# **Grandpa Gaming Instruction Manual**

## **Introduction**

Thank you for purchasing a Retro Box from Grandpa Gaming of Las Vegas. I hope you have a lot of fun revisiting the classic video games of years past.

The GG Retro Box is a Raspberry Pi, running the Retropie software. Retropie is a complete software solution for retro gaming, including an operating system, various emulators (an emulator is a piece of software designed to imitate, or imitate, a piece of hardware, like the NES or Sega Genesis), and a front end called Emulation Station.

This manual is meant to be a basic guide as to how to use the device, and what it can do. The Retropie software has a lot of features, more than can be covered in this manual.

## **Basic Instructions**

- Turn the TV on and select the correct input. Connect the unit to the TV with the HDMI cable. Plug the controller(s) into any USB port. Lastly, plug the power adapter into the micro-USB port next to the HDMI port. If you have one of the newer Retro Boxes, based on the Pi 4, there will be 2 HDMI ports on the back of the case. Use the one on the left.
- In the system screen, use up/down to scroll through the list of games, one at a time. Use the left/right shoulder buttons to scroll through the list of games one page at a time. Press 'A' to play your game. The appropriate emulator will launch and your game will start.
- To exit your game, and return to the system screen, press 'Select' and 'Start' at the same time. Note, some systems that require a keyboard, such as Colecovision, Intellivision, and Odyssey 2, use a different way to exit. Check the sections on those systems for instructions.
- To exit the system screen and return to the main screen, press 'B'.
- To shutdown or reboot your system, press 'Start' from the main screen. This will bring up the Main Menu. Select 'Quit' and press 'A'. Select either the reboot or shutdown option, and press 'A' again. Keep in mind that the Raspberry Pi does not have an on/off switch. If your case or power supply has a power switch, toggle it off. Otherwise, you will have to unplug the power, and re-plug it to restart. Note, BE SURE TO DO A PROPER SHUTDOWN RATHER THAN JUST POWERING OFF THE SYSTEM. This ensures that the data on the SD card does not get corrupted, and that all saved games are properly written to disk.

#### **Special Instructions for Handheld Retro Box**

• To exit the game, press Start and "HK" (short for Hotkey) to exit the game, not Start and Select

• After doing a proper shutdown of the system, turn the power button to Off. Failure to do this will cause the batteries to drain.



#### Main Screen

The main screen is where you land when you first boot up the Retro Box. If instead, you see a screen with a white window complaining about a missing gamepad, plug in your USB game controller.

By using the left/right direction keys, you can choose from among the available systems. There is also an entry called Retropie, which allows you to choose Retropie configuration, see section below for that screen. If you have the Pixel Desktop installed, you will see an entry called Ports. The Desktop is under that.

To select an available system, or Retropie configuration, press the 'A' button on your controller.

## System Screen



Once you select a specific system, you will find yourself on the page for that specific system. Scroll through the list of games for this system using the up/down arrow buttons. Use the left/right shoulder buttons to scroll through the list a page at a time.

As you highlight a specific game, you will see various information about the game, such as box art, description, etc. This is all from various databases on the Internet, so may be incomplete. A small number of games may have no art or description available.

To play a specific game, highlight it and press 'A'. The game will launch in the appropriate emulator. To exit the emulator and return to the system screen, press the Select and Start buttons at the same time. To exit the system screen, and return to the main menu, press 'B'.

## The Main Menu

Press Start while on the Main Screen to Bring up the main Menu

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Here is a brief rundown on the options in the Main Menu

- Scraper The Scraper is a program that goes to the Internet, and downloads box art, descriptions, and other data regarding the individual games for each installed system. This has already been done for you, so you should not have to deal with this.
- Sound settings Adjust volume, and turn sound effects on/off
- UI Settings Screen saver, transition effects, etc. One thing to check for Quick System Select. Make sure this is set to Off.
- Other Settings Technical settings. Do not change, unless you know what you are doing.
- Configure Input Use this if you wish to remap the buttons on your current controller. See the section on Adding a New Controller for more information.
- Quit Quit or restart the system, or just the Emulation Station front end. Note that quitting Emulation Station will drop you to a Linux Command Line Interface (CLI). Do not do this unless you know how to work in this environment.

## **Options Screen**

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When in the screen for a specific system, press the Select button to bring up the Options screen. From here you can jump to a specific letter in the list. You can also sort the game list according to most recently played, or number of times played, so that your favorite or most recently played games are at the top of the list.

## **Retropie Configuration Screen**



Here are the options in the Retropie Configuration Screen, with links for further information on several of them..

- Bluetooth Connect to external Bluetooth devices like mice, keyboards and game controllers. Note, Bluetooth Audio is not supported by this device, so you can't connect to Bluetooth speakers.
- Configuration Editor This is advanced configuration, beyond the scope of this manual. For more information go to https://github.com/retropie/retropie-setup/wiki/Configuration-Editor
- ES Themes Themes change the look and feel of the Emulation Station interface. For more information, go to the Themes section in Getting the Most out of Your Retro Box, page 16.
- File Manager Launches Midnight Commander, an old school Linux File Manager, similar to Windows Explorer. Controlled solely by keyboard, no mouse. For instructions on how to use, go to http://nawaz.org/media/docs/mc/mc.pdf

- Retroarch View and modify a number of highly technical settings related to Retroarch, software that allows all the emulators on Retropie to share a similar look and feel. Beyond the scope of this document.
- Retroarch NetPlay A feature that allows you to play certain multiplayer games across a network, rather than sharing the same device and screen. For further information, go to https://github.com/retropie/retropie-setup/wiki/Netplay
- Retropie Setup runs the Retropie Setup script, which allows you to install new packages, and update existing ones, as well as a number of configuration options. Most of those are already covered in this section, so you shouldn't need to access this.
- Run Command Configuration Allows access to config options for the load screen and CPU. You don't need this.
- Show IP Shows the IP address of your system
- Splash Screens The splash screen is the graphic that displays when the system boots up. Download various splash screens, change them, or even set to display a random screen at every boot.
- Wireless Allows you to connect to Wireless networks. Not necessary for the games, but may be useful if you want to use some of the advanced features like NetPlay.

#### **Installing a New Controller**

The GG Retro Box comes with 2 SNES style or Xbox 360 style game controllers. These have already been configured, and work out of the box. However, it is capable of working with almost any USB controller, including Xbox and Playstation Controllers. If you install a second controller, a new kind of controller, you will see the Configure Input screen.

The controller configuration screen is pretty self-explanatory. Press the button on your gamepad that corresponds to the highlighted option, It will register, then go on to the next. You may not have a button that corresponds to the option. For instance, the SNES Style controller does not have trigger buttons, or analog controls. In that case, hold any button down for 3-5 seconds. It will register as Not Defined. When finished, it will highlight 'OK' at the bottom. Press 'A', and your new controller is now configured. Note, the last option is to set a Hotkey. This is a button that is pressed along with the Start button to exit a game and return to the System screen. Leave this undefined to go with the default selection of Start plus Select.

## Main Systems

The GG Kid's Retrobox comes with 4 systems pre-installed. A brief description of each is below.

## <u>Atari 2600</u>

The Atari 2600, otherwise known as the VCS, was the first widely successful home video game system, as well as one of the first to use interchangeable cartridges to allow the unit to play many different games. (Previous home video games were single game units, such as Pong) It is one of the biggest selling systems of all time, moving over 40 million units by the time it was discontinued in 1992.

Although the graphics and audio were crude by today's standards, the Atari 2600 produced a number of memorable games, such as conversions of arcade games Space Invaders and Asteroids, as well as Activision classics like Pitfall and Kaboom.

## Nintendo Entertainment System / Famicom

The Nintendo Entertainment System (NES), released in 1985, is one of the most popular video game systems of all time. Many of the most popular video game franchises of all time originated on the NES. They include famous Nintendo properties, such as Super Mario, Zelda and Metroid, as well as numerous third party series, such as Mega Man, Castlevania, and Contra, and RPGs such as Final Fantasy and Dragon Warrior. The Famicom is the Japanese version offered on the Asian Retro Box

## Sega Genesis / Megadrive

The Sega Genesis, known as the Megadrive in the rest of the world, was the first true 16 bit console, something heavily hyped by the Sega marketing department. Its graphics and sound were a huge step above the 8 bit consoles of the time, such as the NES. It was known for the quality of its sports games, and some of the most famous sports franchises of all time, such as Madden Football, premiered on the Genesis. It was also known for Disney themed games, such as Aladdin, Castle of Illusion and Quackshot. Other notable games for the system include the Sonic the Hedgehog series, Ecco the Dolphin, and Gunstar Heroes.

## Super Nintendo / Super Famicom

The Super Nintendo system was introduced in 1990 as a competitor to the Sega Genesis. It boasted superior graphics capabilities, but a slower CPU, Some of the best known games are Nintendo first party games such as Super Mario World, Super Metroid, and Donkey Kong Country. It is also know for its excellent RPGs, such as Final Fantasy II and III, and Chrono Trigger, as well as its excellent, and very hard, Star Wars games. The Super Famicom is the Japanese version, featured on the Asian Retro Box.

## Additional Systems on the Grandpa Box

#### <u>Arcade</u>

This section is pretty self explanatory. It encompasses all the games we stuck quarters into in the 80s and 90s. It does not include Laserdisc games like Dragon's Lair, which are in their own section (see Daphne, below). When playing an arcade game, use the Select button to insert a coin, and the Start button to start the game.

Because of the huge variety of hardware and software involved in classic arcade games, it is impossible to guarantee that every game in MAME will play correctly. In general, you should be fine with older games, but the newer the game is, the more apt it is to have slowdowns and other problems.

## <u>Daphne</u>

Daphne is an emulator for mid 80s laserdisc arcade games, such as Dragon's Lair and Space Ace. The laserdisc fad came and went in just a couple of years, so there are only a handful of games for the platform.

Because Laserdisc games were in the Arcade, you have to coin in, just like the Arcade games. Only instead of the Select button, use the Y button to insert a quarter. Press Y once or twice,en Start to begin the game. To exit a Daphne game, use the Select button.

#### Mattel Intellivision

The Intellivision was introduced in 1979 and was the primary competitor to the Atari 2600. Though technically superior, especially in audio, it was never able to catch the 2600 in sales, partially due to its unusual controller with the 12 button number pad. It was known for its sports games, Dungeon and Dragons games, and arcade ports.

You will need a keyboard attached to the GG Retro Box to play Intellivision Games. Use the '1' key to start the game and F1 to exit the emulator. Also, if you have a controller with analog thumb sticks, like an Xbox 360 or Playstation controller, do not use this with the Intellivision emulator.

In some Intellivision games, like Burger Time, it may seem like nothing happens after you press 1 or 2 to start the game. Try pressing either equals (=) or the Enter key on the number

pad. One of those should start the game. Also, if you only have one controller plugged in, and it does not seem to work, try pressing F6.

There is a second INTV emulator on the box called Ir-freeintv, which does not require a keyboard. This emulator has a virtual number pad built in. Press and hold either shoulder button to bring up the keypad. Use the d-pad on the controller to highlight the deisred key, and press B. Use Start + Select to exit the game. This emulator works best for games that use the keypad sparingly, or not at all.

## **Colecovision**

The Colecovision was introduced in 1982, at the height of the first home video game craze. It was the most technically advanced system of its time, and was known for the quality of its arcade ports, which were the closest to arcade quality you could get in a home system. It was the first system to offer peripherals like a steering wheel, a trackball, and even an expansion module which turned the unit into a full fledged home computer. Although superior from a hardware standpoint, it was a victim of bad timing, as the entire US video game market crashed in 1983, taking the Colecovision with it.

You will need a keyboard attached to the GG Retro Box to play Colecovision Games. Use the number keys to start the game and press right Shift, along with Enter, to exit the emulator. Also, if you have a controller with analog was thumb sticks, like an Xbox 360 or Playstation controller, do not use this with the Colecovision emulator.

#### Update:

The newer retro boxes, based on the Pi 4, have a completely different emulator. On this one, the Start + Select combo exits the game, as it does on most of the others. Also, several of the buttons on the Xbox style controller correspond to the numbers on the Colecovision controller. To play 2 player games on the higher difficulty levels, you may need to reconfigure your controller so that left and right thumb are defined.

Colecovision Button	<u>Xbox Button</u>
1	Х
2	Y
3	Right Shoulder
4	Left Shoulder
5	Right Trigger
6	Left Trigger
7	Right Thumb
8	Left Thumb

## Game Boy

The Game Boy was released by Nintendo in 1989, and became one of the best selling hand held consoles of all time. It played games on a monochrome screen, but still managed impressive graphics and game play. Some of its most notable games are Tetris, the Super Mario Land series, including the very first Wario game, and the very first Pokemon games, Red and Blue.

#### Game Boy Color

The Game Boy Color was the successor to the Game Boy, released in 1998. It featured a faster processor and a color screen. It was backward compatible with the original Game Boy, and could even add limited color to original Game Boy games.

#### Game Boy Advance

The Game Boy Advance was the successor to the Game Boy Color, released in 2001. It had a wider base, larger screen, and superior hardware, comparable to a Super Nintendo. In fact, many of the best selling games for the system were ports of NES and SNES games. It supported multiplayer with a link cable device.

#### Nintendo 64

The Nintendo 64 was released in 1996, and was the last home console to utilize cartridges, as opposed to optical disks. It had a unique, 3 pronged controller, with an analog thumb stick. Some of the most notable games include Super Mario 64, Legend of Zelda – Ocarina of Time, Diddy Kong Racing and Goldeneye.

Note that Nintendo 64 emulation is tricky, and some games may not run well on the Raspberry Pi device. Try experimenting with different emulators, and video resolutions. There is a page at https://docs.google.com/spreadsheets/d/1Sn3Ks3Xv8cIx3-LGCozVFF7wGLagpVG0csWybnwFHXk/edit#gid=282207345

listing which games work best with which emulators, and at which settings. Also, note the standard controllers, like the SNES style controllers, do not work well with N64 games. You need a controller with an analog thumb stick. The Xbox 360 style controller works quite well, or if you prefer an actual N64 style, do an Amazon/Ebay search for "N64 USB Controller".

#### Sega Master System

The Sega Master System was introduced in 1986, as a competitor to the NES. Although superior from a technical standpoint, the SMS never matched the popularity of the NES, due to Nintendo's superior marketing and library of third party games. It did considerably better in Europe and South America. It had a library consisting of 8 bit conversions of Genesis games, like Sonic the Hedgehog and Streets of Rage, as well as excellent originals like Phantasy Star, and Alex Kidd in the Enchanted World.

#### Sega Game Gear

The Game Gear was a hand held system released in 1991 as a competitor to the Game Boy. The hardware was comparable to the Master System, and in fact many of the games in its library were ports of Master System titles, or 8 bit conversions of popular Sega Genesis titles.

## <u>Sega 32X</u>

The 32X was an add on for the Sega Genesis, adding 32 bit processing power, and improved graphics. Although a failure at the time, it had a number of good titles available, such as Star Wars Arcade, and Knuckles Chaotix.

## Sega CD / Mega CD

The Sega CD was an add-on for the Genesis that allowed the system to play CD based games, as opposed to cartridges. The extra storage space of the CD format allowed for games with extra content, better music, and even full motion video. Notable games for the system include Sonic CD, the Lunar Games, and Sewer Shark as well as enhanced editions of Genesis games like Earthworm Jim and Ecco the Dolphin. The Mega CD is the overseas version, featured on the Japanese Retro Box.

#### TurboGrafx-16 / PC Engine

The TurboGrafx-16 was the first console of the 16-bit era. It was far more successful in Japan than the US, but still produced a number of excellent American games, though, like Keith Courage, the Bonk series, and Blazing Lasers, one of the best vertical shooters of all time.

#### <u>Vectrex</u>

The Vectrex was released in 1982 by a company called General Consumer Electronics. It was capable of playing only vector based games (think Asteroids and Tempest). Unlike other home consoles, this one did not plug into a TV, but came with its own integrated monitor. It disappeared only a few years later, but has maintained a small, devoted following.

#### Odyssey 2

The Odyssey 2, or Videopac as it was known in Europe, was one of the first home video games released, competing with the original Atari. Although most of its games were variations on more well known games, some of them improved on the concept, like Alien Invaders, and KC Munchkin.

Like the Colecovision and Intellivision, the O2 requires a keyboard to launch the games, and in some cases, to play them. Usually pressing a number like 1 or 2 starts the game. To exit an Odyssey 2 game, press Ctrl and Esc simultaneously on the keyboard.

#### <u>Atari 7800</u>

The Atari 7800 was a successor to the 2600 and 5200 consoles, released in 1986. Its best know titles are ports of arcade games, such as Joust and Asteroids, it also boasted original games, such as Ace of Aces and Midnight Mutants.

When playing Atari 7800 games, BEWARE THE X BUTTON. The X button acts as a soft reset, and will restart whatever game you are playing, without warning.

## Additional Systems on the Loaded Ultra Box

## <u>Atari 5200</u>

The 5200 was Atari's first attempt at a successor to their flagship VCS. It was essentially an Atari 400 computer that was modified to be a console. It boasted a number of excellent Arcade ports, such as Gorf and Missile Command, as well as graphically updated versions of 2600 games such as Pitfall.

The 5200 came under criticism for it's joystick. It was an analog stick, one of the first in the home market, but it was poorly constructed, uncomfortable to hold, and had a confusing number pad which was rarely used. The 5200 lasted only 2 years, being discontinued once the 7800 came out.

Because it was canceled fairly suddenly, the library contains a number of unreleased and prototype games. These games are often unfinished or have broken/missing features. They are included as curiosities. In addition, controls for the 5200 are imperfect, especially when it comes to analog games like Kaboom.

#### Neo Geo Pocket / Pocket Color

Neo Geo was a company that made Arcade games as well as a special console that could play them at home. Those games are all in the Arcade section. In 1998, after the success of the Game Boy, they decided to get in on the handheld market. Their fist machine was monchrome, had only 9 games, and lasted a year before being replaced by a color version. Most of the games were scaled down versions of their fighting and action games, like Fatal Fury and Metal Slug.

## **PlayStation**

The first PlayStation, the PS1 or PSX, is one of the most successful consoles of all time, selling 100 million units between 1995 and 2005. It is known for being one of the first consoles to successfully do 3D games. Some of the most famous franchises in the worls, like Crash Bandicoot, Spyro the Dragon, and Resident Evil, first started on the PlayStation.

A fairly large number of PS games don't have images or descriptions attached. Most of these are demo discs from magazines, or children's educational games from companies like Learning Tree.

Another note, many PS games were spread across multiple CDs, and require you to change CDs in the middle of the game to continue. This is done in the RetroArch menu, which you can access in-game by holding the Select button, and pressing X. Then go to Disc Control. Choose Eject Disc, then Load New Disc, then Insert Disc.

#### **Dreamcast**

Released in 1998, the Dreamcast was Sega's last entry into the console market. Although a commercial failure at the time, it has experienced a resurgence in popularity in recent years. It was known for the quality of its arcade conversions, such as Capcom vs SNK, and Street Fighter III, as well as original games like the first true 3D Sonic games, and Shenmue.

Dreamcast emulation, like the N64, is very difficult. A large number of games are simply incompatible with current emulators. The ones I offer on the upgrade are the ones I could get to work. In many cases, there are slowdowns in the intro and cut scenes and/or choppy audio. In some cases, there are slowdowns in the game play itself, although the game is playable.

The Dreamcast emulator uses a chunk of space on the SD card to simulate the VMU, or memory card. After a certain point, this virtual card will become full, meaning you can't have any more save game files. To purge it, you will need to go to the DC Bios. On an actual Dreamcast, this was done by booting up the device with no disc inside. On the Retrobox, it is a little different. Start a game normally, the press Start+X to bring up the RetroArch menu. Go to Options, then change the second selection, Boot to BIOS from false to true. Press B until you get to the Main Menu, then choose Quit Retroarch. Restart the game, and you will boot directly to the DC BIOS. From here choose File to get rid of any or all save game files to clear up space. Once that is done, press Select+X to bring up the Retroarch menu again. Set Boot to Bios to false, exit and restart.

There are 2 DC emulators on the Retro Box, Flycast and Redream. The vast majority run under Flycast, which functions like most of the emulator on the system, using Start + Select to exit the game. The ones using Redream exit different way. Press Select to bring up menu, then choose the top right option to exit.

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## <u>Atari Lynx</u>

The Lynx was a handheld system developed by Atari in 1990, and was the first handheld with a full color LCD screen. It had a number of unique features, such as the ability to turn the system "upside-down" to play either right or left handed, and even the ability to turn the device sideways to play games with a vertical orientation like Klax. It featured a number of ports of famous Arcade games like Joust and Qix, as well as originals like Battle Wheels and Warbirds.

## Turbografx-CD / PC Engine-CD

The Turbo CD was a peripheral for the TurboGrafx-16, released in 1988, that allowed CD based games, with many times the memory of the standard cartridge. While only a modest success in the US, the Japanese version did far better. It produced a number of notable games: RPGs like Exile and Beyond Shadowgate, shooters like Gates of Thunder and Super Darius, and PC game ports like Loom.

#### <u>PSP</u>

Stands for PlayStation Portable, a full color handheld released by Sony. It used a small optical disc called UMD that played not only games, but movies and music as well. A number of PS1 and even PS2 titles were ported to the system as well as some excellent original RPGs, action and sports games.

PSP emulation, like PS1, Dreamcast, and other more modern systems, is still not perfect. Although I play tested as much as I could, some games may have some slowdown or audio imperfections. Please contact me if you have any issues.

#### <u>Sega SG-1000</u>

The SG-1000 was Sega's first home console, an 8 bit system originally released in Japan at the same time as the Famicom. It was never released in the US or most of Europe, but it eventually became the Sega Master System, which was.

#### Virtual Boy

Nintendo doesn't often fail, but when it does, it does so in a big way. A perfect example is the Virtual Boy. It was an attempt at VR gaming, released in 1995. To save money, it was monochrome, displaying everything in red. Most users complained of headaches from the ill fitting headset. It lasted only a year, but produced some fun games, such as a Mario Clash, similar to the original Mario Bros Arcade game, and a 3D version of Space Invaders that should definitely be experienced. The 3D actually looks good on modern TVs, perhaps better than the original.

#### Famicom Disk System

The Famicom Disk System was a peripheral for the Famicom exclusive to Japan, that allowed games to be played on double sided disks, similar to PC floppy discs. You would often have to flip the disc over, either during the game, or sometimes at the beginning. Use the shoulder buttons to do this. If you see the letter 'B', followed by a bunch of Japanese characters at the start of the game, press Right Shoulder, then Left Shoulder, then Right Shoulder again. This ejects the current disk, chooses the B side, then reinserts the disc. The game will start normally.

## **Getting the Most out of Your Retro Box**

#### **Favorites**

If you have a group of favorite games that you play regularly, you can create an entire category for them, accessible from the Main Screen. To add a game to your Favorites, highlight it from within the System Screen, and press Y. You will see a message saying that the game has been added to Favorites. To remove a game from Favorites, press Y again.

To view your Favorites, go to the Main Screen, and press Start, then Game Collection Settings, then Automatic Game Collections. Check the box for Favorites, then keep pressing B until you get out of the menu. It will take a few seconds to create the Favorites screen, so be patient. You will now have a new category called Favorites on the Main Screen. Another category, last Played, can be set up the same way.

Note, some themes, such as Simple Dark, the default one that I install, do not handle the Favorites/Last Played screens well. Artwork is displayed, but no descriptions, and the game doesn't highlight when you choose it. Other themes, such as the default, Carbon, handle them better.

#### Saving Games

No one wants to play Final Fantasy in one sitting, so the ability to save games is crucial. If the original game had a save feature, it will work just like it did on the cartridge or disc. The only caveat is that you need to make sure the save game file is written to the SD card correctly. The best way to do this is to do a clean shutdown or reboot after saving and exiting the game. Do this by going to the Main Screen, pressing Start, then Quit, then Shutdown or Restart. If you simply power off the system after exiting, you risk losing the save game because it wasn't written correctly. Also, you risk corrupting the data on the SD card.

Most other systems also have a Quick Save and Load feature, which saves the game in the exact state you are currently in. o do a Quick Save, hold the Select button and press the Right Shoulder button. To load the last quick save state, hold Select and press the Left Shoulder button. This is a great feature for long games that did not originally have a save feature, like Super Mario 3 and the first 2 Sonic games.

#### <u>Themes</u>

Themes are a great way to change the look and feel of the Retro Box Interface. There are dozens available. There are themes for smaller displays, monochrome themes, and various themes devoted to specific TV shows, comic book characters, and even themes to mimic the UI of other gaming systems, like the Switch or Amiga computer. For a fill list of themes, go to <a href="https://github.com/retropie/retropie-setup/wiki/themes">https://github.com/retropie/retropie-setup/wiki/themes</a>.

To view and install themes, go to ES Themes in the Retropie screen. Make sure your Retro Box is connected to the Internet. The first option is View/Update Theme gallery. Choose Update to make sure you have all the latest themes, then View. You will see a slide show consisting of 2 screens for each theme. The pictures will automatically change every few seconds, but you can use the A or B button on the controller to go to the next one. It is useful to have a USB keyboard plugged in while doing this, so you can hit ESC to to exit, otherwise you are stuck looking at every picture until the end.

Once done viewing, you can install one or more themes. They are listed in the order you viewed them, so just go down to the one you want to install and press A. Themes can be several dozen Megabytes in size, so be careful of space restrictions on the SD card.

To switch themes, go to the Main Screen, press Start, then UI Settings then Theme Set. Use left and right on the gamepad to choose a theme, then B to exit. After a few seconds, the background will go dark. Press B again, and your new theme will be there.

#### **Classic Computers**

In addition to all the coolest consoles, the Retro Box can also emulate, and play games from, a number of classic computers, such as the Commodore 64, Amiga, Apple II and even MS-DOS. I don't offer those on my for sale units, because in order to play those games, you have to know how to use those old computers, which most folks do not. If, however, you have an interest in any of those classic computers, send me an email, and I will send you information as to everything that is involved in setting up your Retro Box to play them. If there is enough interest, I may at some point add it as a new product line.

## Hints and Troubleshooting

Emulating classic video games is not an exact science. Although the vast majority of games should play well, there may be some games in each system that do not play well, or at all. Try experimenting with different emulators, or different video settings in the launch menu.

Always, Always, ALWAYS do a proper shutdown of the device, rather than just powering it off. This ensures all save games are written to disk, and reduces greatly the risk of data corruption on the SD card. On rare occasions, you may be in a state where you can't do a proper shutdown, and have to power clear the device. You should be good, but if this is something that consistently happens with a specific game or a specific situation, please email me so I can investigate and try to fix it.

The Retropie software uses a program called a scraper, to collect metadata on each game, such as box art, descriptions, publisher, etc. It collects this data from various databases on the Internet. The scraper is not perfect, and the databases are not complete. A very small percentage of games may be identified incorrectly, or not identified at all. My apologies.

The device does not have a dedicated power button. If you need to reboot, you can do so from the main menu, or just unplug the power, wait 5 seconds, and plug it back in. In many cases, the power supply itself will have an on/off toggle switch, so use that instead. Also, the special NES / Super Famicom style cases have dedicated power and reset buttons.

Wireless game controllers will work with the device, although wired is better. Many wireless controllers have a lag that makes game play difficult. 2.4 Ghz wireless is FAR superior to Bluetooth. BT controllers are difficult to pair and get working, and they usually don't resync with the Retro Box on boot up. Check out my website, at grandpagaminglv.com to find reviews of various third party controllers. They are in the Blog section.

If you find yourself switching from one system to another without meaning to, you have Quick System Select turned on. To disable it, press Start to get to the Main Menu, then UI Settings.

I am always looking for ways to improve the device. If there are games not working, games/systems that you would like to see added to the device, or any suggestions for making the device better, contact me at <a href="mailto:support@grandpagaming.com">support@grandpagaming.com</a>. I will do my best to respond within 48 hours.

## **Warranty**

I guarantee the device for 1 year from the date of purchase. Any problems or concerns, please email me. If I am unable to resolve your issue through phone or email, I will replace the device or any defective components free of charge.