost of small pauses when switching between systems.

```
       -RELEASE REST OF LISTS?-
              ☐ CHANGE
              ◯ CANCEL
  WHEN ENABLED, LIST MOVEMENT WILL BE SMOOTHER
    AT THE COST OF PAUSES IN SYSTEM CHANGES.

              STATUS:OFF
```

Note: Requires settings to be saved to apply (It is also recommended to restart the program).

Custom APP/ELF Output (PAGE 2):

```
CUSTOM APP/ELF OUTPUT                    DEFAULT
PS2 SYSTEM MENU
```

This setting changes RETROLauncher's default output to a custom ".ELF" application. Clicking "Custom APP/ELF Output" changes the device where the ".ELF" file will be searched for.
The search options are:

+ "Default" for default output to PS2 system.
+ "MC 0" for the first memory card.
+ "MC 1" for the second memory card.
+ "Current" for searching on the current device.

Pressing "x" on the option below will open a browser to search for the ".ELF" application on the selected device.

```
CUSTOM APP/ELF OUTPUT                    MC 0
MC0:/
```

Once in the explorer, with "X" you open the directories and select the application, with "Circle" you return to the previous directory, and with "Triangle" you cancel the search.

```
MC0:/

  THE FOLDER IS EMPTY OR THE FILES ARE NOT SUPPOR




  △ CANCEL        ✕ SELECT        ◯ BACK
```
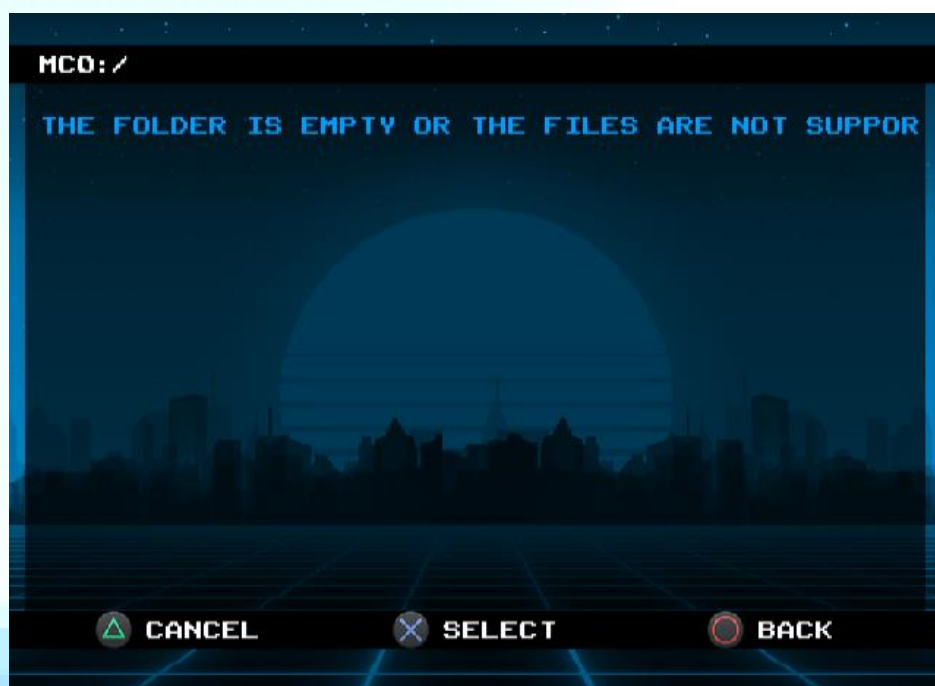
The explorer will only display folders and applications with the ".ELF" extension. If no folder or application is found, a message will appear indicating that there are no compatible files. If everything is correct, you will see the selected application in the settings menu. Remember to save your settings before exiting the settings menu, otherwise your settings will be reset.

Note 1: If the selected application is not found when loading the configuration, it will return to the default output.

Note 2: Requires settings to be saved to apply (It is also recommended to restart the program).

See full route In the APPS menu (PAGE 2):

> **SEE FULL ROUTE IN THE APPS MENU   STATE: OFF**

This setting allows you to display the full path in the applications menu, it is very useful when you have several applications with the same name in subfolders or on different devices.

Note: Requires settings to be saved to apply.

Sound in the menu (PAGE 2):

> **SOUND IN THE MENU   ▬ STATE: OFF**
> **SOUND VOLUME   65**

This setting enables and disables sound effects in the RETROLauncher menu. When enabled, the "Sound Volume" option below controls the volume of the sound effects.

Note 1: To change the volume, press the directional pad "Left" or "Right" (volume up or down) on the "Sound Volume" option.

Note 2: If the sounds are not found and the option is active, the playback of that sound will be skipped.

Note 3: Requires settings to be saved to apply.

If you press "SELECT" on the "Sound in the menu" option, a window will appear where you can enable or disable the music loop that plays in the background (It is disabled by default).

> **–BACKGROUND MUSIC LOOP?–**
> ☐ **CHANGE**
> ⬤ **CANCEL**
> **ONCE THE CHANGE IS MADE, WAIT A MOMENT FOR**
> **THE LOOP TO FINISH PLAYING.**
> **STATUS:ON**

Note: When disabling the background loop, if the audio was already playing you will have to wait for it to finish before it stops playing, regardless of this the change has already been applied and when the audio finishes it will no longer play again.

Screenshot as background (PAGE 2):

> **SCREENSHOT AS BACKGROUND   STATE: OFF**

This setting allows you to display screenshots of each game as wallpaper in each system menu, when the game is selected.
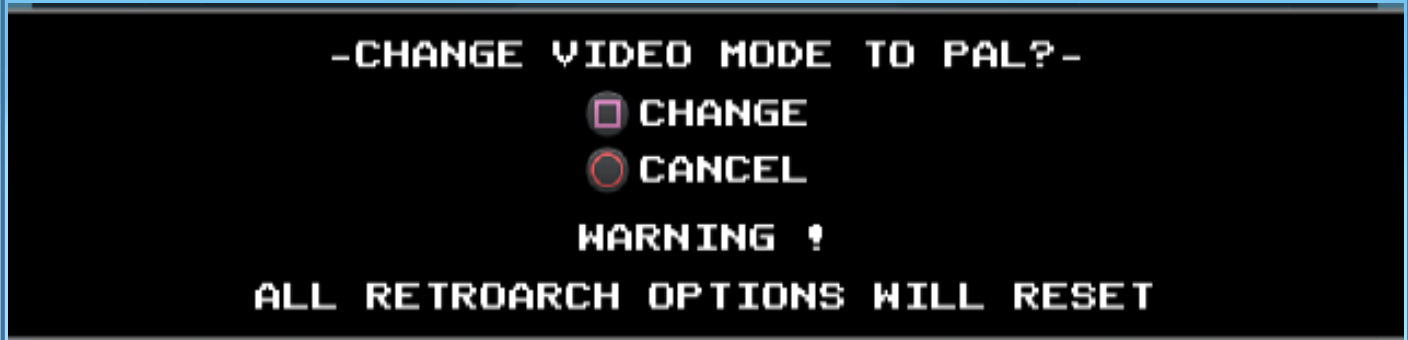
Note: Requires settings to be saved to apply.

Video Mode (PAGE 2):

> **VIDEO MODE   NTSC**

This option allows you to change the video mode of RETROLauncher, along with all the corresponding settings for the Retroarch cores.

When you change this option, a window will appear asking if you want to confirm the change.
Please note that making this change causes all Retroarch systems to reset their default settings to adapt to each format ("NTSC/PAL 60Hz" or "PAL 50Hz").

```
-CHANGE VIDEO MODE TO PAL?-
          ☐ CHANGE
          ◯ CANCEL
        WARNING !
ALL RETROARCH OPTIONS WILL RESET
```

Note 1: This option is not affected by RETROLauncher restores.
Note 2: Retroarch systems will be restored according to the selected video mode.

Vibration in menu (PAGE 2):

```
VIBRATION IN MENU          STATE: OFF
```
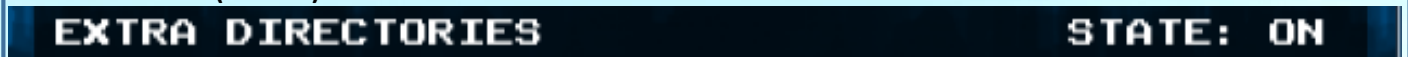
This setting enables a vibration effect in the RETROLauncher menu.
Note 1: Sometimes the vibration effect gets stuck, just perform another movement to correct it.
Note 2: Requires settings to be saved to apply.

Extra directories (PAGE 2):

```
EXTRA DIRECTORIES          STATE: ON
```

This setting enables or disables searches in the system's extra directories. These directories are where applications or PS2 ISOs are typically added. This is very useful when you don't want to move applications or ISOs to the internal RETROLauncher directory (it's enabled by default).
Directories that are added to the search when this option is enabled:
+ "MC0:/APPS/" - For the system APPS.
+ "MC1:/APPS/" - For the system APPS.
+ "USB:/APPS/" - For the system APPS.
+ "DVD:/" - For the system APPS.
+ Applications installed by SAS (Save APP System). For the system APPS.
+ "USB:/DVD/" - For the system PlayStation 2.
+ "USB:/CD/" - For the system PlayStation 2.
Note 1: If disabled, only applications and ISOs located within RETROLauncher's internal directories will be listed (For PS2, DVDs/CDs in the tray will continue to be displayed).
Note 2: Requires settings to be saved to apply.

Reset all settings (PAGE 2):

```
RESET ALL SETTINGS
```
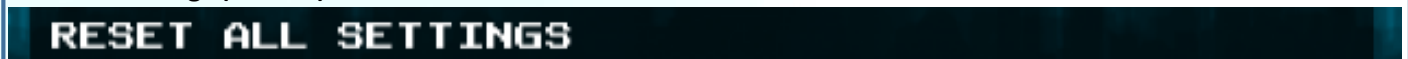
This option restores all RETROLauncher settings to default, as well as restoring the settings of all Retroarch cores and emulators.

```
- RESET ALL SETTINGS? -
         ☐ RESET
         ◯ CANCEL
   -DELETING SAVES STATES?-
         R1  NO
```
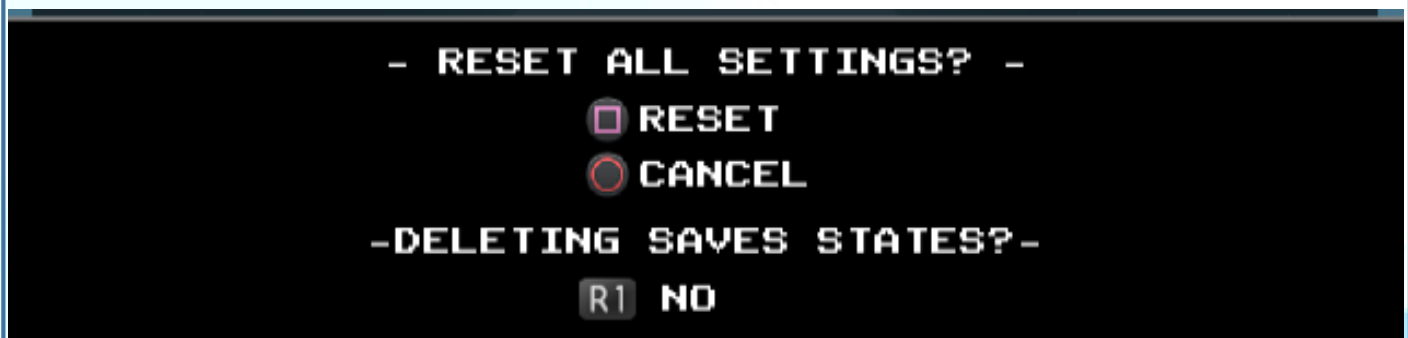
Note: There is an option to clear Retroarch's saved games. This option is activated by pressing "R1" when prompted to reset the options. Be careful, as this option will delete the saved games from all systems.

Once the restoration has started, do not turn off or restart the console, wait for it to finish.

Credits (PAGE 2):

CREDITS

This option displays the credits for all applications and media behind RETROLauncher.
Note: Pressing "Triangle" skips the credits.

Save Settings (PAGE 2):

- SAVE SETTINGS -

To save the configuration, simply press "X" on this option (the configurations made on both pages will be saved).
If changes are made and not saved, we will be asked to confirm the exit.

UNSAVED CHANGES DO YOU WANT TO EXIT?
☐ EXIT
△ CANCEL
ALL CHANGES MADE WILL BE LOST UPON REBOOT.

Note: Don't unplug the USB drive before or during the save, as you'll get an error. When the game list is visible, the save is complete (it should be immediate).

How to add covers and screenshots?

To add images to the games listed in RETROLauncher, simply copy the images to the corresponding directories for each system, respecting the names of each file and the necessary requirements.

Image Requirements:

+ It must be an image in ".png" format.
+ The image must have a transparency mask otherwise it will not be displayed.
+ The image name must be the same as the ROM/APPS, respecting upper and lower case.

 Example: If the ROM is called "GaMe.nes" the image must be called "GaMe.png".

+ It is recommended to use resolutions lower than 320x240 (they can be higher although it affects performance).
+ It is recommended to use ".png" images in 8-bit format with 256 colors (greatly improves performance).
+ The smaller the image, the smoother the system will run (recommended below 40 KB).
+ The image must be in the directory corresponding to the ROM emulator.

 Example:
 Game: "USB:/RETROLauncher/Roms/Roms Sega Megadrive/Example.bin"
 Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Sega Megadrive/Example.png"
 Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Sega Megadrive/Example.png"

Image directories:

Atari 2600:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Atari 2600/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Atari 2600/"

Neo Geo Pocket:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Neo Geo Pocket/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Neo Geo Pocket/"

Nintendo Famicom:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Nintendo Famicom/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Nintendo Famicom/"

Nintendo Game Boy:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Nintendo Game Boy/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Nintendo Game Boy/"

Nintendo Game Boy Color:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Nintendo Game Boy Color/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Nintendo Game Boy Color/"

Nintendo Game Boy Advance:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Nintendo Game Boy Advance/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Nintendo Game Boy Advance/"

Nintendo Super Famicom:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Nintendo Super Famicom/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Nintendo Super Famicom/"

PlayStation:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers PlayStation/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots PlayStation/"
Note 1: If there are no covers in the RETROLauncher directories, the search will be performed in the "ART" folder at the root of the USB drive. This search is only valid for VCDs with the "XXXX_XXX.XX" name, as it uses this part of the file to find covers in the "ART" folder.
Note 2: Images in the "ART" folder must be in ".png" format.

PlayStation 2:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers PlayStation 2/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots PlayStation 2/"
Note 1: If there are no covers in the RETROLauncher directories, the search will be performed in the "ART" folder at the root of the USB drive. This search is only valid for ISOs with the "XXXX_XXX.XX" name, as it uses this part of the filename to find covers in the "ART" folder.
Note 2: Images in the "ART" folder must be in ".png" format.

Sega Game Gear:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Sega Game Gear/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Sega Game Gear/"

Sega Master System:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Sega Master System/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Sega Master System/"

Sega Megadrive:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Sega Megadrive/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Sega Megadrive/"

Sega SG-1000:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers Sega SG-1000/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots Sega SG-1000/"

APPS:
Cover: "USB:/RETROLauncher/Multimedia/Covers/Covers APPS/"
Screenshots: "USB:/RETROLauncher/Multimedia/Screenshots/Screenshots APPS/"
Note 1: If there are no Covers in the RETROLauncher directories, it will search in the "ART" folder in the root of the USB.
Note 2: Images in the "ART" folder must be in ".png" format.

How do I add text fonts?

To add text fonts to RETROLauncher, simply copy the fonts to the corresponding directory, respecting the necessary requirements.

Text font requirements:
+ It must be a font with the extension ".ttf" or ".otf".
+ It can have any name as long as the extension is ".ttf" or ".otf" (Short names are recommended).
+ The name of the fonts will not be reflected in the configurations, only a number will be assigned.

Directory of text sources: "USB:/RETROLauncher/Multimedia/Others/Font/"

Note 1: To change the fonts you must enter the RETROLauncher configuration, change the Fonts and save the configuration.
Note 2: Text fonts may not fit properly in RETROLauncher. To resolve this, once you've selected the font in the settings menu, press "SELECT" on the "Font type" option to access the text adjustment menu. Once there, follow the on-screen instructions to try to achieve a better fit for the text font.
Note 3: If you accidentally set a font that is too small or illegible, simply delete the fonts from the directory and the default font will be automatically loaded.

How to add wallpapers?

To add wallpapers to RETROLauncher, simply copy the images to the corresponding directory, respecting the necessary requirements.

Wallpaper Requirements:
+ It must be an image in ".png" format.
+ The image must have a transparency mask otherwise it will not be displayed.
+ The resolution must be 640x480 maximum, although it can be lower.
+ It is recommended to use ".png" images in 8-bit format with 256 colors.
+ It can have any name as long as the extension is ".png" (Short names are recommended).
+ The name of the funds will not be reflected in the settings, only a number will be assigned.

Wallpapers Directory: "USB:/RETROLauncher/Multimedia/Others/Background/"

Note 1: If the background is not visible, the image may not have a transparency mask.
Note 2: If the resolution is lower or higher than indicated, the image will automatically adapt to 640x480.
Note 3: To change the background you must enter the RETROLauncher settings, change the background and save the settings.

How to add sound effects?

To add sound effects to RETROLauncher, simply replace the sound effects in the corresponding directory, respecting the necessary requirements.

Sound effects requirements:
+ Must be sounds in ADPCM format.
+ They must have the extension ".adp".
+ If you have an audio file with the extension ".adpcm" you just need to rename it to ".adp".
+ The names of the sounds should be as follows:
      + "back.adp" / Audio to go back and change image.
      + "error.adp" / Audio to mark execution errors or cancellation of actions.
      + "move.adp" / Audio for moving through menu items.
      + "next.adp" / Audio for emulator switching.
      + "run.adp" / Audio for the execution and activation of elements.

Sound effects directory: "USB:/RETROLauncher/System/Medios/Sound/Menu/"

Note 1: Playback problems may occur if the audio is poorly encoded or is very large.
Note 2: There's an extra audio track that serves as background music. If you don't want to hear this extra audio, you can easily delete it (or replace it).
      + music.adp / Audio with background music.
      Extra audio directory: "USB:/RETROLauncher/System/Medios/Sound/Background/"
Note 3: To create sound effects you can use the tool for OPL "WAV to ADP converter for OPL", this tool will allow you to convert ".wav" files to "adp" as long as the ".wav" format required by the application is respected.

How do I add VMC support to PS2 games?

Automatic Form:
RETROLauncher has a menu to automatically configure VMCs, to open this menu press "circle" on any game in the list and the game options will open on the screen, all VMCs found in the "USB:/VMC/" directory with the ".bin" extension will automatically be listed, activate the VMC and then select one of the VMCs found, finally save the configuration and all files will be automatically created by RETROLauncher.

Note: RETROLauncher does not create VMC, use other applications to create them, it will only search for them with the corresponding extension (".bin") and in the indicated directory ("USB:/VMC/").

Manually:
To add virtual memory to PS2 games, you must create a text file containing the command line to load the virtual memory, then finally rename it with the same name as the game you want to use the virtual memory and change the extension to ".vmcd" so that it is recognized by RETROLauncher.

Steps to create ".vmcd":
+ Create a ".txt" file.
+ Edit the file and add the load command for virtual memories inside:
 Command: -mc0=mass:/"virtual memory directory"
 Example: -mc0=mass:/VMC/generic_0.bin
+ Save the file and change the extension from ".txt" to ".vmcd".
+ Move the file to the same directory where the game is located or to the following folder "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Configs/" and rename it with the same name of the game to which you want to add virtual memory.
 Example:
 Game: "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Game.iso"
 vmcd: "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Configs/Game.vmcd"

Note 1: Now RETROLauncher will create the ".vmcd" files inside the "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Configs/" folder to have cleaner game folders.
You don't need to move your current files because RETROLauncher will still read them, but the next time you configure them it will move them to the "Configs" folder.
Note 2: If the command is misspelled the game will not start (respect upper and lower case).
Note 3: If the virtual memory file does not exist, the virtual memory will not be loaded but the game will run with the physical virtual memory.
Note 4: A file must be created for each game in which you want to run the virtual memory (it can be the same virtual memory but each game must have its own command line to load the VMC).
Note 5: If there is a ".mode" file and a ".vmcd" file, both can be loaded and they can coexist.
Note 6: Automatic mode will erase and create configurations as well as read them, if you configure VMC manually, automatic mode will also take them when entering the game settings.

How do I add compatibility modes to PS2 games?

Automatic Form:
RETROLauncher has a menu to automatically configure compatibility modes, to open this menu press "circle" on any game in the list and the game options will open on the screen, activate the modes you want to apply to the game, then save the configuration and all the files will be automatically created by RETROLauncher.

Manually:
To add compatibility modes to PS2 games, you must create a text file containing the command line that loads the compatibility modes, then finally rename it with the same name as the game you want to use the compatibility modes and change the extension to ".mode" so that they are recognized by RETROLauncher.

Steps to create ".mode":
+ Create a ".txt" file.
+ Edit the file and add the compatibility modes command inside:

> **Command:** -gc="modes you want to activate"
> **Example:** -gc=012357
> **modos:**
>> 0 - IOP: Fast reads (sceCdRead)
>> 1 - Dummy
>> 2 - IOP: Sync reads (sceCdRead)
>> 3 - EE : Unhook syscalls
>> 5 - IOP: Emulate DVD-DL
>> 7 - IOP: Fix game buffer overrun
>
> **Note:** you can add several chained modes to the numbers.

+ Save the file and change the extension from ".txt" to ".mode".
+ Move the file to the same directory where the game is located or to the following folder "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Configs/" and rename it with the same name of the game to which you want to add compatibility modes.

> **Example:**
> **Game:** "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Game.iso"
> **mode:** "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Configs/Game.mode"

Note 1: Now RETROLauncher will create the ".mode" files inside the "USB:/RETROLauncher/Roms/ISOs PlayStation 2/Configs/" folder to have cleaner game folders.
You don't need to move your current files because RETROLauncher will still read them, but the next time you configure them it will move them to the "Configs" folder.
Note 2: If the command is misspelled the game will not start (respect upper and lower case, do not leave spaces).
Note 3: If a ".mode" file and a ".vmcd" file exist, both can be loaded and they can coexist.
Note 4: A file must be created for each game in which you want to run compatibility modes (each game must have its own command line if you want to load compatibility modes).
Note 5: Please check if the game supports the modes in case the game does not start when setting them.
Note 6: Automatic mode will erase and create configurations as well as read them. If you manually configure compatibility modes, automatic mode will also take them when entering the game settings.

How do I run PS2 games from MX4SIO? (Experimental)

To add games from the MX4SIO, you must create an empty text file on the USB stick in the same directory where the game is located (.ISO) on the MX4SIO. Give it the same name as the game in MX4SIO and change the extension from ".txt" to ".mx4". This empty file, with the ".mx4" extension, will tell RETROLauncher that the game is running on the MX4SIO.

Example 1:
Game on MX4SIO: "MX4SIO:/DVD/Game.iso"
Direct access to the game on the USB: "USB:/DVD/Game.mx4"

Example 2:
Game on MX4SIO: "MX4SIO:/CD/Game 2.iso"
Direct access to the game on the USB: "USB:/CD/Game 2.mx4"

Note 1: Place the shortcuts on the USB respecting the same directory as your games in MX4SIO.
It is important to respect the shortcut directory, if a shortcut is placed in the "USB:/DVD/" folder and the game is in the "MX4SIO:/CD/" directory, the game will not run.
Note 2: The only two directories where shortcuts will be searched are "USB:/DVD/" and "USB:/CD/".
Note 3: If the name is misspelled and does not match the game in MX4SIO, or if it is found to be non-existent, Neutrino will not run it.
Note 4: Compatibility modes are fully functional and configurable from RETROLauncher.

VMC for games on MX4SIO

In order to load a VMC when running a game from MX4SIO, it is mandatory that the VMC is located in the MX4SIO directory itself ("MX4SIO:/VMC/"). Although RETROLauncher can assign a VMC, these memories are located on the USB, so if we assign a VMC from the RETROLauncher menu and that memory is not found in the MX4SIO, the game will fail to run.

Add VMC to game in MX4SIO

To add VMC to games in MX4SIO simply create a text file in the "USB:/VMC/" directory with the same name as the VMC located inside the "MX4SIO:/VMC/" directory, then change the file extension from ".txt" to ".mx4", RETROLauncher will automatically take these files as VMC that can be assigned to MX4SIO shortcuts.

Example:
VMC on MX4SIO: "MX4SIO:/VMC/generic_0.bin"
Direct access to VMC on USB: "USB:/VMC/generic_0.mx4"

Note 1: Created files will only be listed for MX4SIO shortcuts.
Note 2: If the VMC name is misspelled and does not match the VMC in MX4SIO, or if it is found to be non-existent, Neutrino will not run the game.
Note 3: For the rest of the devices the settings are the same, the only thing that changes are the file extensions, for HDD (only in exFAT format) the extension is ".hdd" and for MMCE the extension is ".mmc".
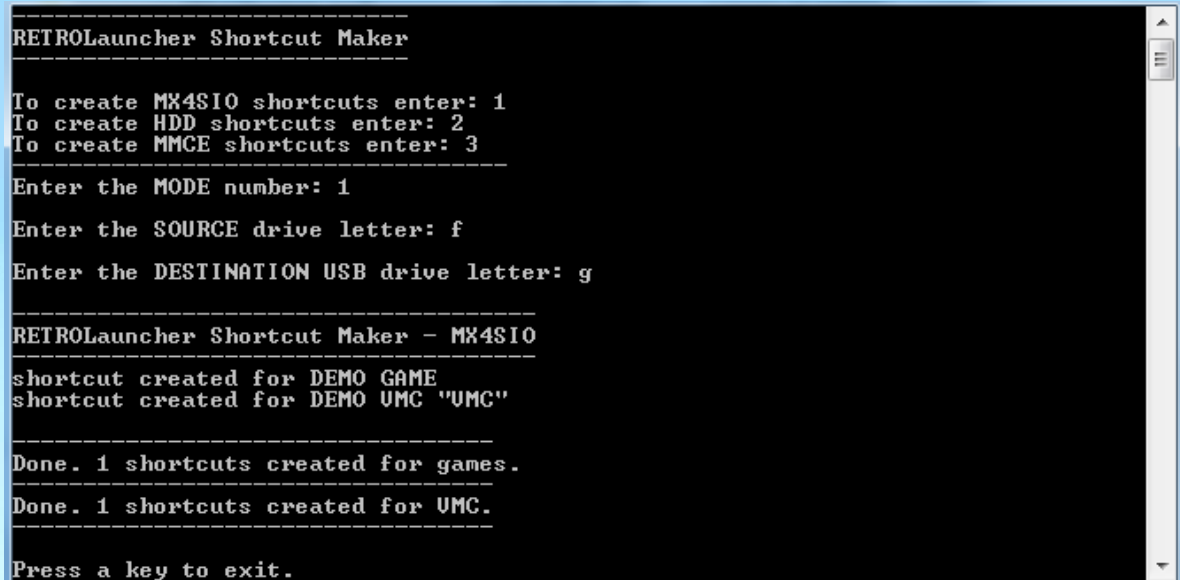
IMPORTANT: These modes have not been tested, and I don't know how they work. However, they were added to the code so that users who have these tools can experiment. The command configurations are based on the Neutrino documentation, so they should work if everything is configured correctly.
I don't have the means to check this, so it will always be better to use more specific and comfortable applications to launch PS2 games such as OPL/NHDDL/XEB+ Launcher/OSD-XMB.

RETROLauncher Shortcut Maker

Use this tool to create all shortcuts automatically.

+ Run "RETROLauncher Shortcut Maker.bat".

+ Enter the number of the mode used to create shortcuts.

+ Enter the letter of the source device (where games and VMC will be searched).

+ Enter the drive letter of the target device (where the game and VMC shortcuts will be created).

```
--------------------------------
RETROLauncher Shortcut Maker
--------------------------------

To create MX4SIO shortcuts enter: 1
To create HDD shortcuts enter: 2
To create MMCE shortcuts enter: 3
--------------------------------
Enter the MODE number: 1

Enter the SOURCE drive letter: f

Enter the DESTINATION USB drive letter: g

--------------------------------------
RETROLauncher Shortcut Maker - MX4SIO
--------------------------------------
shortcut created for DEMO GAME
shortcut created for DEMO VMC "VMC"

--------------------------------------
Done. 1 shortcuts created for games.
--------------------------------------
Done. 1 shortcuts created for VMC.
--------------------------------------

Press a key to exit.
```

How do I update RETROLauncher emulators and cores?

To update applications that use RETROLauncher, simply replace all corresponding files for each application with a new version of the application or with a previous version.

Enceladus: Download "Enceladus.elf" rename it to "RETROLauncher.elf" and replace the "RETROLauncher.elf" file located in the "USB:/RETROLauncher/" folder.

Neutrino: Download Neutrino and replace all files located in the "USB:/RETROLauncher/System/RetroarchPS2/Sony PlayStation 2/Neutrino/" directory.
Note: Neutrino commands may change during development, so they may fail to run after an update (code modifications may be required in such cases).

wLaunchELF ISR: Download any version or variant of "wLaunchELF ISR.elf" and copy it to the following directory "USB:/RETROLauncher/System/RetroarchPS2/APPS/", finally rename it to "WLE.elf".
It should look like this:
"USB:/RETROLauncher/System/RetroarchPS2/APPS/WLE.elf"

OPL: Download any version or variant of OPL (command-compatible), and copy it to the following directory "USB:/RETROLauncher/System/RetroarchPS2/Sony PlayStation 2/OPL/".

Retroarch Cores: Download Retroarch, copy the Core you want to update and replace the Core in the system-specific folder within the "USB:/RETROLauncher/System/RetroarchPS2/" directory.
Note 1: If you want to add another system you can add it by editing the code (From version 1.14.0 exFAT is supported in Retroarch for PS2).
Note 2: There are some conflicts with running Retroarch via command on certain Core versions. If updating or replacing the Core doesn't work and you get a black screen, try using a different version of Retroarch.

How do I run RETROLauncher from exFAT?

To run RETROLauncher from an exFAT-formatted memory card, simply download the file "**EXFAT USB support - BDMAssault by israpps (Matías Israelson).rar**," unzip the folders, and copy them to the root of your memory card. These files are required for some applications used by RETROLauncher to work with the exFAT format.

Note: Both "TempGBA" and older Retroarch Cores do not support exFAT.

Necessary files on the Memory Card:
"mc0:/POPSTARTER/usbd.irx"
"mc0:/POPSTARTER/usbhdfsd.irx"
"mc0:/SYS-CONF/USBD.IRX"
"mc0:/SYS-CONF/USBHDFSD.IRX"

How to launch games through OPL?

Requirements for launching games through OPL:
+ You must have a version of OPL compatible with command execution.
+ It is recommended to use your own OPL or revisions compatible with your configuration, since when launching games through OPL (regardless of the OPL version you use to launch the game) the OPL configurations that are currently in place will be loaded, so if you launch the game with a version of OPL that is not compatible with your current OPL configuration, there may be conflicts or crashes.
+ Access to the game ID is required, so it is recommended to use the old "XXXX_XXX.XX.Game Name" naming method. In case the game name does not have the ID, it will try to search within the ISO. This process extends the loading time and may not be as accurate.
+ When launched through OPL all OPL own configurations that have been configured will be loaded.
+ Only those games in ISO format that are inside the USB will be launched.
+ Shortcuts will be skipped and automatically launched with Neutrino (as well as cases where the game ID cannot be found).
+ RETROLauncher does not alter or generate OPL game configurations, it just launches the game.

Configure OPL:
To configure OPL enter the RETROLauncher settings menu, then place the cursor over the "PlayStation 2" option and press "SELECT", a menu will open where you can search for your OPL.

You can also add multiple versions of OPL in the following directory:
"USB:/RETROLauncher/System/RetroarchPS2/Sony PlayStation 2/OPL/".

Note 1: If multiple versions of OPL are detected, we will be asked which version to run the game with (try to use OPL versions that share configurations, otherwise you will get conflicts).

Note 2: It's always best to use OPL directly to launch PS2 games, as this method has many limitations. This feature was only added as an option for specific games not compatible with Neutrino, or to quickly test OPL revisions.

Known Issues with RETROLauncher.

"Error starting RETROLauncher": Accompanied by a red message, it is an execution error in the program code, it is recommended to reinstall all RETROLauncher.

"Error launching RETROLauncher from OPL": Accompanied by a red message, it is an execution error in the program code, download the file "**Problems when running from OPL.rar**" and unzip the "RETROLauncher" folder in the same directory as "RETROLauncher" combining both folders. Then copy the line from the "conf_apps.cfg" file and paste it into your "conf_apps.cfg" file. This should boot from OPL.

"RETROLauncher freezes on the loading screen": This error occurs when a media-related file, such as images or text fonts, cannot be found. If the game images are in an incompatible format, the game will also freeze. Delete any recently added images. If the error persists, reinstall all of RETROLauncher.

"Error starting RETROLauncher with two USBs": Accompanied by a white message, it indicates that there is more than one USB device connected to the PS2, follow the instructions in the message and restart RETROLauncher.

"External hard drive won't launch RETROLauncher": Some external drives pause when running Enceladus, causing an error when loading the program. Use another medium such as a USB flash drive or try different versions of Enceladus.

"Black screen when running game": Make sure the game is compatible with the emulator/core you're running. If you replaced the core, it means it's not compatible with RETROLauncher. Try a different core or reinstall the entire RETROLauncher.

"The sound of the Cores is interrupted": This happens on consoles configured in PAL 50 Hz, and is because Retroarch automatically configures games to the game's region. To solve this simply open the Retroarch options once inside a game, look for the Core configuration and try to force the system to the same as your console or configuration, if your console is configured in PAL 50 Hz force the games to PAL 50 Hz and the audio speed will be corrected (the configuration is saved for all games upon exit, although you can assign an individual configuration to the games). This is the case with all Cores or games that present this problem. Ideally, have everything in NTSC or PAL 60 Hz, if you do not have a chip to change the console to NTSC or PAL 60 Hz you must change the RETROLaucher video mode to PAL in the settings menu, with that the choppy audio is corrected but at the cost of having some breaks on screen.

"Error starting the game": Accompanied by a red message, it is an execution error in the program code, it is recommended to restart RETROLauncher and verify that the USB device is correctly connected, if it persists, reinstall all of RETROLauncher.

"Freezes in GBA": Not all games are compatible with the GBA Core but compatibility improves greatly by placing the GBA BIOS in the corresponding directory, some games fix the freeze and others remain the same, it's a matter of testing (TempGBA is not compatible with exFAT).
BIOS: "gba_bios.bin"
Directory: "USB:/RETROLauncher/System/RetroarchPS2/Nintendo Game Boy Advance/retroarch/system/"

"Error saving configuration": Accompanied by a red message, it is an execution error in the program code, it is recommended to restart RETROLauncher and verify that the USB device is correctly connected, if it persists, reinstall all of RETROLauncher.

"Images are not displayed in the menu": Verify that the image name is correct. RETROLauncher is case-sensitive. Make sure the image you placed has a transparency mask; otherwise, the image will be found and displayed, but it will be completely transparent.

"Pauses and freezes when loading images": If the images used are very large in size or have high-quality encoding, this will cause long pauses while loading. Long pauses also occur when there are many items in the same folder. Checking if an image exists in a folder with 500 items is not the same as having to search for it in a folder with more than 1000 items. Make sure you comply with the image requirements explained in this document.

"Restarting Retroarch does not reopen RETROLauncher": Tampering with Retroarch's settings can corrupt the return to RETROLauncher. To fix this, restore the problematic system configuration in the RETROLauncher settings menu. This should resolve the issue. If the problem persists, reinstall the entire RETROLauncher.

"The controller keeps vibrating": This sometimes happens when you perform a shake motion while loading an image. It should resolve itself when you perform another shake motion; otherwise, simply restart RETROLauncher.

"The menu sound is poor or faulty": This sometimes happens when the audio doesn't load properly. It should be fixed by simply restarting RETROLauncher. If it persists, reinstall the entire RETROLauncher.

"PS1 games won't run": There may be many causes but the main ones are:
+ Bad VCDs, if you want to run a VCD make sure you do a proper conversion.
+ Make sure your game is compatible with POPStarter.
+ If patches are required, check if they were placed correctly.
+ If you run PS1 games from exFAT memory make sure you have the drivers on the Memory Card.
+ Check that the binary names are correct, respecting capitalization.

"PS2 games won't run": There may be many causes but the main ones are:
+ Bad ISOs, if you want to run an ISO of a title that was originally formatted as CD, make sure you convert it correctly.
+ Make sure your game is not fragmented.
+ Neutrino will run the game on the same system as your console is configured, if it doesn't have a chip it will fail with games that don't belong to your console's region, you can use patches in the ISOs or GSM to try to run those games.
+ If I set the compatibility modes manually, check that the command is spelled correctly and without spaces because it will fail if so.
+ If it happens after updating Neutrino then it is a command issue, reinstall RETROLauncher.

"Game names are not rendered correctly or are altered": This occurs when the game name contains a special character (for example "Ñ") and RETROLauncher fails to render the name. To fix this, simply change the game name to one that doesn't contain special characters.

"Blue screen when running APPS": If you get a light blue screen when you run an application, it means that the application could not be run, the light blue screen is the wLaunchELF ISR menu, select some of the menu options to return to RETROLauncher or exit to the PS2 system.

"Freezing on startup with DVD/CD in tray": This error occurs when running RETROLauncher from a launcher that has the ability to read the DVD/CD drive, a clear example of this is wLaunchELF with DVD/CD support, to solve this place the DVD/CD in the tray once started RETROLauncher, then refresh the game list in PS2 or APPS.

"RETROLauncher slows down": If the game lists are very large and the game names are very long, performance will suffer. Try to keep the number of ROMs per system to a minimum and be more selective with ROMs (lists with fewer than 1,000 games are recommended).
The same goes for images; if they are too large, there will be pauses when moving between game lists (memory fragmentation may be causing RETROLauncher to slow down; try a clean install).
Try disabling "**Force Garbage Collection**" and enabling "**Release Rest of Lists**" in the RETROLauncher settings menu, the improvement should be noticeable.

"Overscan in Retroarch games": Some Cores present "overscan" due to the nature of the different systems, to fix this once you open a game go to the Retroarch video options and enter "Scaling", there you can try the different scaling modes, once you have selected the one that best suits your screen, restart Retroarch and the configuration will be saved, this change must be made individually for each Core since they do not share the same configuration.

"OPL keeps loading": This error occurs when running a version of OPL whose configuration is not compatible with the OPL configuration we currently have on the system, try using your own OPL or a version compatible with your configuration.

"OPL Black or white screen": This error occurs when running a game that is fragmented or when RETROLauncher failed to correctly obtain the game ID, check the ID name and try renaming the ISO with the old name format.

"RETROLauncher not working on my PS2": RETROLauncher was tested on a single console model "SCPH-77006 - NTSC - Japanese", if you have problems with a specific model or variables please edit this document or publish by some means the model of your console, if it has a chip add the model / version, and the media on which you run RETROLauncher. I also strongly request that you publish if RETROLauncher works correctly on your console.

Credits

Enceladus: Enceladus is an enhanced Lua environment for creating homebrew software for the PS2.
Created by Daniel Santos.
DanielSant0s X: https://x.com/danadsees
Youtube: https://www.youtube.com/channel/UCIDx5TuDp-1IRTRr5l5JSdw
Project Link: https://github.com/DanielSant0s/Enceladus
License: Distributed under GNU GPL-3.0 License.

Retroarch PS2 Port: RetroArch is a frontend for emulators, game engines and media players.
Created by RetroArch contributor fjtrujy (Francisco J. Trujillo).
fjtrujy X: https://x.com/fjtrujy
Retroarch Link: https://www.retroarch.com
Licenses: There is software behind RetroArch that is protected by Non-Commercial licenses. It is important to respect the wishes of the developers and people behind the respective projects.
https://docs.libretro.com/development/licenses/

POPStarter: POPStarter is a launcher which lets you play your PS1 games in combination with PS1 emulator for PS2.
Created by developer krHACKen.
POPStarter Link: https://www.psx-place.com/threads/popstarter.19139/

Neutrino: Neutrino is a small, fast and modular PS2 device emulator that maximizes compatibility and performance.
Created by developer Maximus32 (Rick Gaiser).
Neutrino Link: https://github.com/rickgaiser/neutrino
License: Academic Free License "AFL" v. 3.0

TempGBA: TempGBA (GpSP) is a Game Boy Advance emulator ported to PS2.
Created by developer belek666.
belek666 GitHub: https://github.com/belek666
TempGBA(GpSP) - PS2 link: https://www.psx-place.com/resources/gpsp-by-belek666.687/

wLaunchELF ISR: wLaunchELF ISR is an open source file manager and executable launcher for the PS2 console.
wLaunchELF 4.43x_ISR was created by developer israpps (Matías Israelson) and is a wLaunchELF mod.
israpps (Matías Israelson): https://israpps.github.io/
Youtube: https://www.youtube.com/@El_IsraPS2
wLaunchELF 4.43x_ISR Project Link: https://github.com/israpps/wLaunchELF_ISR
wLaunchELF Project Link: https://github.com/ps2homebrew/wLaunchELF
License: Academic Free License "AFL" v. 2.0
wLaunchELF / project by AKuHAK and SP193.
uLaunchELF / project by E P and dlanor.
LaunchELF / project by Mirakichi.
And to all the developers who contributed to uLaunchELF.

SNESticle: SNESticle is a SNES emulator that was ported by its creator, Icer Addis (Sardu), to several platforms, including PS2.
Source code: https://github.com/iaddis/SNESticle
License: MIT License Copyright 2022 Icer Addis

RadShell: RadShell is a command line client for PS2 created by developer "RadAd", that allows the automation of basic tasks within PS2.
RadShell Link: https://archive.org/details/radshell

BDMAssault: BDMAssault is a PS2 homebrew project created by israpps (Matias Israelson) that aims to bring USB EXFAT support to older closed-source homebrew applications that can load external USB controllers.
BDMAssault Project Link: https://github.com/israpps/BDMAssault
License: Academic Free License "AFL" v. 2.0

Open PS2 Loader: OPL is a 100% open source game and application loader for PS2 and PS3 devices, created by Ifcaro and jimmikaelkael in conjunction with a huge community of developers who are constantly improving it.
Open PS2 Loader Project Link: https://github.com/ps2homebrew/Open-PS2-Loader
License: Copyright 2013, Ifcaro & jimmikaelkael Licensed under Academic Free License version 3.0.

Original background: https://www.artapixel.com/escp-art-midnight-sun-city-night-retrowave-cyberpunk.html
Created by < e s c p > Art
Youtube: https://www.youtube.com/@escp
License: This Image is licensed under the Creative Commons Zero v1.0 Universal.
Free images by https://www.artapixel.com

Public Pixel: Retro video game style text font.
Designed by GGBotNet.
GGBotNet X: https://twitter.com/ggbotnet
Youtube: https://www.youtube.com/channel/UCndkEEd767CI7wTlNJYKrTg
Public Pixel Link: https://www.ggbot.net/fonts/
License: This Font Software is licensed under the Creative Commons Zero v1.0 Universal.

Special thanks to the entire "PSX-PLACE" community for providing support and visibility to the program. We also thank all the YouTube channels and their communities for spreading the word and improving RETROLauncher with their messages of support and constructive feedback.

Spaghetticode: I created RETROLauncher with the sole purpose of having a simple and editable graphical environment to have collections of retro games on PS2, I did it for myself and I didn't think it would grow so much, much less publish it, I thought it would be good to share it in case someone somewhere was looking for the same thing as me and couldn't find anything retro-focused on our beloved PS2. At no time did I mean to offend or disrespect the developers behind the different applications used in this program, if I did, I apologize. I tried to compile as much information as possible to give the credits correctly, I hope I didn't make a mistake, or that I overlooked something, if so, I apologize. RETROLauncher is made by all of us.

Thank you for using RETROLauncher.   Boon Tobias 🦔