

ELF 412 in 1

Arcade Game Board

Manual

Contents

Paragraph		Page
1	Connector Layout	1
2	Operation Instructions	2
2.6/7	Returning to Game List	3
3	System Settings Configuration	4
3.1	1. Exit	4
3.2	2. JAMMA I/O Test	4
3.3	3. MY Cabinet Type = Upright	4
3.4	4. MY Cabinet Type = Cocktail (Default)	4
3.5	5. Show Serial Number	5
3.6	6. Service (Sub Menu)	5
3.6.1	6.1 Display	5
3.6.2	6.2 System Mode	6
3.6	6.3 Game Mode (All Games / Edit {Para4,5 ,6})	5
3.6	6.4 Free Browse (On Off)	5
3.6	6.6 Stop Timer (On Off)	5
3.6	6.7 Music(On Off)	5
3.7	7. Coin Setting	6
3.7.5	Free Play	7
3.8	8. Show Coins Counter	7
3.9	9. Flip Screen	7
4	Edit Game List (Para 3.6 Edit select)	8
5	Single Game Setting (Para 3.6 Edit select)	10
6	Game Difficulty & Lives Set (Para 3.6 Edit select)	10
7	Game Configuration Settings	11
7.1	Method 1 Game Configuration	11
7.2	Method 2 Game Configuration	12
8	Test or S1 Button Function	12
9	Common Problems and Solutions	12
10	JAMMA Wiring MAP	13
	SPECIAL NOTE -- Software	14
	Attachment: Game List	

1. CONNECTOR LAYOUT.

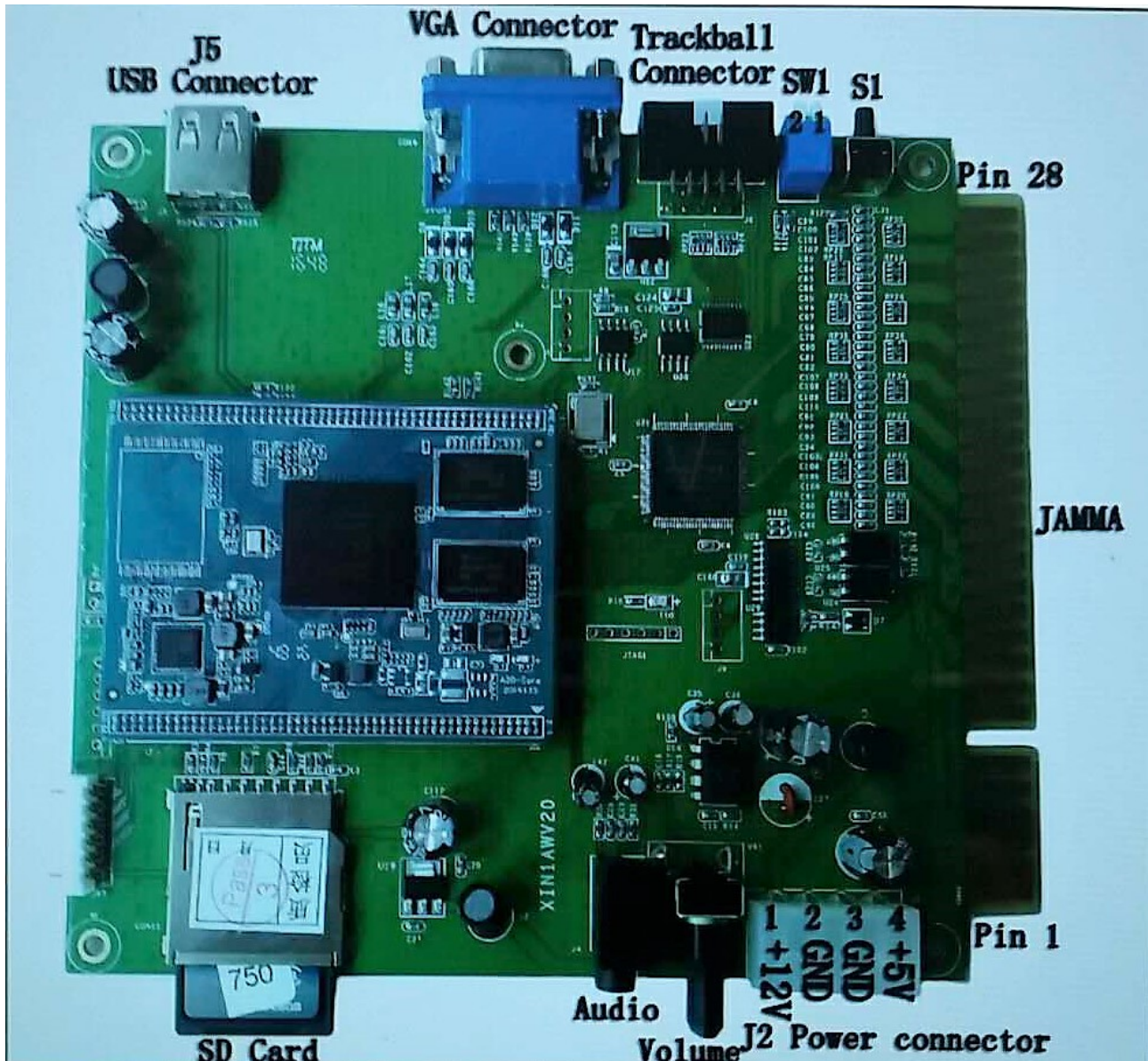
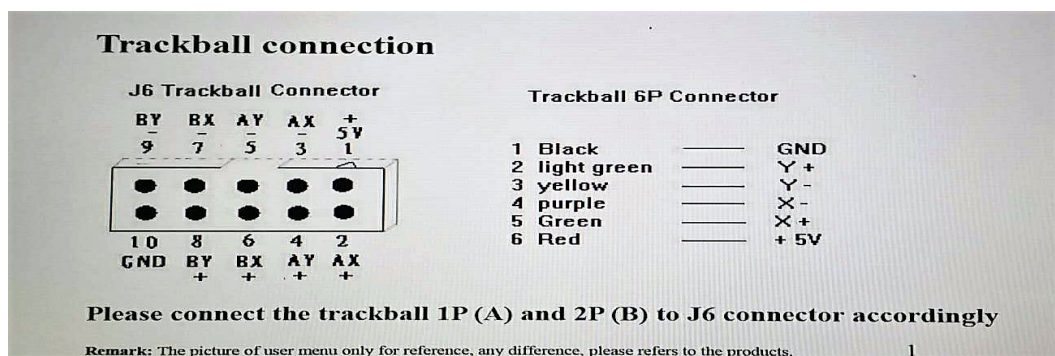


Figure 1 :: Game board Layout

CAUTION: The function of JAMMA connector power and J2 power is same; do not use them BOTH together as that WILL destroy the game board.



Please connect the trackball 1P (A) and 2P (B) to J6 connector as shown.

2. OPERATION INSTRUCTION.

Connect the game board and switch on the machine power, after the logo of the “GAME ELF” appears, the machine will enter game list menu (about 20s-40s).



Figure 2 :: Game Menu Layout Note:: Press 1P-C for Help

1. Insert coins first and select game. (No coins for Free play for free browse).
2. Select game by moving 1P joystick up or down (**single step**), and left or right (**Page Shift**) to view game list.

3. Press **1P- START** button to enter game.
4. If Coin recycling is set to “No”, after entering the game, all coins the player inserts will be added into the game automatically. If Coin recycling is set to “Yes”, Press **1P START** button for 3~5seconds to pop up menu, and select “continue” to insert coins.
5. All games on Cocktail mode and some games on Upright mode need 2 coins (or more coins) and press **2P-START button first to enable 2 players mode**. If Coin recycling is set to “Yes”, for these games. Press **2P-START** to transfer and add coins to new game.
6. **Press 1P-START button for 3 seconds, “Release Now” is displayed, to display a pop up menu, and select “exit” to return to the Game List (as figure 2) or “continue” to resume in same game.**
7. **Press 1P-START for 3 seconds to return directly game list .**
8. **SYSTEM SETTINGS CONFIGURATION.(Entering Config. / Edit Mode)**
 1. Switch on the machine power, when the string “**Press TEST button to setup**” appears, press **TEST** or **S1** button to enter the System Settings Menu.

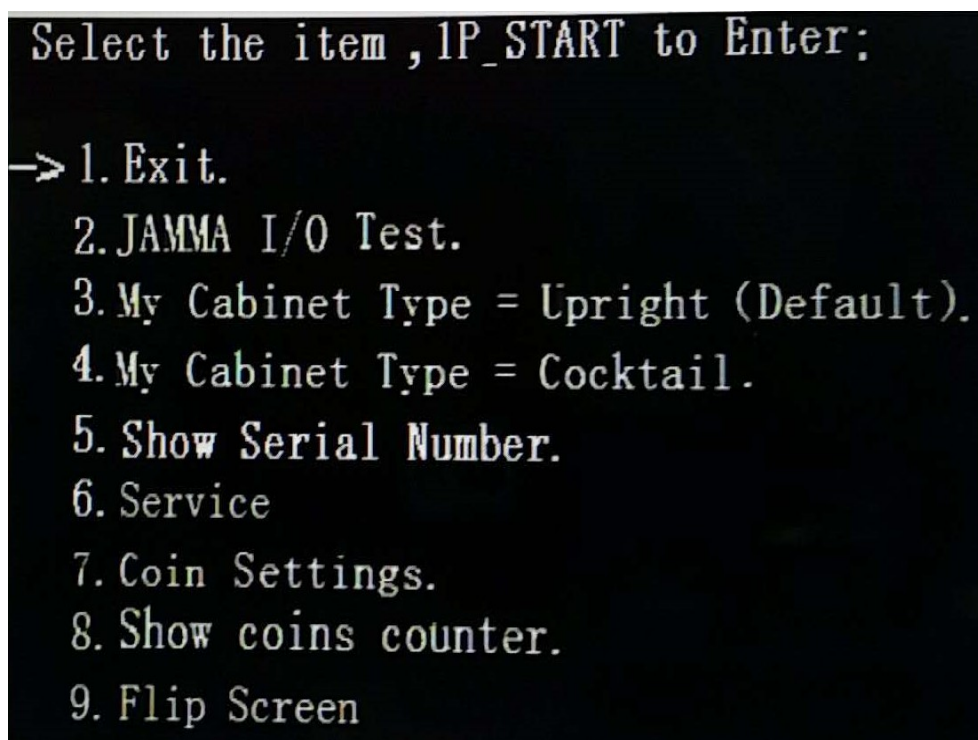


Figure 3 :: System Settings Menu.

2. Select item by moving **1P joystick up or down** and press **1P-START** to enter.
3. According to the screen display prompts, perform the operation.
4. Select “**Exit**” to quit and re-enter to the game list (see Figure 2).

3.1 Exit.

3.2 JAMMA Input / Output(I/O) Test. (sub Menu)

Check input/output buttons function is 1 or zero(0).(It is invalid for family mode.)

* 【TEST】 = 【S1】 * 【SERVICE】 = COIN

3.3 MY Cabinet Type ☐ Upright

According to the screen display prompts, perform the operation step by step. All game configurations are reset to factory defaults and loaded in Upright mode. Prompt(DEFAULT) will be displayed after a successful setting. Otherwise please perform again.

3.4 MY Cabinet Type ☐ Cocktail (Factory Default)

According to the screen display prompts, perform the operation step by step. All vertical configurations of games are loaded in Cocktail mode. Prompt(DEFAULT) will be displayed after a successful setting. Otherwise please perform again.

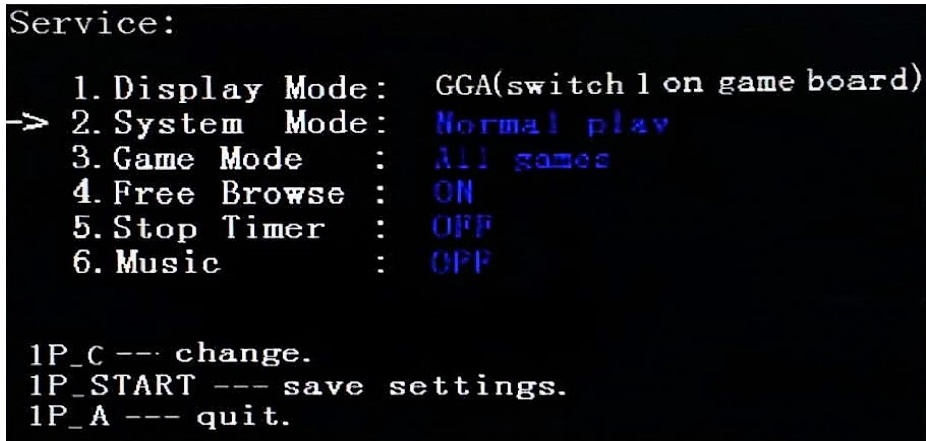
3.5 Show Serial Number

This serial number is only marked number, we suggest that our customers note this number and be convenient for getting service in the future.

Elf 412 in 1 Serial

3.6 SERVICE (sub Menu)

1. On the System Setting Menu, select item "6. Service" and press **1P-START** to enter the Service Menu.



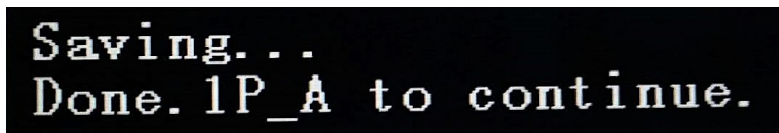
```
Service:
  1. Display Mode:  GGA(switch 1 on game board)
-> 2. System Mode:  Normal play
  3. Game Mode     :  All games
  4. Free Browse   :  ON
  5. Stop Timer    :  OFF
  6. Music         :  OFF

1P_C --- change.
1P_START --- save settings.
1P_A --- quit.
```

Figure 4 :: Service Menu

NOTE:: The Dark Blue text is very difficult to read

2. Moving 1P joystick up or down to choose item, then **1P-C** to modify item.
3. **SW1** switch on game board adjust Display Mode. See Remark para 3.6.1..
4. After finishing modification, press **1P-START** to save setting(as figure 5), then press **1P-A** to return System Menu.
5. Select "1. Exit" to exit, the new configuration is valid after system automatically restarts.



```
Saving...
Done. 1P_A to continue.
```

Figure 5:: Saving Text

3.6.1 Display Mode (Setting Switch SW1)

1. Display mode

This game board support both VGA and CGA display modes, see below for settings.

VGA mode (31.5Khz): Before switching on the machine power, set BIT1 of SW1 ON. Connect the VGA monitor to the VGA output connector. The output resolution is 800x600.

CGA mode (15.75KHz): Before switching on the machine power, set BIT1 of SW1 OFF to use a regular JAMMA cabinet. **The VGA port output is invalid.**

Remark: Do not operate SW1 with power applied. This may cause the special electronic smoke to leak out affecting normal operation!

3.6.2 System Mode

In order to edit the “**Game list/ Game difficulty/ Lives setting/ Game configuration**” it is necessary to enter the “**Config/Edit Mode**”. If you don’t need to adjust these items, please set to “**Game Mode (Normal play mode)**” for normal operation.

3.7 Coin Settings.

1. On the **System Menu**, select item “**7.Coin settings**” to enter Coin Settings.

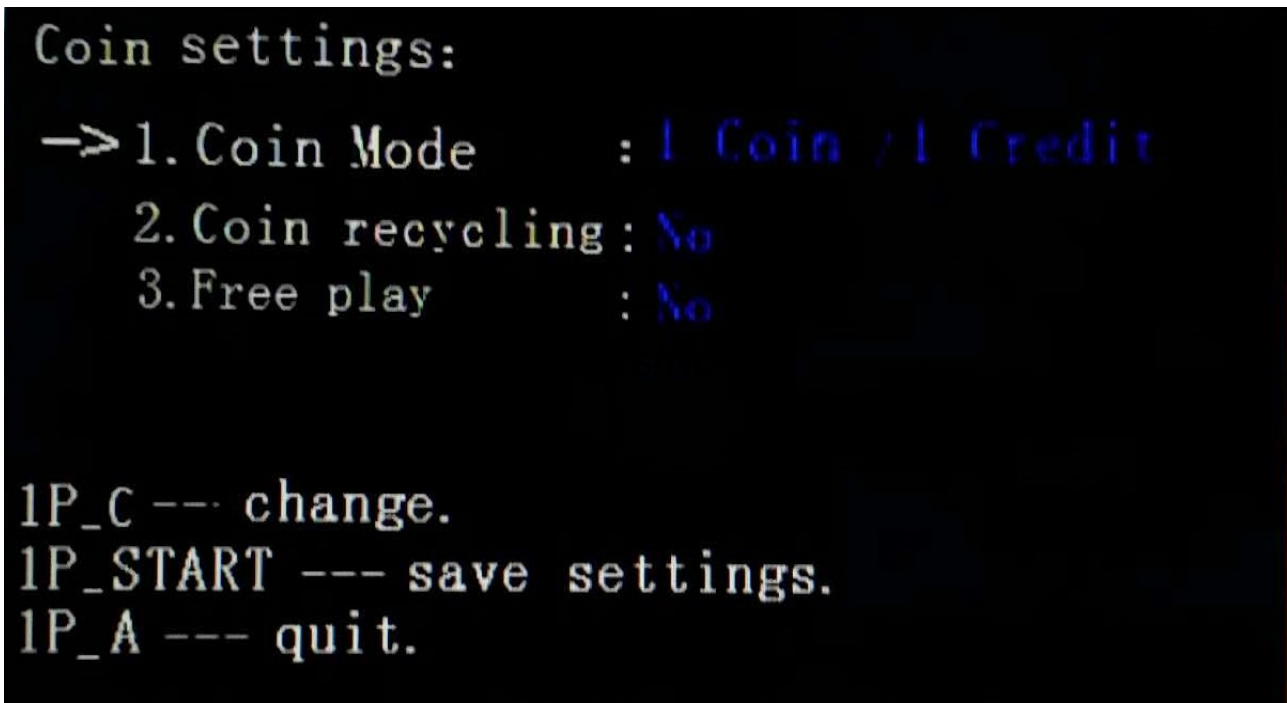


Figure 7:: Coin Setting Submenu.

NOTE:: The Dark Blue text is very difficult to read

3.7 Free play:

1. Free play (ON): Play all games for free.
2. Free play (OFF): Disable for free play.

3.8 Show coins counter

1. Show the number of coins in the current mode of operation (The function is invalid for Free play mode and home mode).

3.9 Flip screen

1. Flip screen: Game screen flip 180 degree.

4. EDIT GAME LIST

1. **Service Settings Menu** (per Figure 4), set **System Mode** to **Config/Edit mode**, then save and quit the system setting. Enter the **Game edit interface**. In the **Config/Edit mode**, press TEST or S1 button on the **Game List Menu** to enter the menu below.

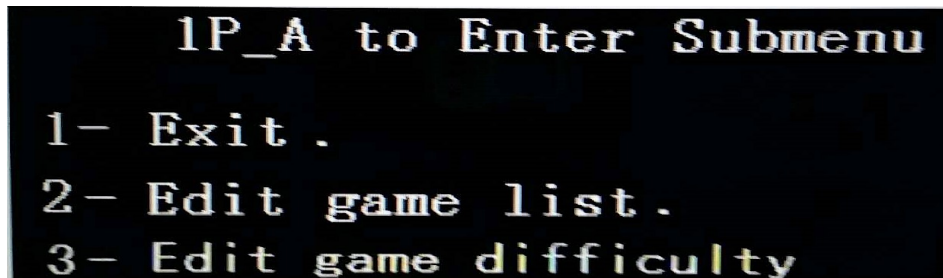


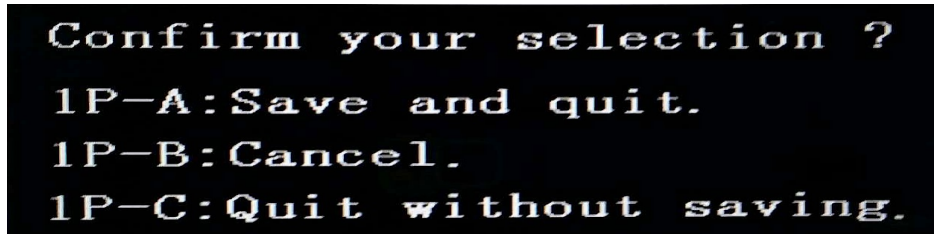
Figure 7:: Game List and Game Difficulty Submenu.

2. Move 1P joystick up or down to select "2-Edit game list" and enter the "Edit game list" menu.



Figure 8:: Show or Hide Menu

3. The item "*" means to show game list, no "*" means to hide game list.
4. Select game list by moving 1P joystick (up or down to choose game, left or right to view game menu) and press 1P-A to decide to show or hide the selected game.
5. Press 1P-B button to show all games, press 1P-C button to hide all games.



6. After the game list edition is finished, press 1P-START button to enter the save menu (as Figure 9). Please follow the instruction to save. Then return to interface (Figure 7), quit "enter game list interface" (Figure 2). **Figure 9::**
 Selection Submenu

After editing the **Game List**, please enter **Service** setting again (per Figure 4), set **System Mode** to **Normal** and save it. The game will be started in normal after the system reboot(as Figure 2).

5. SINGLE GAME SETTING AND OPERATION.

1. Please refer to “**Edit game list**” as above, and enter the edit **Game List menu**.
2. Moving 1P joystick up or down to select game, press **1P-D** button to set. If it shows “SET” in front of game title you selected, that means the setting is successful.
3. Enter Service Menu, set the Game mode to Single mode,
 1. Set System mode to “Normal play” mode and save it.
 2. The Single mode will be started after re-entering the game.

Remark □ In Single game mode, please change to “NO” in the coin recycling.

6. GAME DIFFICULTY AND LIVES SETTING.

Enter **Service Menu** (per Figure 4), set **System mode** to **Config/Edit mode**, and then enter the **Game Difficulty submenu** (per Figure 7). Select the item “**3.Edit game difficulty**” to enter the **Game List Difficulty Menu** as below.



Figure 10 :: Game list Difficulty Menu

1. Button Assignments

1. **1P-Joystick**: select the game that needs to be changed.
2. **1P-A** button: adjust the game difficulty.
3. **1P-B** button: adjust the lives.
4. **1P-C** button: set ALL games to hardest.
5. **1P-D** button: set All games to hard.
6. **1P-E** button: set ALL games to normal.

7. **1P-F** button: set All games to easy.

10

Notice: when some games' difficulty show as "x(x)" or lives show as "x", it means this game has no difficulty and no lives to adjust, or it means this game doesn't support to adjust game difficulty and lives. If it is the 2nd option, please enter the game and set the game configuration specifically. (See the detail setting on "Game configuration settings").

2. After finishing it, press **1P-START** and follow the instruction to save. Press **1P-A** button to save the modified games and press **1P-D** button to force to save all games. Saving all games will take a long time.
3. Set the "**System mode**" back to "**Normal play**" mode and enter the Game List menu to start game as usual.

7. GAME CONFIGURATION SETTINGS

7.1 Method 1 for Game configuration settings:

1. Enter **Service** menu (as figure 4), set **System mode** to "**Config/Edit**" mode, save and quit the system settings menu, then enter the Game List menu.
2. Moving 1P joystick up or down to select the game you want to change, press **1P-START** button to start game and enter the Game Configuration editor menu.



Figure 11:: Game Config. Editor

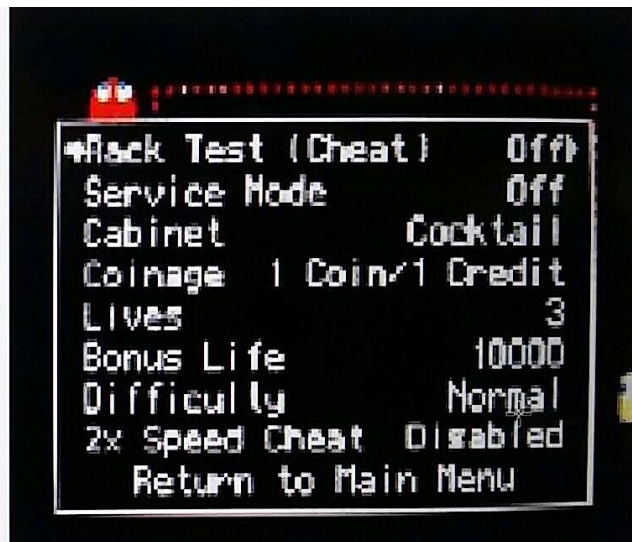


Figure 12 :: Game Settings

3. Move 1P joystick to select "**Dip Switches**" and press **1P-A** button to enter the setting menu(as figure 12). (This operation is invalid for some games, please refer to Method 2.)
4. Select option by moving 1P joystick up or down, and press **1P-C** or **1P-D** button to adjust.

5. Select "**Return to main menu**" to quit the setting menu after setting (as Figure 11), and select "**Exit game**" to back game list (as figure 2). Restart the game, then new settings are valid.

11

6. Please go on to set other games if you need. If not, set **System mode** to "**Normal play**" mode and save it. Re-enter the game list and the game will be started in Normal mode.

7.2 Method 2 for Game configuration settings (Original configuration adjustments):

1. Refer to Method 1, enter the game configuration editor menu(as figure 11), and select the item "Enter Service Mode (if listed)" to enter game's original setting menu (when some games select this item, it's need to quit game first and enter again, then enter the game configuration setting menu).
2. Follow the instructions of the game configuration setting menu to modify game configuration and save it.
3. After finishing it, press TEST or S1 to show the game configuration setting menu, select "Exit game" and return to game list menu (as figure 2). Enter the game again and the new configuration is valid. **Caution** □ The game will enter setting menu after starting if "Service mode" is set to ON.
Refer to Method 1, set "Service mode" to "OFF".
4. Set the System Mode to "Game Mode" and enter the normal playing mode.

8. TEST OR S1 BUTTON FUNCTION

1. System setting button, press **TEST or S1** button to enter the system setting when the screen show "**Press TEST to setup**" (as figure 3).
2. In the Normal play mode, press TEST or S1 button to quit and return to the game list (as figure 2). Or press and hold **1P-Start** for 3~5seconds.
3. In the Config/Edit mode, press TEST or S1 button in the game to pop up or hide the configuration setting menu (as figure 11). Press S1 button on the game list menu (as figure 2), and enter the Edit game list interface.

9. COMMON PROBLEMS AND SOLUTIONS

Problem: the game screen is not synchronised in the cga mode when game start.

Solution: Adjust the horiz. stabiliser in the game monitor until the image is clearly visible.

10. JAMMA WIRING

JAMMA Connector		Wire MAP
Component Side --Player One		Solder Side – Player Two
Assignment	Pin	Assignment
GND	1	GND
GND	2	GND
+5V	3	+5V
+5V	4	+5V
///	5	////
+12V	6	+12V
////	7	////
////	8	////
JMA 9	9	JMB 9
Speaker +	10	Speaker --
JMA 11	11	JMB 11
Video Red	12	Video Green
Video Blue	13	Video Sync.
GND	14	Service
Test	15	JMB 15
1P – Coin	16	2P – Coin
1P –Start	17	2P – Start
1P --Up	18	2P --Up
1P --Down	19	2P --Down
1P – Left	20	2P – Left
1P – Right	21	2P – Right
1P – A	22	2P – A
1P – B	23	2P – B
1P – C	24	2P – C
1P – D	25	2P – D
1P – E	26	2P – E
1P – F	27	2P – F
GND	28	GND

Caution: Do not connect the PIN27 of JAMMA port to ground lead, it will affect the game's playing.

Remark: The picture of user menu only for reference, any difference, please refer to the product.

Switch Locations

1. Illuminated Push Button. 8Way Joystick Lamp off, 4 way Joystick Lamp on.

1. Joystick Player 1. Up, Down, Left, Right
2. 1P-A First right of the joystick. (Player 1 Switch A).
3. 1P-B Middle of three. (Player 1 Switch B).
4. 1P-C Right Hand Switch of three on Console (Player 1 Switch C).

SPECIAL NOTE

SOFTWARE

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1. This computer hardware equipment is provided without software.
2. Customers may obtain software by their own methods (from the software provider or download software from related web sites).

We do not supply software for this hardware.

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