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# TEKKEN 4 Game PCB Kit

Connections and Adjustments

Part No 90500133 Issue 2

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#### **KIT CONTENTS**

| Description                                  | Part No                | Quantity    |   |
|--|------------------------|-------------|---|
| Tekken 4 PCB Rack Assy                       | XTEK4-PCB              | 1           |   |
| DVD Rom CD Disc                              |                        | XTEK4-CDROM | 1 |
| Jamma (B) PCB                                |                        | XTEK4-JAMMA | 1 |
|  | Power Supply Loom      |             | 1 |
| Book Assists James (B) DOB somestime asking  | RGB Video Loom         |             | 1 |
| Rack Assy to Jamma (B) PCB connecting cables | RCA (Phono) Audio Loom |             | 1 |
|  | Data Loom              |             | 1 |
| Amp El connectors to 48way Edge Adaptor Loom |                        | 69200067    | 1 |
| Amp El connectors with Flying Leads Loom     | 69200066               | 1           |   |
| Button Decals                                |                        | 1 set       |   |
| Instruction Card                             |                        | 1           |   |
| Move List Card                               |                        | 1           |   |
| Title Board                                  |                        |             | 1 |
| Tekken 4 Promotional Poster                  |                        |             | 1 |
| Top Flash                                    | 40000703               | 1           |   |
| Universal Cabinet Side Decal - LHS / RHS     | 40000704               | 2           |   |
| Header Decal                                 | 40000705               | 1           |   |
| Connection and Adjustment Manual             | 90500133               | 1           |   |

#### 1. SPECIFICATIONS

COMPATIBILITY: JAMMA STANDARD (with JAMMA (B) PCB)

JAMMA VIDEO STANDARD (JVS)

**PCB INPUT POWER:** +5v (±5%) @ 7A (Min), +12v (±5%) @ 2A (Min)

**OPERATING** Temperature +5°C to +45°C

**ENVIRONMENT:** Humidity 10% to 85% (no condensation)

MONITOR ORIENTATION Horizontal Orientation

AND SIGNAL: Horizontal Frequency 15kHz / 31kHz (selectable)

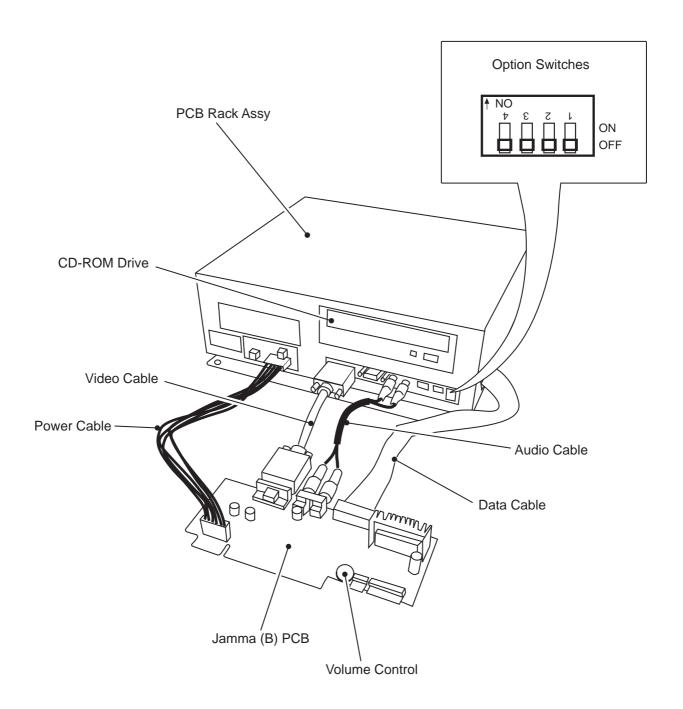
RGB output level 0.7V p-p / 3.0V p-p (selectable)

when set to 15kHz

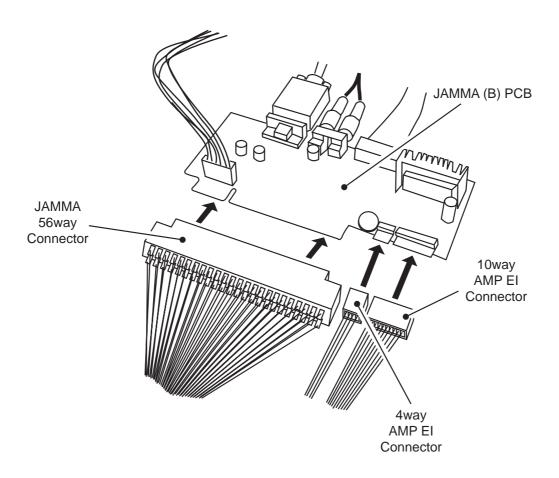
0.7V p-p when set to 31kHz

Composite Sync / Separate Sync (selectable)

#### 2. CABINET CONNECTIONS (Standard Jamma)



The JAMMA (B) PCB is connected to the game cabinet with a 56way Edge Connector (standard JAMMA) and 4 and 10way AMP El Connectors.



Note: Supplied in the Kit is an Amp El connectors to 48way extender card adaptor loom, for cabinets with an existing 48way connector, and an AMP El connectors with flying leads loom for cabinets without a 48way connection.



4 and 10way AMP EI Connector with 48way Extender Card Part No. 69200067



4 and 10way AMP EI Connector with flying leads Part No.69200066

#### **Connections for Standard JAMMA Cabinet**

| TEKKEN 4             |       |                |                      |  |  |  |  |
|----------------------|-------|----------------|----------------------|--|--|--|--|
| JAMMA                | 56way | Edge C         | Connector            |  |  |  |  |
| Solder Side          | Termi | Component Side |                      |  |  |  |  |
| GND                  | А     | 1              | GND                  |  |  |  |  |
| GND                  | В     | 2              | GND                  |  |  |  |  |
| +5volt               | С     | 3              | +5volt               |  |  |  |  |
| +5volt               | D     | 4              | +5volt               |  |  |  |  |
|                      | Е     | 5              |                      |  |  |  |  |
| +12volt              | F     | 6              | +12volt              |  |  |  |  |
| Polarizing Key       | G     | 7              | Polarizing Key       |  |  |  |  |
| Coin Counter 2       | Н     | 8              | Coin Counter 1       |  |  |  |  |
|                      | J     | 9              |                      |  |  |  |  |
| L Speaker (-)        | K     | 10             | L Speaker (+)        |  |  |  |  |
| Audio (-) (mono)     | L     | 11             | Audio (+) (mono)     |  |  |  |  |
| Video GREEN          | M 12  |                | Video RED            |  |  |  |  |
| Video SYNC           | N     | 13             | Video BLUE           |  |  |  |  |
| SERVICE              | Р     | 14             | Video GND            |  |  |  |  |
|                      | R     | 15             | TEST                 |  |  |  |  |
| Coin Switch 2        | S     | 16             | Coin Switch 1        |  |  |  |  |
| P2 START             | Т     | 17             | P1 START             |  |  |  |  |
| P2 Lever UP          | U     | 18             | P1 Lever UP          |  |  |  |  |
| P2 Lever DOWN        | V     | 19             | P1 Lever DOWN        |  |  |  |  |
| P2 Lever LEFT        | W     | 20             | P1 Lever LEFT        |  |  |  |  |
| P2 Lever RIGHT       | Υ     | 21             | P1 Lever RIGHT       |  |  |  |  |
| P2 PUNCH (Left) Sw1  | Z     | 22             | P1 PUNCH (Left) Sw1  |  |  |  |  |
| P2 PUNCH (Right) Sw2 | а     | 23             | P1 PUNCH (Right) Sw2 |  |  |  |  |
| P2 Sw3 Not used      | b     | 24             | P1 Sw3 Not Used      |  |  |  |  |
|                      | С     | 25             |                      |  |  |  |  |
|                      | d     | 26             |                      |  |  |  |  |
| GND                  | е     | 27             | GND                  |  |  |  |  |
| GND f 28 GND         |       |                |                      |  |  |  |  |

| TEKKEN 4               |                     |  |  |  |  |  |
|------------------------|---------------------|--|--|--|--|--|
| 10way AMP El Connector |                     |  |  |  |  |  |
| Pin No                 | Description         |  |  |  |  |  |
| 1                      | GND                 |  |  |  |  |  |
| 2                      |                     |  |  |  |  |  |
| 3                      | P2 KICK (Right) Sw5 |  |  |  |  |  |
| 4                      | P2 KICK (Left) Sw4  |  |  |  |  |  |
| 5                      |                     |  |  |  |  |  |
| 6                      |                     |  |  |  |  |  |
| 7                      | P1 KICK (Right) Sw5 |  |  |  |  |  |
| 8                      | P1 KICK (Left) Sw4  |  |  |  |  |  |
| 9                      |                     |  |  |  |  |  |
| 10                     | GND                 |  |  |  |  |  |

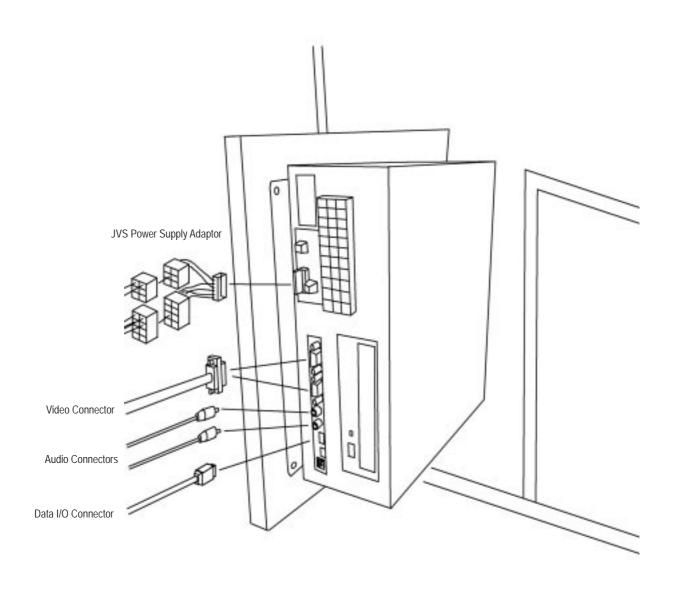
| TEKKEN 4              |               |  |  |  |  |  |
|-----------------------|---------------|--|--|--|--|--|
| 4way AMP El Connector |               |  |  |  |  |  |
| Pin No                | Description   |  |  |  |  |  |
| 1                     |               |  |  |  |  |  |
| 2                     |               |  |  |  |  |  |
| 3                     | R Speaker (+) |  |  |  |  |  |
| 4                     | R Speaker (-) |  |  |  |  |  |

Connector Loom (Part no 69200066)

## Adaptor for Earlier Tekken Series Cabinets with 48way Edge Connector (Part No 69200067)

|                  | PREVIO                    |       |        |                     |                   |
|------------------|---------------------------|-------|--------|---------------------|-------------------|
|                  | 48way Extension Connector |       |        |                     |                   |
|                  | Solder Side               | Termi | nal No | Component Side      |                   |
| 4w AMP EI pin 4  | R Speaker (-)             | A24   | B24    | R Speaker (+)       | 4w AMP EI pin 3   |
|                  |                           | A23   | B23    |                     |                   |
|                  |                           | A22   | B22    |                     |                   |
|                  |                           | A21   | B21    |                     |                   |
|                  | Polarizing Key            | A20   | B20    | Polarizing Key      |                   |
|                  |                           | A19   | B19    |                     |                   |
|                  |                           | A18   | B18    |                     |                   |
| 10w AMP EI pin 4 | P2 KICK (Left) Sw4        | A17   | B17    | P2 KICK (Right) Sw5 | 10w AMP EI pin 3  |
|                  |                           | A16   | B16    |                     |                   |
|                  |                           | A15   | B15    | GND                 | 10w AMP EI pin 10 |
|                  |                           | A14   | B14    | GND                 | 10w AMP EI pin 10 |
|                  |                           | A13   | B13    |                     |                   |
|                  |                           | A12   | B12    |                     |                   |
|                  |                           | A11   | B11    |                     |                   |
|                  |                           | A10   | B10    |                     |                   |
|                  |                           | A9    | В9     |                     |                   |
|                  |                           | A8    | В8     | GND                 | 10w AMP EI pin 1  |
|                  |                           | A7    | В7     | GND                 | 10w AMP EI pin 1  |
|                  |                           | A6    | В6     | P1 KICK (Right) Sw5 | 10w AMP EI pin 7  |
| 10w AMP EI pin 8 | P1 KICK (Left) Sw4        | A5    | B5     |                     |                   |
|                  |                           | A4    | B4     |                     |                   |
|                  |                           | А3    | В3     |                     |                   |
|                  |                           | A2    | B2     |                     |                   |
|                  |                           | A1    | B1     |                     |                   |

#### 3. CABINET CONNECTIONS (JVS Standard)

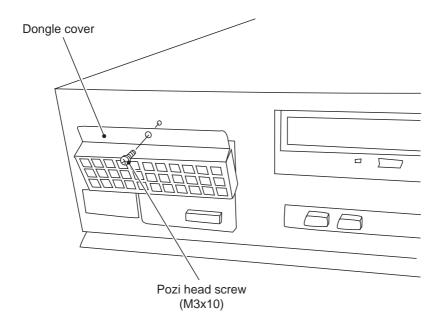


#### 4. FITTING THE DONGLE

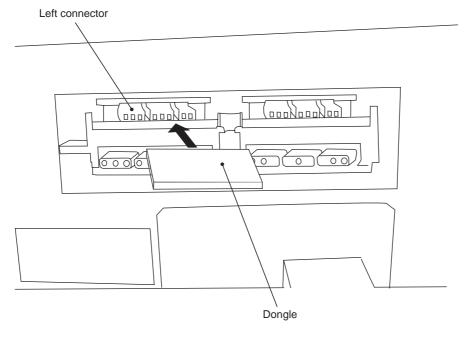
The dongle included in this kit is limited to this game only. DO NOT insert this Dongle in other games. Inserting the Dongle in other games may cause damage.

Ensure that the power is switched OFF before inserting the Dongle.

1. Remove 1off pozi head screw (M3x10) and remove the Dongle Cover.



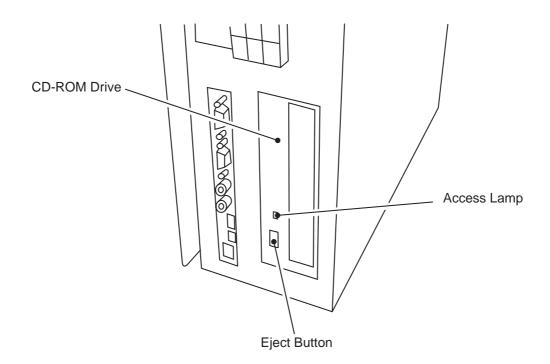
2. Fit the Dongle to the left hand connector.



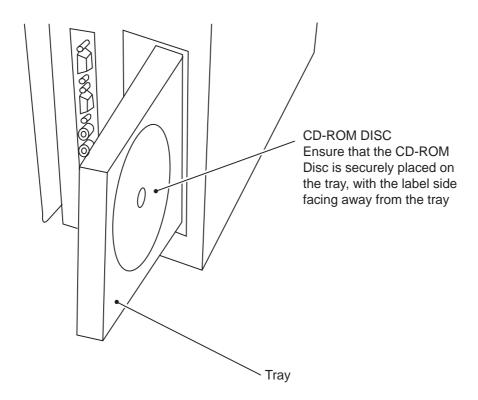
3. Refit the Dongle cover and pozi head screw (M3x10)

#### 5. FITTING THE CD-ROM DISC

- The CD-ROM Disc must be inserted with the power switched on. To prevent an electric shock, accident or injury, do not touch any parts other than those specified below.
- The supplied CD-ROM Disc is designed exclusively for this product. Never use the CD-ROM Disc in any other product. Do not insert other CD-ROM Discs in the CD-ROM drive of this game.
- The CD-ROM tray retracts automatically after 10 seconds.
- 1. Press the eject button of the CD-ROM drive to open the tray.



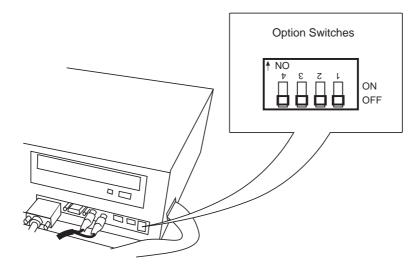
2. Place the CD-ROM Disc on to the tray, ensuring that the label side (printed surface) is facing away from the Tray.



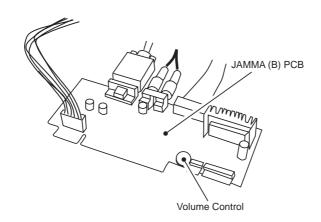
- 3. Press the Eject button to retract the Tray in to the unit.
- 4. Switch the power OFF, wait approx 10 seconds then switch the game back ON.

#### 6. ADJUSTMENTS AND SETTINGS

The Game PC Board Assy is fitted with 4 Option Switches.



The JAMMA (B) PCB has the Volume Control fitted.



#### 6-1 Option Switches

Switch 1 is used to change between Test Mode and Game Mode.

ON: Test Mode OFF: Game Mode

Switch 2 is used to set the output level of the video signal.

31kHz ON: 0.7V p-p OFF: 0.7V p-p 15kHz ON: 3.0V p-p OFF: 0.7v P-P

Switch 3 is used to change the monitor Sync Frequency

ON: 31kHz OFF: 15kHz

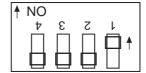
Note: When using a 31kHz monitor, set the RGB input of the monitor to 0.7v. If the monitor does not have a setting adjustment, refer to page 17 section 6-2-1 "Display Test", and change the Contrast and RGB Brightness levels to adjust the brightness.

Switch 4 is used to set the Video Sync Signal

ON: Composite Sync OFF: Seperate Sync

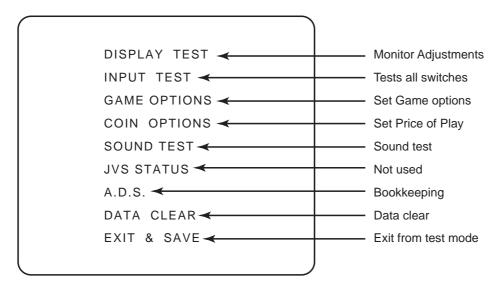
#### 6-2 Test Mode

To enter Test Mode set the Test switch in the cabinet (if fitted) to ON, or if no Test switch is fitted to the cabinet, set Option switch 1 ON



Note: The test mode is activated only when the cabinet Test switch or Option switch 1 is moved from OFF to ON. If the game is switched on with either switch in the ON position the Test Mode will not be activated. The switch must be switched OFF and then ON to enter the test mode.

When the Test Mode is entered, the following screen is displayed.



Use the Joystick Up or Down to step through the tests. (The selected test will be displayed in red)

Press the 1 Player Button 1 to enter the selected test.

After making adjustments select EXIT and press the 1 Player Button 1 to return to the above screen. Select another test or select 'EXIT & SAVE' and press the 1 Player Button 1 to save the changes and return to the Game Mode.

Note: If 'EXIT &SAVE' is not selected and activated, any changes made may not be stored properly. Switching the cabinet Test switch or Option 1 switch OFF does not exit the Test Mode.

Switch the cabinet Test switch or Option 1 switch OFF.

#### 6-2-1 Display Test

This test allows the following checks and adjustments to be made.

Colour Edit

Adjust contrast and brightness of each colour to match video output from the PCB to the Monitor.

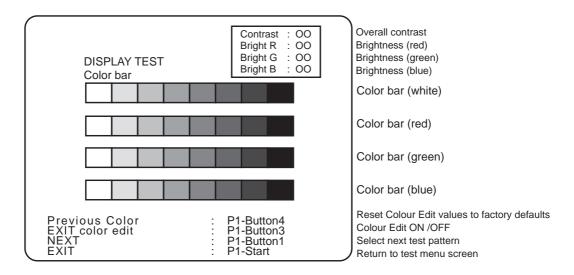
Note: This adjustment should only be made if the correct picture quality cannot be achieved by using the normal monitor adjustments.

Convergence

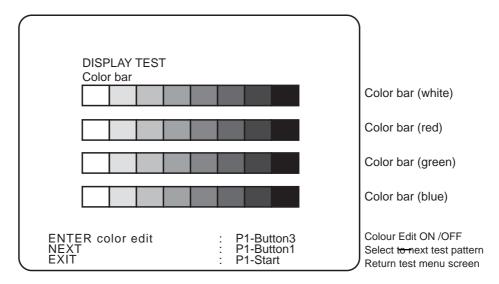
Check and adjust the size, position and distortion of the screen image.

■ Interlace Check

Switches between interlaced and non-interlaced display. (Only with 15kHz video signal).



1. Select display Test from the Test Menu Screen, the following screen is displayed.



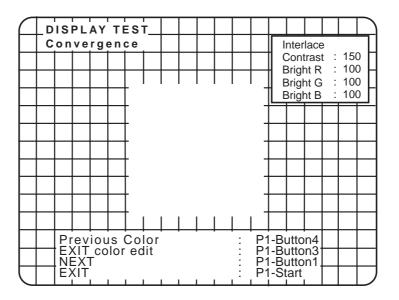
- 2. Each time the 1P Button 3 is pressed the Colour Edit adjustment box is turned ON or OFF.
- 3. Press the 1P Button 1 to step to the next test function COLOUR BAR  $\rightarrow$  CONVERGENCE  $\rightarrow$  INTERLACE -

#### 6-2-2 Colour Edit

- 1 Ensure that the Colour Edit Adjustment Box is showing. (Press P1 Button 3 if the Adjustment box is not displayed.
- 2. Use the Joystick UP/DOWN to step to the required adjustment. (Contrast, Brightness (red), Brightness (green), Brightness (blue)).
- 3. Use the Joystick LEFT/RIGHT to adjust the value.
- 3. When all adjustments have been made, press P1 Button 1 to step to the Convergence Test or P1 Start Button to return to the Main Test Menu screen

#### 6-2-3 Convergence

Use this screen to adjust the geometry (height, width, etc.) of the Monitor.



When all adjustments have been made, press P1 Button 1 to step to the Interlace Test or P1 Start Button to return to the Main Test Menu screen.

#### 6-2-4 Interlace

Interlace Mode: This mode provides a more detailed and smoother graphics

than the non-interlaced mode. This is achieved by shifting the picture display a half line in the vertical direction every other frame scan, so doubling the vertical resolution without

changing the horizontal/vertical frequency.

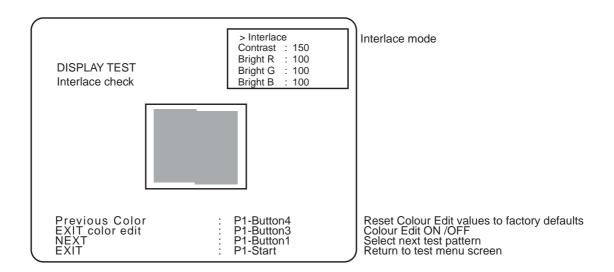
Non-Interlaced Mode: Use this display if the interlace mode results in flicker over

the entire screen display. In the non-interlaced mode, there is no shift of the display position, and the display remains

constant every time.

1 Ensure that the Colour Edit Adjustment Box is showing. (Press P1 Button 3 if the Adjustment box is not displayed.)

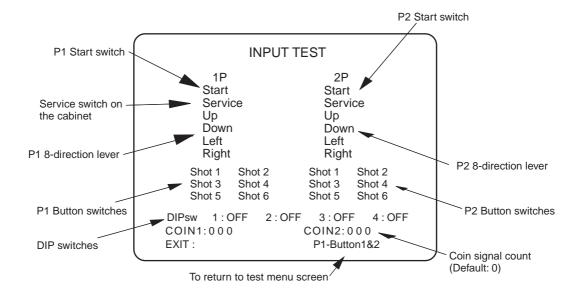
2. Use the Joystick LEFT/RIGHT to change Interlace/Non Interlace.



3. When the adjustment has been made, press P1 Button 1 to step back to the Colour Edit Test or P1 Start Button to return to the Main Test Menu screen.

#### 6-2-5 Input Test

Select Input Test from the Main Test Menu. The following screen is displayed.



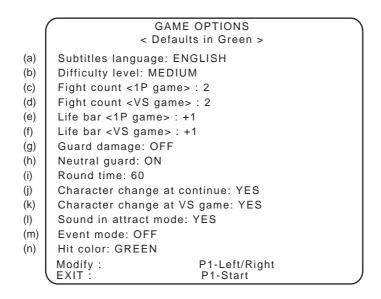
Each time a switch is operated, the corresponding item on the display will change colour to red.

Note: When player button 1 is pressed Shot 1 is indicated. When player button 2 is pressed Shot 2 is indicated When player button 3 is pressed Shot 4 is indicated When player button 4 is pressed Shot 5 is indicated

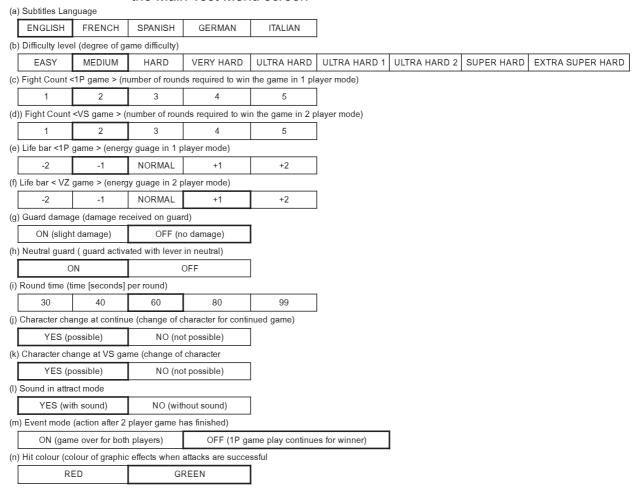
When testing is completed, press P1 Buttons 1 and 2 together to return to the Main Test Menu screen.

#### 6-2-6 Game Options

 Select Game Options from the Main Test Menu. The following screen is displayed.

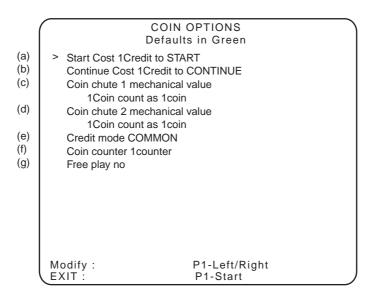


- 2. Use the Joystick UP/DOWN to step to the required adjustment.
- 3. Use the Joystick LEFT/RIGHT to adjust the value.
- 4. When all adjustments have been made, press P1 Start Button to return to the Main Test Menu screen



#### 6-2-7 Coin Options

1. Select Coin Options from the Main Test Menu. The following screen is displayed.



- 2. Use the Joystick UP/DOWN to step to the required adjustment.
- 3. Use the Joystick LEFT/RIGHT to adjust the value.

(a) Start cost (number of credits to start a game)

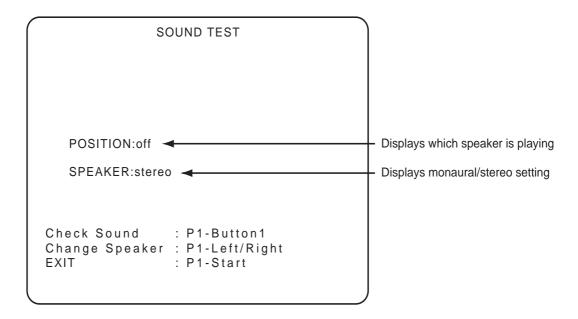
4. When all adjustments have been made, press P1 Start Button to return to the Main Test Menu screen

Note: When using a CashFlow acceptor ensure that Cost and Coin Chute values are set to 1

| 1                   | 2  | 3                      | 4                                  | 5   | 6                                | 7          | 8            | 9         |
|---------------------|--|------------------------|------------------------------------|---|----------------------------------|------------|--------------|-----------|
| o) Continue<br>ost) | cost (numl   | per of cred            | ts to contin                       | nue a gam   | e - must be                      | equal to o | r smaller th | nan start |
| 1                   | 2  | 3                      | 4                                  | 5   | 6                                | 7          | 8            | 9         |
| ) Coin chu          | te 1 mecha   | nical value            | (number                            | of credits fo   | or each coi                      | n)         |              |           |
| 1                   | 2  | 3                      | 4                                  | 5   | 6                                | 7          | 8            | 9         |
| ) Coin chu          | te 2 mecha   | nical value            | (number                            | of credits for  | or each coi                      | n)         | -            |           |
| 1                   | 2  | 3                      | 4                                  | 5   | 6                                | 7          | 8            | 9         |
| e) Credit Mo        | ode (credit  | storage an             | d use)                             |   |                                  | 1          |              |           |
| accoun              | COMMON<br>are stored a<br>t regardles<br>tch or start<br>operated. | s a single<br>of which | Different<br>Credits f<br>by playe | EACH ONI<br>credit acc<br>established<br>rom coin 1<br>er 1 and cre<br>re used by | ounts are d. are used edits from |            |              |           |
| Coin cour           | nter (assign   | ment of co             | in meters)                         |   |                                  | •          |              |           |
| Both coir           | 1 COUNTE<br>n switches :<br>coin counte                            | share one              | Each coi                           | COUNTER<br>n switch ha  | as its own                       |            |              |           |
| g) Free play        | ′  |                        |                                    | _   |                                  | •          |              |           |
| ,                   | no coins<br>uired)   |                        | coins<br>ired)                     |   |                                  |            |              |           |

#### 6-2-8 Sound Test

1. Select Sound Test from the Main Test Menu. The following screen is displayed.



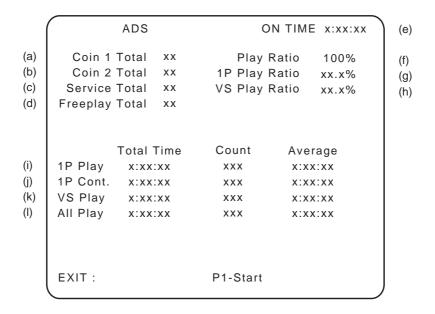
- 2. Press 1P Button 1 to conduct a stereo check. Sound will be produced from the left speaker only, then the right speaker only, then both speakers together. The display will show which speaker is active.
- 3. Use the Joystick LEFT/RIGHT to change between STEREO/MONO sound.
- 4. When testing has been completed, press P1 Start Button to return to the Main Test Menu screen

#### 6-2-9 JVS Status

This test is inactive and not used on JAMMA system cabinets, it is only operational on JVS system cabinets.

#### 6-2-10 A. D. S - (Book Keeping)

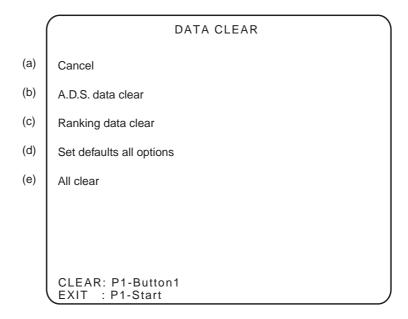
1. Select ADS from the Main Test Menu. The following screen is displayed.



- (a) Total games on 1 player side.
- (b) Total games on 2 player side.
- (c) Total number of games using the Service switch.
- (d) Total number of games during Free Play.
- (e) Total time game has been switched on.
- (f) Total time the game has been played as a 1P game, Total number of 1P games played and the Average time of a 1P game.
- (g) Total time the game has been played as a 1P Continue game, Total number of 1P Continue games played and the Average time of a 1P Continue game.
- (h) Total time the game has been played as a 2P game, Total number of 2P games played and the Average time of a 2P game
- (g) Total time the game has been played, Total number of games played and the Average time of all games.

#### 6-2-11 Data Clear

1. Select Data Clear from the Main Test Menu. The following screen is displayed.



- 2. Use the Joystick UP/DOWN to step to the required adjustment.
- 3. When all adjustments have been made, press P1 Start Button to return to the Main Test Menu screen
- (a) Returns to the Main Test Menu.
- (b) Resets all Book Keeping data to zero
- (c) Resets all ranking data such as record of consecutive wins to factory default
- (d) Resets all Game and Coin Options to factory default.
- (e) Executes (a), (b) and (c) all at once.

## Copies of Namco Game Manuals can be downloaded from our **website:** www.namco.co.uk

They are located under Components Distribution

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