

MAME Arcade with MALA Frontend

User Manual

Rick Hoffman 7/23/2013

**Supercade Overview**

Most of the parts (excluding the actual cabinet) are leftovers from old PCs. The main components are:

* Motherboard: EPIA-SP Mini-ITX VIA C3/Eden EBGA CPU – Nehemia 1.3 GHz
* OS: WIN XP
* RAM: 1 GB
* Graphics: Radeon 9250, 128 MB RAM (Note: The motherboard has onboard graphics that I would have used. Except you could not rotate the screen with that).
* 80 GB HDD
* Onboard sound – Creative Amp and speakers
* Acer Monitor
* Belkin wireless adaptor
* All devices are plugged into a powerstrip mounted inside the cabinet
* USB, Headphone, Mic I/O board is located bottom left side.
* Ultimarc I-PAC interface for game button/PC interface

**Controls**

Note: The cabinet is configured for single player only.

* Control panel
	+ Joystick – 4/8-way joystick
	+ Six game control buttons
	+ One coin button
* Two side mount (pinball) buttons
* Single player start button (front of cabinet)
* Bezel
	+ Left side – Pause game (“p”)
	+ Left side – Exit game (“x”)
	+ Right side – PC Power (“p”)
	+ Right side – PC Reset (“r”)
* Volume control – upper left rear of cabinet
* Main power switch – lower left rear of cabinet

**General File/Programs**

*MAME32* – Is the main program that runs the games. It can be used as is or with a front end – is this case MALA. You can change individual game configurations from this program (e.g. screen orientation). All of the ROMs and marquee art are stored in the MAME32 directories.

*MALA* – Is the “frontend”. This program talks to MAME32 and tells it what to run. The frontend makes for an easier user experience – its more “arcade like” than using a Windows program.

**MALA for the Gamer**

Since playing games is the main purpose of this cabinet, here are the instructions on how to play a game!

1. Turn on the PC
	1. Turn on power to the cabinet (switch is in the lower left hand of the rear).
		1. The Supercade marquee is lit when there is power to the cabinet.
	2. Press the Power (p) button on the right side of the bezel.
	3. Allow Windows to boot. MALA will automatically load, so be patient and not touch anything until the screen looks like an arcade machine and not a PC.
2. Select a game – There are two methods for this
	1. Joystick - Use the joystick (Left/Right) to select the category and (Up/Down) to highlight the game. The joystick is VERY sensitive and getting the exact category/game can get iffy.
	2. Keyboard – Use the cursor keys instead. Sort of looses the arcade feeling – but works better.
3. Start the game
	1. Push One Player button and wait for the game to load and boot up.
		1. Most games start fairly quickly, but some take a while. Be patient.
		2. Follow any directions such as “push any button”, “move joystick left and then right”, etc.
	2. Push Coin ($) button – add as many credits as you want. It’s free!
4. Play the game
	1. Early, basic MAME games will just use the joystick and one button (A). However, most MAME games will use the joystick and two buttons (A) and (B).
	2. On games that use more buttons you will need to play with the other buttons to see what they do.
	3. A few games have custom mapped keys to improve game play. Examples include Chicken Shift (use the side mounted “pinball” buttons) and Tube It (use a cluster of four buttons for movements and the other buttons for other functions). A list of these games may be documented elsewhere… or not.
5. Pause/Exit the game – buttons located on left side of bezel
	1. Pause (p) – pauses the game.
	2. Exit (x) – exit the game and return to MALA.

**Accessing Windows XP**

The cabinet is configured to start directly into MALA when the PC is started. To exit MALA and work in Windows, first push the Exit (x) button. When the “Quit?” prompt appears, push the One Player button.

**Adding Games**

Because of the way the Supercade is designed, it is easier to do the file downloads from the Supercade. But the research is best done on a regular PC. Game reviewers may provide both the title and the filename – the filename is useful to help find the exact same version of the game they are reviewing. One method of adding games:

1. Downloading games
	1. Open browser.
	2. Go to a ROM site. [redacted] is a good source. They tend to have most games. Plus they don’t have as many adware, spyware, etc. than some of the others.
	3. Search for the game you want – use the game title, not the file name at this point.
	4. Download the .zip file into “\MAME\roms”. Do not change the filename in any way.
2. Testing games
	1. Open MAME32
	2. “Refresh” the listing so MAME adds the new games to the list.
		1. Some games will be listed several times and have different color squares in front of the name. The main game is the one we are usually interested in. But the various versions will have slightly different titles (e.g. “version 2”, “Japan”, etc.) and filenames.
		2. Games with a red box are not functional.
	3. Run each game and determine if its worth keeping and to make any needed changes to the configuration. About the only configuration change will be the screen orientation.
	4. Make a note of what category the game will go into. Categories are (names may change over time):
		1. Vertical Shooters
		2. Puzzle games
		3. Racing games
		4. Shooter/Side scroller
		5. Pinball
		6. Old School Classics
		7. Fighting games
3. Download marquees
	1. Go back online and search for marquees. Use a search term like “MAME marquee space invaders” and search pictures/web sites. You can look for the original marquee or a good screen shot that shows what the game is about (which is probably better for the less known titles).
	2. When the image is located, download it into \MAME\marquees by using “save image as”. Files must be in .png or .jpg formats. The file name MUST match the file name of the .zip file it will be associated with.
4. Update MALA so it can access the new games.
	1. Run \MALA\MALA173\MalaGameList.exe. This is the program that associates the new files with the various categories.
	2. Open the various .mlg files as needed and scroll the list on the left to find the new game. Double click on that title and it will then populate to the right side (the right side has the list of games for that category).
	3. Once all the new games have been added, save the updated file. It will ask if you want to overwrite the existing file. Select ok.

**Re-assigning Buttons**

Buttons can be custom assigned for individual games. For example, the pinball games can have the left and right flippers assigned to the left and right side cabinet buttons (by default, they are assigned buttons A and B). This function is handled through MALA.

1. Open the game in MALA.
2. Hit TAB on the keyboard while the game is running. A dialog box will open.
3. Arrow to “Input (This Game)” and hit enter.
4. Arrow to the control you want to change and hit enter to clear the existing assignment.
5. Press the desired button on the control panel of the Supercade.
6. Hit ESC to exit out of the menus.

**Other Games and Programs**

This cabinet was primarily designed as a vertical screen MAME configuration. The PC has sufficient power to run most MAME ROMs. A few other emulators where tested on this. Comments on these are as follows:

* Frontends – Most of the frontends required a better processor and were more complicated than MALA.
* MAME emulators – MAME32 is the only MAME emulator I got to work properly on this and my main office PC.
* Other emulators – Some of these seem to work (e.g. Genesis, Sega, etc.). But they require additional software, directory structures, etc. In addition, they do not interface with MALA.
* Future Pinball works on the most basic games. But once the tables get very complex, the machine will not run them. Plus the screen orientation needs to be switched and ends up being very awkward.
* Virtual Pinball will not run on this machine.

Supercade – Control Panel Button Assignment

Button assignment is defined below. The top line is the input labeled on the I-PAC and the bottom line is the keyboard equivalent.

1 SW 1

KB: L-ctrl

START 1

KB: 1

2 Right

KB: G

2 Left

KB: D

1 SW 2

KB: L-alt

Coin 1

KB: 5

1 SW 6

KB: X

1 SW 5

KB: Z

1 SW 4

KB: L-Shift

1 SW 3

KB: Space

Joystick

Ultimarc IPAC Default Button Assignments

|  |  |  |
| --- | --- | --- |
| **Input** | **Normal Codes** | **Codes with shift(hold 1 player start)** |
| COIN 1 | 5 |  |
| COIN 2 | 6 |  |
| START 1 | 1 |  |
| START 2 | 2 | ESC |
| 1 RIGHT | R arrow | Tab |
| 1 LEFT | L arrow | Enter |
| 1 UP | U arrow | Key Below ESC (Volume, gamma, etc )  |
| 1 DOWN | D arrow | P (pause) |
| 1 SW 1 | L-ctrl | 5 (Coin A) |
| 1 SW 2 | L-alt |  |
| 1 SW 3 | space |  |
| 1 SW 4 | L-shift |  |
| 1 SW 5 | Z |  |
| 1 SW 6 | X |  |
| 1 SW 7 | C |  |
| 1 SW 8 | V |  |
| 1 A | P |  |
| 1 B | ENTER |  |
| START 1 | 1 |  |
| START 2 | 2 | Esc |
| 2 RIGHT | G |  |
| 2 LEFT | D  |  |
| 2 UP | R |  |
| 2 DOWN | F |  |
| 2 SW 1 | A |  |
| 2 SW 2 | S |  |
| 2 SW 3 | Q |  |
| 2 SW 4 | W |  |
| 2 SW 5 | I |  |
| 2 SW 6 | K |  |
| 2 SW 7 | J |  |
| 2 SW 8 | L |  |
| 2 A | TAB |  |
| 2 B | ESC |  |