Rick Dangerous

Insanium Edition

THE
GUIDE BOOK

My Hardware
Raspberry Pi4 2GB
Argon One case with M.2 Expansion
Argon One Official Power Supply
SSD 1TB WD BLUE MSATA
PS4 Dualshock V2 Controllers
Wii U Pro Controllers
8BITDO Arcade Stick

My Current Setup

Flashing the Image using Argon One with SSD

If you are using the argon one case with ssd installed inside the case then you have a couple of options to connect the drive to the pc for flashing.

First option is a USB A to USB A cable.
Plug one end into the pc and the other end into usb port on the expansion section at the bottom of the case and flash the image to the drive.

Second option is to buy an enclosure for the ssd drive and flash the drive in the enclosure then remove the drive and install into the argon case.

Software to flash the image to the drive.

I personally use balenaetcher https://www.balena.io/etcher/

Using etcher select flash from file and locate the image your going to flash and then select target which is the drive your going to flash it to. Now press flash!

If you have any problems flashing the drive with etcher alternatively you can use Rapberry Pi Imager https://www.raspberrypi.com/software/

Type A Male to Male

USB Enclsoure M.2 SSD

SYSTEMS INCLUDED

3DO
Amiga
Amiga CD32
Amstrad CPC
Amstrad GX4000
Apple 2*
Arcade
Atari 800
Atari 2600
Atari 5200
Atari 7800
Atari Lynx
Atari ST
BBC Micro*
Commodore 64
Coleco
Daphne
Dreamcast*
Famicom
Family Disk System
Game & Watch
Game Gear
Game Boy
Game Boy Advance
Game Boy Colour
Intellivision
Master System
Megadrive
MSU-1

MSX
MSX 2
N64
Naomi
Nintendo DS*
Neo Geo
Neo Geo CD
NES
Neo Geo Pocket Color
OpenBor
PC
PC Engine
PC Engine CD
Pico-8*
Ports
PSP*
PSP MINI*
PSX
SCUMMVM
Sega 32X
Sega CD
Sega Saturn
Super Famicom
SG-1000
Super Game Boy
Super Nintendo
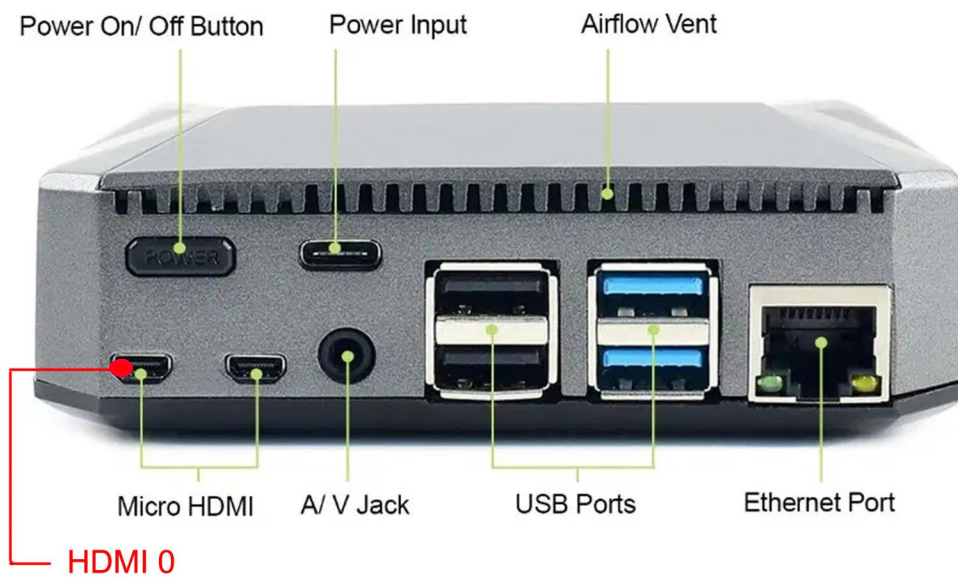Super Grafx
Vectrex
Videopac
Virtual Boy
ZX Spectrum

*Standalone emulators which don't support hotkeys

Connect your raspberry pi4 to your display using a hdmi cable. Make sure to connect to the HDMI0 port on your raspberry pi.

Audio + Video Composite 3.5mm Jack

MIPI CSI Port, camera interface

HDMI1 micro HDMI Port
HDMI0 micro HDMI Port

USB Type C, for Power, upto 3A or 15W

If using an argon one case the HDMI0 will be closest to the edge of the case as shown in picture.

Argon V1

Power On/ Off Button   Power Input   Airflow Vent

Micro HDMI   A/ V Jack   USB Ports   Ethernet Port

HDMI 0

Argon V2

HDMI 0

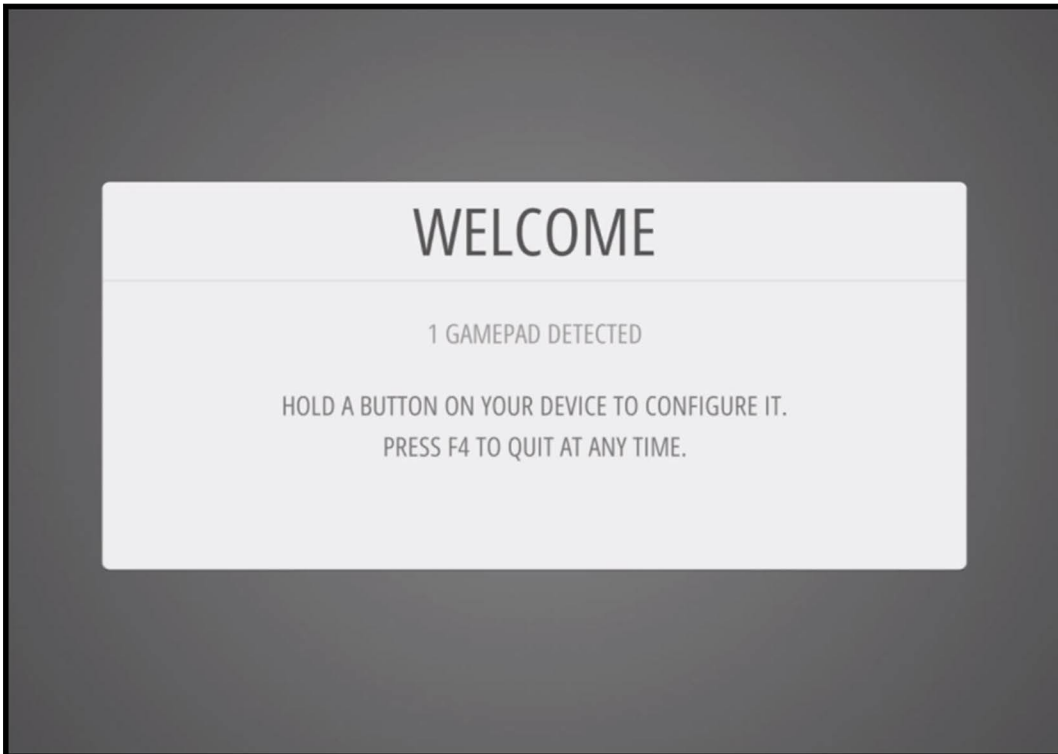## Controller Configuration

On first boot we need to setup a controller. This can be with a keyboard or other compatible gaming controller. My personal choice is to setup my keyboard on first boot.

The controller configuring screen below shows us exactly what buttons to map. If a button is not registered or we press the wrong button we can scroll up and change the mapping for any specific button when we reach the bottom of the configuring menu. You can also skip mapping buttons which your controller might not have by holding any button to skip it.

Now I have my first controller setup I can now navigate emulation station and add more controllers.

If you wish to add a usb gaming controller or 2.4ghz wireless gaming controller we can do that next by pressing start which opens up the main menu and then choosing configure input.

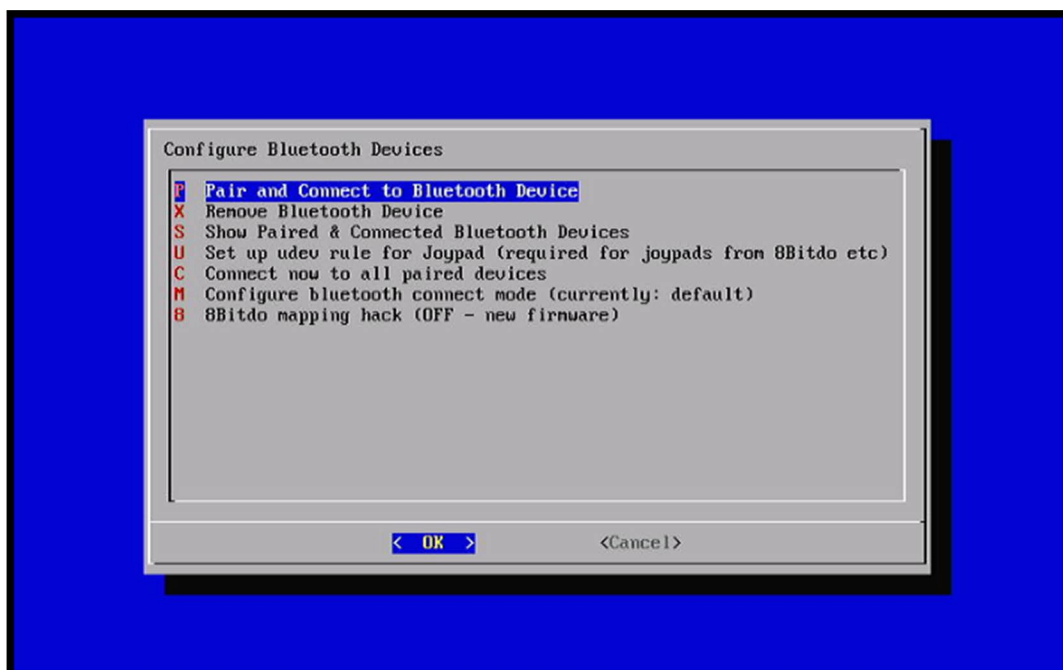**Adding bluetooth controllers**

Bluetooth controllers first have to be paired. To do this navigate to options as shown in the picture below.
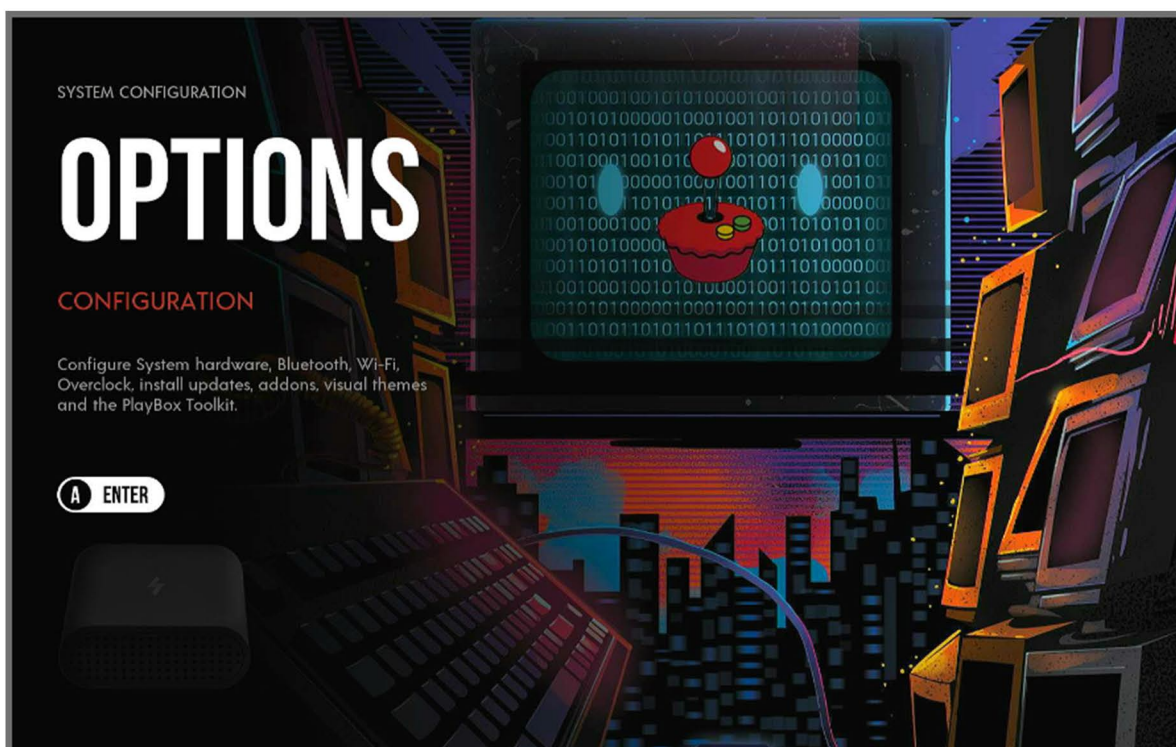
Choose Bluetooth from the system configuration menu
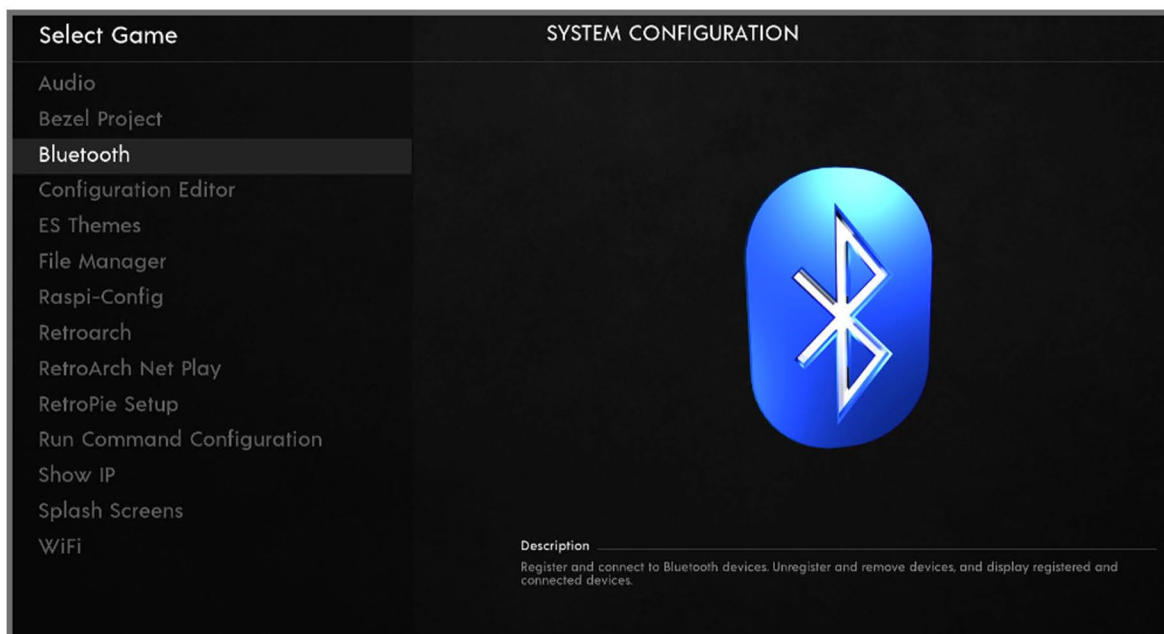
And now choose pair and connect to Bluetooth Device and follow the onscreen instructions.

Once you have paired your controller then you can exit back to emulation station and map your controller.

Pairing Mode

To put the controller into pairing mode,
press and hold the Share button then the PS button.
After a few seconds, the light bar will strobe rapidly and brightly.
The controller is now in pairing mode.

To turn the controller off

The controller will not sleep on its own if left idle,
it will remain on until the battery goes flat.
To force the controller to go to sleep, hold the PS button for 10 seconds.
Once the light bar turns off, the controller is asleep.
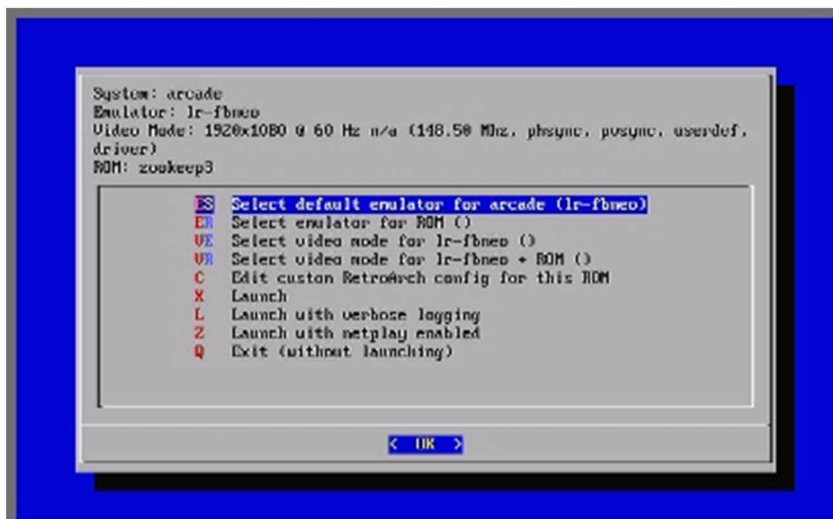
Runcommand Launch Menu

Each time you load a Game there is an option to open what is called the Runcommand Launch Menu.

This is accessed by pressing any button on a controller or kebyoard. I usually use A or X depending on my controller.
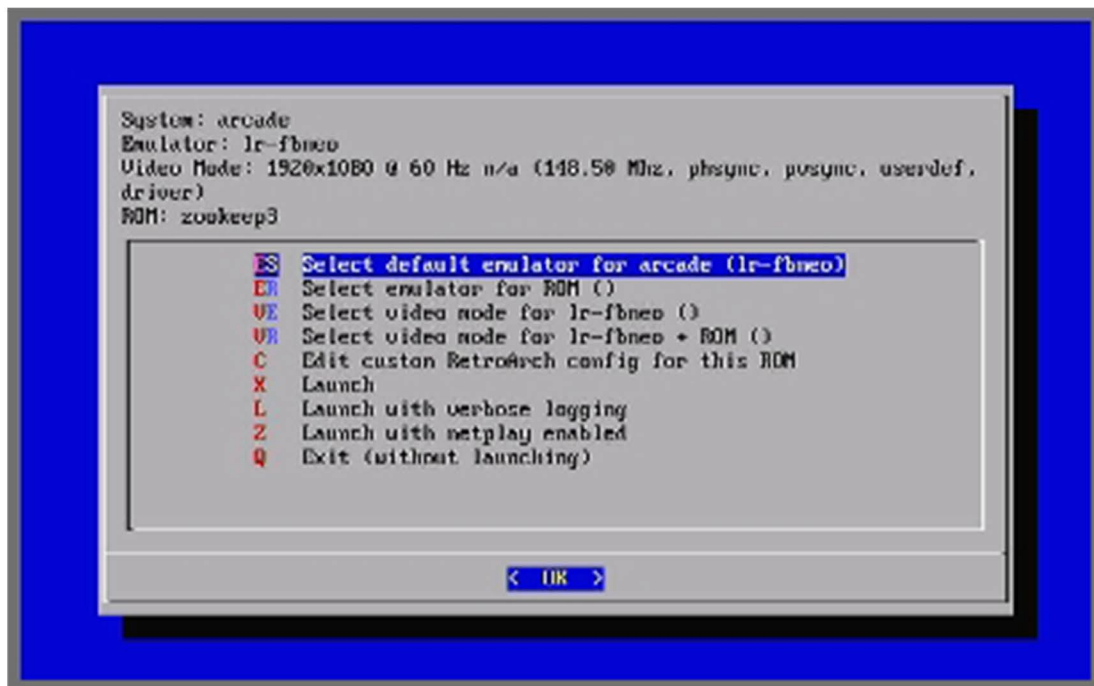
Below is the launch screen for Arcade
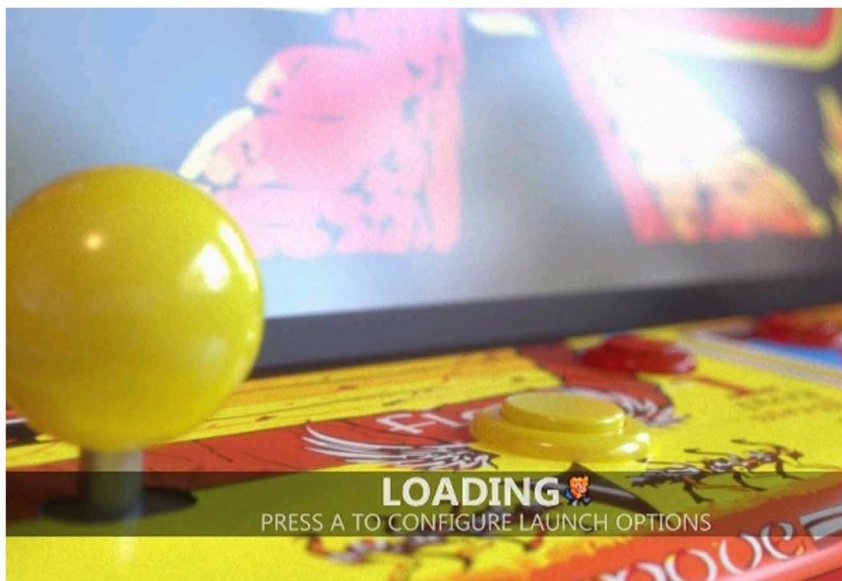
After pressing a button/key whilst loading a game you will be shown a menu like below depending on the system you choose.

Runcomand Launch Menu Options

```
System: arcade
Emulator: lr-fbneo
Video Mode: 1920x1080 @ 60 Hz n/a (148.50 MHz, phsync, pvsync, userdef,
driver)
ROM: zookeep3

    ES  Select default emulator for arcade (lr-fbneo)
    ER  Select emulator for ROM ()
    VE  Select video mode for lr-fbneo ()
    VR  Select video mode for lr-fbneo + ROM ()
    C   Edit custom RetroArch config for this ROM
    X   Launch
    L   Launch with verbose logging
    Z   Launch with netplay enabled
    Q   Exit (without launching)

                        <  OK  >
```

Select default emulator for arcade (lr-fbneo)
Which ever emulator we choose with this option will be the main
default emulator for the whole system.

Select emulator for ROM
We can choose which emulator we want for the current game we
are loading. The change will get saved to the emulators.cfg.

Select video mode for lr-fbneo
This will allow you to set a custom resolution for the emulator.
This change will get saved in videomodes.cfg

Select video mode for lr-fbneo ROM
This will allow you to set a custom resolution for the current
game we are loading. This change will get saved in
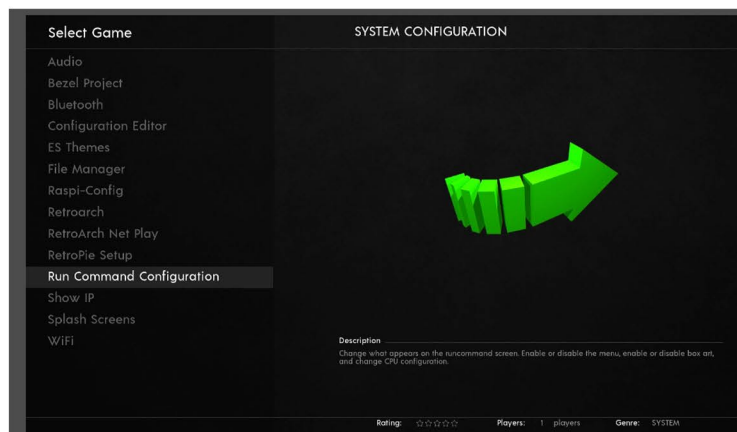videomodes.cfg

Runcommand Launch Configuration

The run command configuration is useful to disable the launch menu. You might wan't to do this to stop accidentally changing an emulator or video setting which might stop a game from launching. This is very useful if you have kids.

Navigate to the options screen.
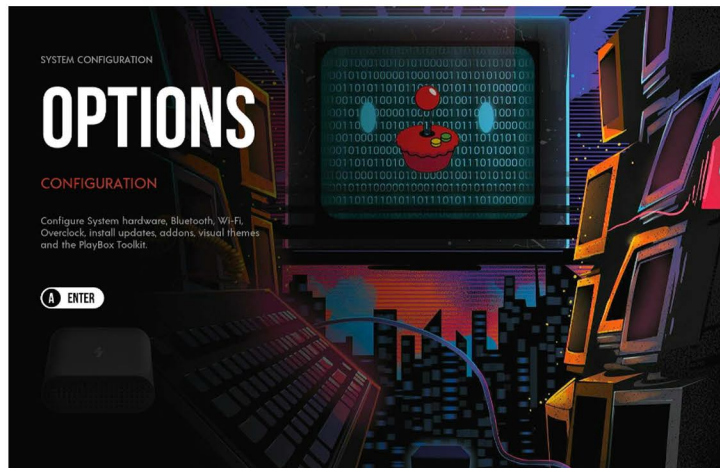
Choose Run Command Configuration

Change Launch Menu to Current Disabled

Multi Disc Games

If a game prompts you to change the disk you can do this via
the RGUI menu by presing your Hotkey+X and then follow the steps below.

1. Disc Control

2. Change Current Disc Index

3. Select Requried Disc Number

4. Insert Disc

Hotkeys

The Hotkey button enables you to press it in combination with another button to access functions such as saving, loading, and exiting in emulators. It is suggested to use the Select button as the hotkey. The following chart shows the default hotkey combinations.

Note Hotkey combinations are specific to the retroarch/libretro based emulators.

Hotkey combinations

Hotkey+Start: Exit
Hotkey+Right Shoulder: Save
Hotkey+Left Shoulder: Load
Hotkey+Right: Input State Slot Increase
Hotkey+Left: Input State Slot Decrease
Hotkey+X: RGUI Menu
Hotkey+B: Reset

How to enable REWIND in most games

(Hotkey + L trigger):
OPTIONS > Retroarch (steps 1-2-3 below start on main menu):
1. Settings > Inputs > Hotkeys
    a. Rewind - set to L trigger button (L shoulder is occupied for load state).
    b. Enable hotkeys - set to your hotkey ("select")
2. Settings > Frame Throttle > Rewind > Rewind Support
    a. Change the Buffer Size (MB) to around 100.
3. Configuration File > Save Current Configuration

If you are not sure how trigger and shoulder buttons was defined, you can do it again; from the main theme, press Start and choose Configure Input.

Game Focus

Pressing Scroll Lock on the keyboard disables any hotkeys and sends all input directly to the game being run. Press again to toggle back the hotkeys.

This is a really useful feature for some of the computer systems like ZX Spectrum as sometimes the hotkeys will stop you from being able to use certain butons or movements.

Useful Terminal Commands

Shutdown
sudo shutdown -h now
Reboot
sudo reboot
Retropie Setup
sudo ~/RetroPie-Setup/retropie_setup.sh
Raspi-Config
sudo raspi-config
Check System Temp
vcgencmd measure_temp
Change Directory
cd /path/to/directory
list Files in Current Directory
ls
Make A New Folder
mkdir
Remove
rm
Text Editor
nano
Change owner of folder and all files in folder to Pi
sudo chown -R pi:pi /folder/to/be/changed
Network Info
ifconfig
Make shell script executable:
sudo chmod +x yourshellscript.sh

Swap A and B Buttons in Emulationstation

Goto Options - Retropie Setup - Configuration / tools -
emulationstation
swap A/B Buttons in ES (Currently Swapped)

Once you have done the above your need to configure your input
again for any controller you wish to be swapped in emulationstation.

Adding New Games Part 1

download skraper from http://skraper.net/

I choose I have an account on the first screen if you dont then choose I don't have
an account and I want to regsiter and hit sign up.

Configuaration Wizard
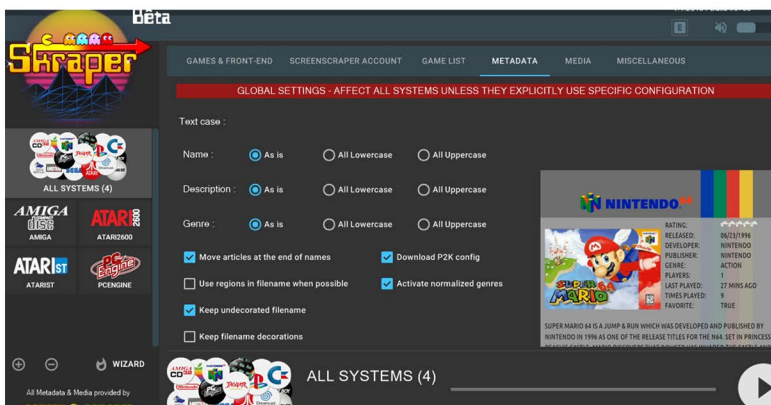Choose Recalbox (not retropie)
Select where you have your games on the pc.
I store mine in d:\retro\roms
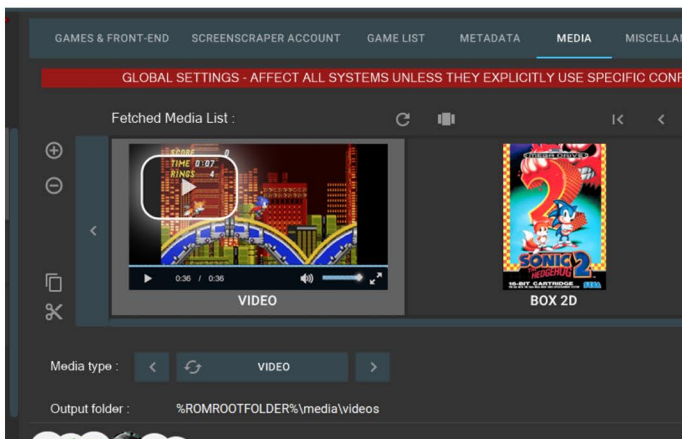you don't have to select anything else just click next.
Click next on the default media screen.

Now you are in the skraper program we can set it up.
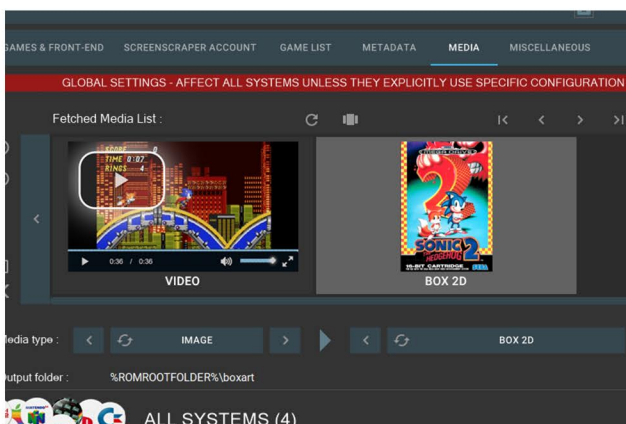as shown in the pictures below.

Tick the box Move Articles at
the end of names

Optionally Tick Keep
undercorated filname

Select the Media Type: right facing
arrow to change the first
internal mix to video
change the path
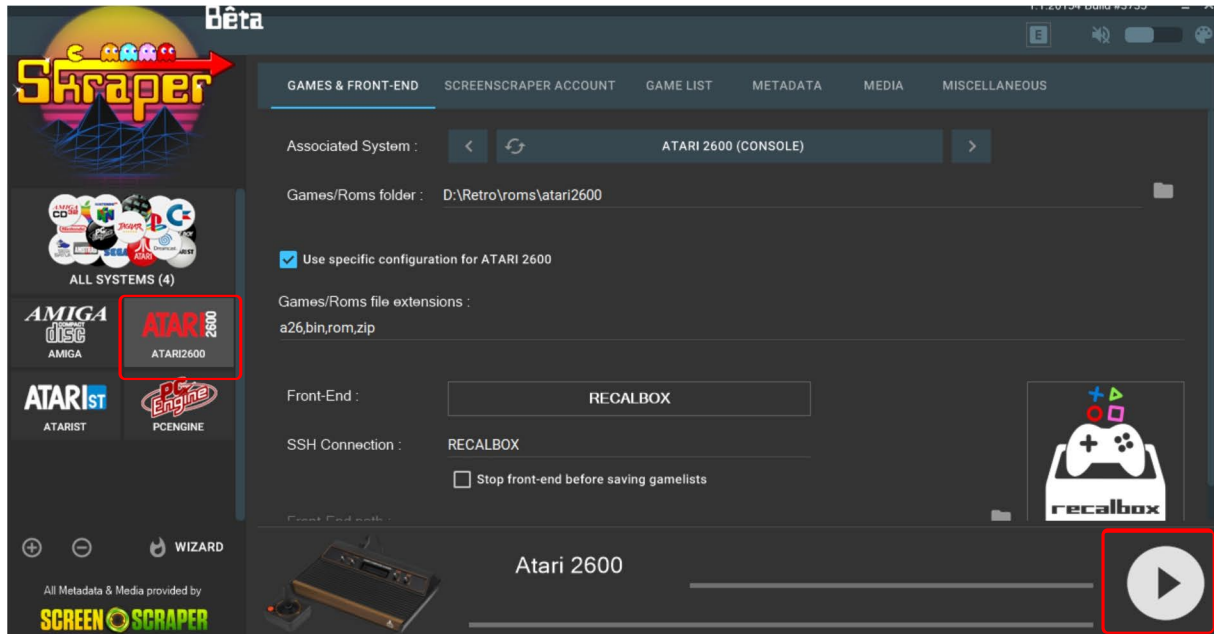%ROMROOTFOLDER%\media\videos
to %ROMROOTFOLDER%\snaps

Change the media type box 3D to box 2D
change the path from
%ROMROOTFOLDER%\media\images
to %ROMROOTFOLDER%\boxart

Adding New Games Part 2

I recommend scraping one system at a time.

First select the system you wish to scrape on the left side then hit the run button which is at the bottom right as shown below.

Editing the gamelist

Now the games have hopefully scrapped we can open the gamelist.xml and ensure everything is good. Locate the gamelist.xml in the systems folder you scrapped on your computer and choose your favourite text editor to open the xml with. I personally use notepad++

```
<game>
    <path>./Atlantis (USA).zip</path>
    <name>Atlantis</name>
    <desc>The lost city of Atlantis is under attack! Wave after wave of Gorgon vessels are approaching, each armed with weapons capable of destroying a part of the city. You are in charge of the command posts at the edges of the city and need to defend it from the invaders. The various gorgon craft will keep flying by on the screen in varying numbers and in different flight patterns. At first they fly high in the sky but then progressively lower. If an enemy makes it low enough before you destroy it, it will use it's weapons and destroy one of the buildings in Atlantis. As you progress in the game, the enemy craft will keep increasing in speed. The game ends when all remaining buildings in the city have been destroyed.</desc>
    <image>./boxart/Atlantis (USA).jpg</image>
    <video>./snaps/Atlantis (USA).mp4</video>
    <rating>0.7</rating>
    <releasedate>19820101T000000</releasedate>
    <developer>Imagic</developer>
    <publisher>Imagic</publisher>
    <genre>Shoot'em up</genre>
    <players>1-2</players>
</game>
```

Rules I like to follow
Check the game name is correct and matching to box art.
Check Desc Tag should not be to long otherwise it will auto scroll and look messy!
Check it has both image and video included
Check atleast publisher or developer is included
Check genre tag and change if needed to match one of the collections I use on the build.
Check players tag is included.
If any of the tags are missing then I create them and get the information from online.
If no image or video tag included and you need to get your own image or video snap be sure to name is exactly as the rom name.

Files & Locations

Emulators.cfg
This file controls which emulators are used to launch games
opt/retropie/configs/all/emulators.cfg

Videomodes.cfg
This file enables our custom set video resolutions.
opt/retropie/configs/al/videomodes.cfg

Collections
Custom game collections
opt/retropie/configs/all/emulationstation/collections/

Themes (Root Acess required if making changes)
etc/emulationstation/themes

Games
home/pi/RetroPie/roms

Game Saves
home/pi/RetroPie/saves

Splashscreens
home/pi/RetroPie/splashscreens

Game Protection Manuals
home/pi/RetroPie/RDmanuals

Game Manuals
home/pi/RetroPie/GameManuals