



DEDICATED CABINET

OPERATING MANUAL

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# 1. SPECIFICATIONS

**POWER** 120VAC @ 60Hz USA & CANADA

**DIMENSIONS** Width: 26.5" (673 mm)  
 Height: 73.5" (1867 mm)  
 Depth: 33" (838 mm) with Gun Assy = 40" (1016 mm)

**WEIGHT** 311 lbs (142 kg)



## 2. GAME PLAY

**Wing Shooting Championship** is a sports hunting game that has an exciting **COMPETITION MODE**. Two players can play at the same time in competition mode which is a first time for the market!

### HOW TO PLAY

- Insert coin(s)
- Press Hunter 1 or Hunter 2 button to start game.
- Use Sammy 27" Shotgun to select stage and weapon. (Pump the Shotgun before you shoot the screen each time.) There are 5 kinds of weapons.

**PUMP ACTION (5 bullets), SEMI-AUTO (3 bullets)**

**OVER&UNDER (2 bullets), SIDE BY SIDE (2 bullets)**

**SINGLE SHOT (1 bullet)**

- 6 different bird stages. (GREAT PLAINS QUAIL, RING-NECKED PHEASANT, CANADA GOOSE, AMERICAN BLACK DUCK, MALLARD DUCK and EASTERN BOB WHITE QUAIL)
- 12 areas with one bonus stage for each bird. The Bonus stage is CLAY SHOOTING.

**Perfect round in bonus stage advances to a SPECIAL STAGE!**

**How To Hunt**

**Shoot only birds in flight**  
**Don't shoot any grounded birds** ----- **Lose one chance**  
**When hunter misses all birds** ----- **Lose one chance**  
**Don't shoot any female pheasants** ----- **Lose one chance**

**GREAT PLAINS QUAIL**   **MALLARD DUCK**   **CANADA GOOSE**   **RING NECKED PHEASANT**   **EASTERN BOB WHITE QUAIL**   **AMERICAN BLACK DUCK**

**HEAD TO HEAD COMPETITION**

Two players can play at the same time in competition mode.  
Perfect round in bonus stage advances to **SPECIAL STAGE**



### 3. HANDLING AND INSTALLATION

**PLEASE TAKE A MOMENT TO READ THE FOLLOWING BEFORE YOU TURN ON YOUR NEW GAME.**

The **Wing Shooting Championship** video game is an indoor game machine. It is not designed for outdoor use. Avoid installing the game in the following locations:

- ◆ Locations subject to rain or water damage
- ◆ Locations in direct sunlight
- ◆ Locations subject to extreme heat
- ◆ Locations near hazardous or flammable liquids or chemicals

You will need the following minimum dimensions for egress into your location:

- ◆ 80 inches in height
- ◆ 30 inches in width

#### INSTALLATION

Unpack your game carefully. Be careful of the shipping staples. They can be sharp.

Your game is assembled and should not need any assembly.

Level your game using enclosed Leg levelers.

The standard voltage for U.S. and Canada 120V / 125V - 3A; Europe 220V / 240V - 2A.

Use of extension cords is prohibited.

Use only a grounded outlet. **YOUR GAME MUST BE GROUNDED!!!**

The minimum space required for operation in your locations should be:

- ◆ 80" high
- ◆ 30" wide
- ◆ 75" depth

**THE GAME MUST BE LEVEL. USE A LEVEL TO AVOID NEEDLESS ADJUSTMENTS.**

#### SAFETY PRECAUTIONS

- ◆ Be sure to turn the power off or unplug the game before working on the unit.
- ◆ Do not unplug game by pulling on the line cord.
- ◆ Replace line cord if the insulation is damaged in any way with one of equal quality.
- ◆ Replace open fuses with same type and rating.
- ◆ Re-check and re-seat all harness connections.

## 4. CONNECTOR TABLES

| <b>JAMMA CONNECTOR</b> |              |              |                       |              |                 |
|------------------------|--------------|--------------|-----------------------|--------------|-----------------|
| <b>MAIN P.C.BOARD</b>  |              |              |                       |              |                 |
| <b>SOLDER SIDE</b>     |              |              | <b>COMPONENT SIDE</b> |              |                 |
| <b>FUNCTION</b>        | <b>COLOR</b> | <b>PIN #</b> | <b>PIN #</b>          | <b>COLOR</b> | <b>FUNCTION</b> |
| GROUND                 | BLK          | <b>A</b>     | <b>1</b>              | BLK          | GROUND          |
| GROUND                 | BLK          | <b>B</b>     | <b>2</b>              | BLK          | GROUND          |
| +5VDC                  | RED          | <b>C</b>     | <b>3</b>              | RED          | +5VDC           |
| +5VDC                  | RED          | <b>D</b>     | <b>4</b>              | RED          | +5VDC           |
|                        |              | <b>E</b>     | <b>5</b>              |              |                 |
| +12VDC                 | BLU          | <b>F</b>     | <b>6</b>              | BLU          | +12VDC          |
| KEY                    |              | <b>H</b>     | <b>7</b>              |              | KEY             |
| COIN METER B           |              | <b>J</b>     | <b>8</b>              |              | COIN METER A    |
| COIN LOCKOUT B         |              | <b>K</b>     | <b>9</b>              |              | COIN LOCKOUT A  |
| SPEAKER(-)             | BLK          | <b>L</b>     | <b>10</b>             | WHT/BLK      | SPEAKER(+)      |
|                        |              | <b>M</b>     | <b>11</b>             |              |                 |
| VIDEO GREEN            | GRN          | <b>N</b>     | <b>12</b>             | RED          | VIDEO RED       |
| VIDEO SYNC             | WHT          | <b>P</b>     | <b>13</b>             | BLU          | VIDEO BLUE      |
| SERVICE CREDIT SWITCH  | BRN/WHT      | <b>R</b>     | <b>14</b>             | BLK          | VIDEO GROUND    |
|                        |              | <b>S</b>     | <b>15</b>             | WHT/GRY      | TEST SWITCH     |
| COIN SWITCH B          |              | <b>T</b>     | <b>16</b>             |              | COIN SWITCH A   |
| 2P START BUTTON        |              | <b>U</b>     | <b>17</b>             |              | 1P START BUTTON |
|                        |              | <b>V</b>     | <b>18</b>             |              |                 |
|                        |              | <b>W</b>     | <b>19</b>             |              |                 |
|                        |              | <b>X</b>     | <b>20</b>             |              |                 |
|                        |              | <b>Y</b>     | <b>21</b>             |              |                 |
|                        |              | <b>Z</b>     | <b>22</b>             |              |                 |
|                        |              | <b>a</b>     | <b>23</b>             |              |                 |
|                        |              | <b>b</b>     | <b>24</b>             |              |                 |
|                        |              | <b>c</b>     | <b>25</b>             |              |                 |
|                        |              | <b>d</b>     | <b>26</b>             |              |                 |
| GROUND                 | BLK          | <b>e</b>     | <b>27</b>             | BLK          | GROUND          |
| GROUND                 | BLK          | <b>f</b>     | <b>28</b>             | BLK          | GROUND          |

| <b>CN6 - 4 PIN SUB CONNECTOR</b> |              |                 |
|----------------------------------|--------------|-----------------|
| <b>MAIN P.C.BOARD (1P GUN)</b>   |              |                 |
| <b>PIN #</b>                     | <b>COLOR</b> | <b>FUNCTION</b> |
| <b>1</b>                         |              |                 |
| <b>2</b>                         | GREEN        | PUMP SWITCH     |
| <b>3</b>                         | BLACK        | PUMP SWITCH GND |
| <b>4</b>                         |              |                 |

| <b>CN8 - 4 PIN SUB CONNECTOR</b> |              |                 |
|----------------------------------|--------------|-----------------|
| <b>MAIN P.C.BOARD (2P GUN)</b>   |              |                 |
| <b>PIN #</b>                     | <b>COLOR</b> | <b>FUNCTION</b> |
| <b>1</b>                         |              |                 |
| <b>2</b>                         | GREEN        | PUMP SWITCH     |
| <b>3</b>                         | BLACK        | PUMP SWITCH GND |
| <b>4</b>                         |              |                 |

| <b>CN5 - 4 PIN SUB CONNECTOR</b> |              |                 |
|----------------------------------|--------------|-----------------|
| <b>MAIN P.C.BOARD (1P GUN)</b>   |              |                 |
| <b>PIN #</b>                     | <b>COLOR</b> | <b>FUNCTION</b> |
| <b>7</b>                         | RED          | +5VDC           |
| <b>8</b>                         | WHITE        | TRIGGER SWITCH  |
| <b>9</b>                         | BROWN        | GROUND          |
| <b>10</b>                        | BLUE         | OPTICAL         |

| <b>CN7 - 4 PIN SUB CONNECTOR</b> |              |                 |
|----------------------------------|--------------|-----------------|
| <b>MAIN P.C.BOARD (2P GUN)</b>   |              |                 |
| <b>PIN #</b>                     | <b>COLOR</b> | <b>FUNCTION</b> |
| <b>7</b>                         | RED          | +5VDC           |
| <b>8</b>                         | WHITE        | TRIGGER SWITCH  |
| <b>9</b>                         | BROWN        | GROUND          |
| <b>10</b>                        | BLUE         | OPTICAL         |

# 5. DIP SWITCH TABLES



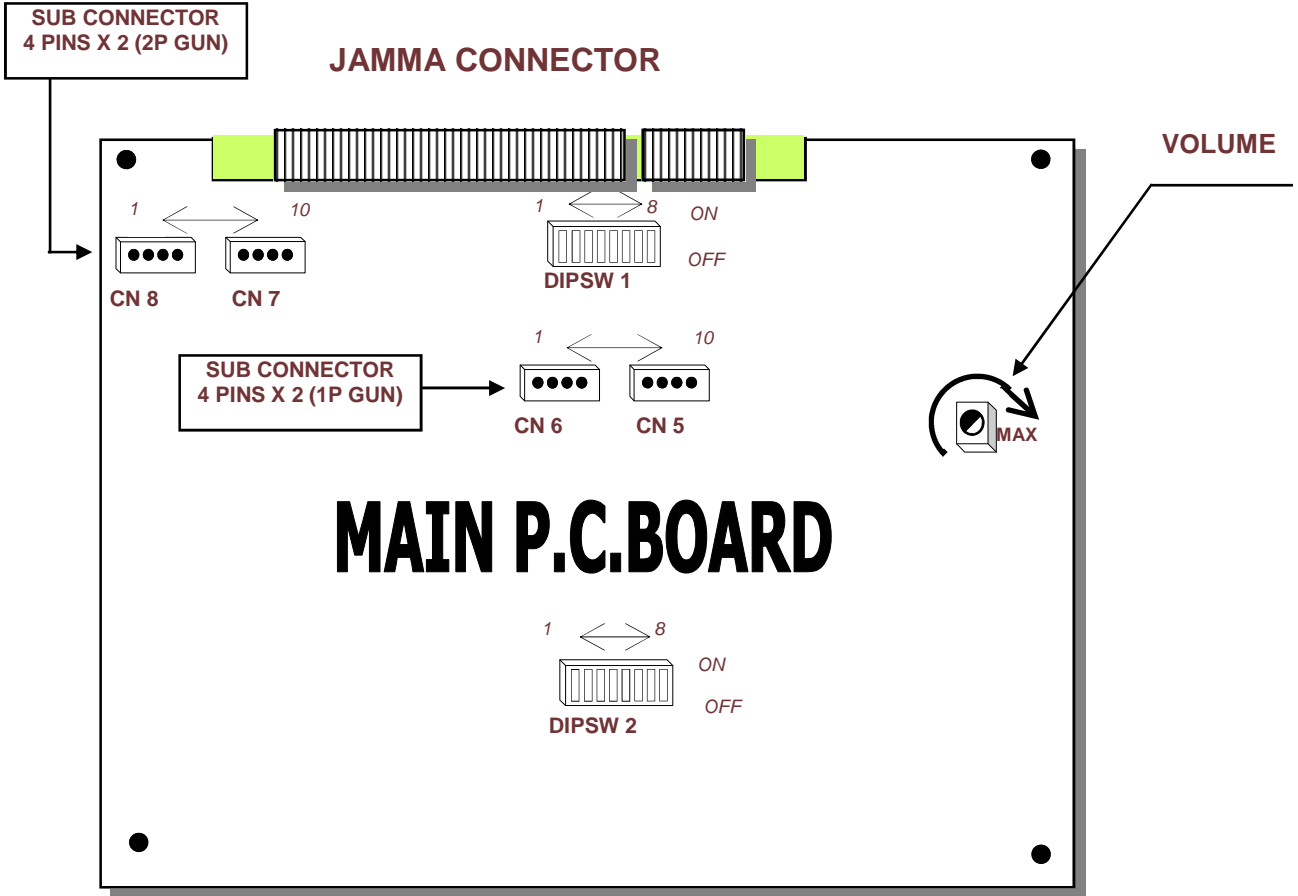
| DIP SWITCH 1    |   | SWITCH POSITIONS |     |     |     |     |     |     |     |
|-----------------|---|------------------|-----|-----|-----|-----|-----|-----|-----|
| FUNCTIONS       | SETTING                                     | 1                | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
| COIN CHUTE A, B | 1 COIN START, 1 COIN CONTINUE               | OFF              | OFF | OFF | OFF |     |     |     |     |
|                 | 2 COINS START, 2 COINS CONTINUE             | ON               | OFF | OFF | OFF |     |     |     |     |
|                 | 2 COINS START, 1 COIN CONTINUE              | OFF              | ON  | OFF | OFF |     |     |     |     |
|                 | 3 COINS START, 3 COIN CONTINUE              | ON               | ON  | OFF | OFF |     |     |     |     |
|                 | 3 COINS START, 2 COINS CONTINUE             | OFF              | OFF | ON  | OFF |     |     |     |     |
|                 | 3 COINS START, 1 COIN CONTINUE              | ON               | OFF | ON  | OFF |     |     |     |     |
|                 | 4 COINS START, 4 COINS CONTINUE             | OFF              | ON  | ON  | OFF |     |     |     |     |
|                 | 4 COINS START, 3 COINS CONTINUE             | ON               | ON  | ON  | OFF |     |     |     |     |
|                 | 4 COINS START, 2 COINS CONTINUE             | OFF              | OFF | OFF | ON  |     |     |     |     |
|                 | 4 COINS START, 1 COIN CONTINUE              | ON               | OFF | OFF | ON  |     |     |     |     |
|                 | 1 COIN 2 CREDITS, 1 CREDIT START & CONTINUE | OFF              | ON  | OFF | ON  |     |     |     |     |
|                 | 1 COIN 3 CREDITS, 1 CREDIT START & CONTINUE | ON               | ON  | OFF | ON  |     |     |     |     |
|                 | 1 COIN 4 CREDITS, 1 CREDIT START & CONTINUE | OFF              | OFF | ON  | ON  |     |     |     |     |
|                 | 1 COIN 5 CREDITS, 1 CREDIT START & CONTINUE | ON               | OFF | ON  | ON  |     |     |     |     |
|                 | 1 COIN 6 CREDITS, 1 CREDIT START & CONTINUE | OFF              | ON  | ON  | ON  |     |     |     |     |
|                 | FREE PLAY                                   | ON               | ON  | ON  | ON  |     |     |     |     |
| NOT USED        |   |                  |     |     |     | OFF | OFF | OFF |     |
| TEST MODE       | OFF   |                  |     |     |     |     |     |     | OFF |
|                 | ON  |                  |     |     |     |     |     |     | ON  |

| DIP SWITCH 2      |                      | SWITCH POSITIONS |     |     |     |     |     |     |     |
|-------------------|----------------------|------------------|-----|-----|-----|-----|-----|-----|-----|
| FUNCTIONS         | SETTING              | 1                | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
| MONITOR SETTING 1 | NORMAL               | OFF              |     |     |     |     |     |     |     |
|                   | REVERSE VERTICAL     | ON               |     |     |     |     |     |     |     |
| MONITOR SETTING 2 | NORMAL               |                  | OFF |     |     |     |     |     |     |
|                   | REVERSE HORIZONTAL   |                  | ON  |     |     |     |     |     |     |
| ATTRACT SOUND     | ON                   |                  |     | OFF |     |     |     |     |     |
|                   | OFF                  |                  |     | ON  |     |     |     |     |     |
| DIFFICULTY LEVEL  | NORMAL               |                  |     |     | OFF | OFF |     |     |     |
|                   | EASY                 |                  |     |     | ON  | OFF |     |     |     |
|                   | HARD                 |                  |     |     | OFF | ON  |     |     |     |
|                   | HARDEST              |                  |     |     | ON  | ON  |     |     |     |
| NOT USED          |                      |                  |     |     |     |     | OFF |     |     |
|                   |                      |                  |     |     |     |     | ON  |     |     |
| CHANCES           | 2                    |                  |     |     |     |     |     | OFF |     |
|                   | 3                    |                  |     |     |     |     |     | ON  |     |
| GUN TYPE          | PUMP ACTION GUN UNIT |                  |     |     |     |     |     |     | OFF |
|                   | HAND GUN UNIT        |                  |     |     |     |     |     |     | ON  |

**"FACTORY INSTALLED" SETTING**

## 6. LAYOUT OF P.C.BOARD & CONTROL PANEL

### MAIN P.C.BOARD





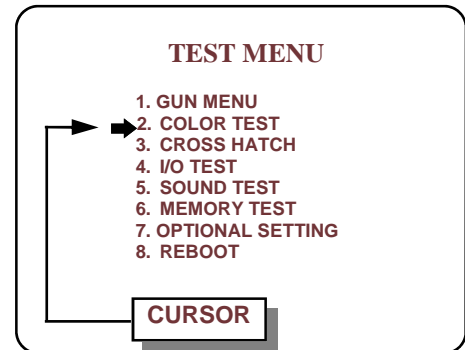
## 7. TEST MODE

### Entering the TEST MODE

If you need to check the condition of the game circuitry and controls, you can use the TEST MENU. Turn ON "DIP SWITCH 1, #8" and re-power on the game. The game will go into TEST MODE (diagnostics) and the screen appears as follows:

### Select TEST

Use this screen to choose which of the 7 screens you want to see. Move cursor using the START BUTTON. Then pull the TRIGGER to enter the function.

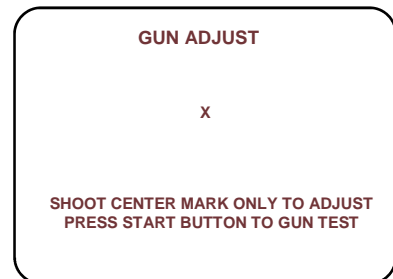


### 1. GUN MENU

You can adjust GUN unit in GUN ADJUST mode.

#### Gun Adjust

1. Enter TEST MENU and select GUN ADJUST.
2. Shoot center mark only with gun sight.
3. If you need more accuracy, try again.
4. Press START button to save Gun accuracy and enter GUN TEST mode, press START button again to go back to Main menu.



You can test accuracy in GUN TEST mode.

#### Gun Test

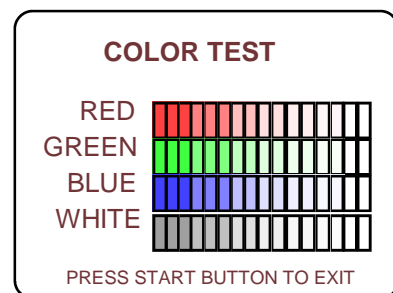
1. At Gun Adjust screen, press START button to go to test mode.
2. Shoot all around the screen to see Gun's accuracy.
3. Press START button to go back to Main menu.



### 2. COLOR TEST

Use this screen to check the color of monitor. The color blocks in the center should be four bands (Red, Green, Blue and White from top to bottom), each with a color scale from dark to bright, left to right. If the screen does not match this description, adjust the Monitor as described in the Monitor's manual.

\* Press the START button to exit and go back to the TEST MENU screen.



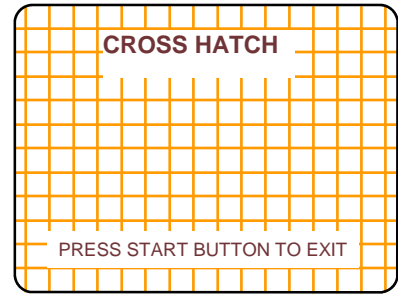
### 3. CROSS HATCH

Use this screen to check the size of picture. The CROSS HATCH test pattern has a White grid on a Black background. Check following:

- The grid line should be straight, and the lines should not have excessive pincushion or barrel distortion.
- "Out"line of grid line is the same size as "Out"line of game screen. So, "Out"line should be able to be seen with no overflow of grid lines on screen.

If these are not as above, adjust the Monitor as described in the Monitor's manual.

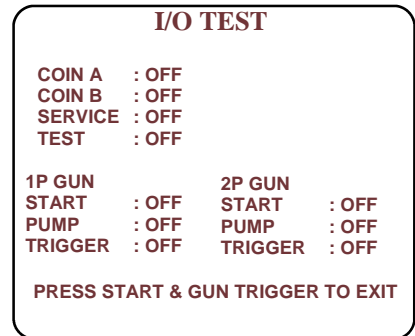
- \* You can exit and go back to the TEST MENU screen by press START button.



### 4. I/O TEST

Use this screen to check the switches in this game. To check the functioning of each switch, activate it and watch the corresponding OFF letters change to ON. If the ON and OFF letters do not appear correctly, check the Harness connections and Switches.

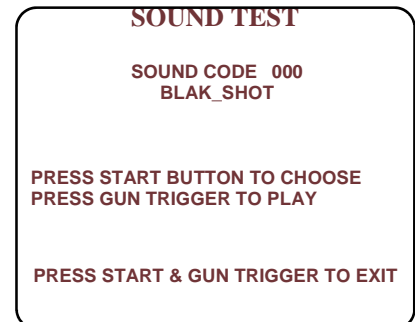
- \* Press START button and Gun trigger simultaneously to exit.



### 5. SOUND TEST

Use this screen to check all game sounds. Choose a sound with the START buttons. (Hunter 1 = forward, Hunter 2 = Back) Then pull the TRIGGER. You can check each sound in this game.

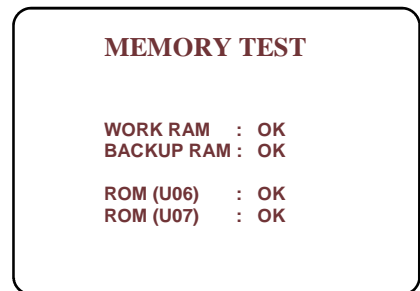
- \* Press START button and Gun trigger simultaneously to exit.



### 6. MEMORY TEST

Use this screen to check RAM and ROM on the Main P.C.B. The Main P.C.B. will automatically check them when you enter this screen. If there are no problems, the word **OK** will appear on screen. If you get the word **ERROR**, check the mounting of RAMs or ROMs on the Main P.C.B. and if **ERROR** reappears, it needs to be replaced.

- \* This mode will automatically exit after testing is finished.



## 7. OPTIONAL SETTING

### HIGH SCORE CLEAR

If you desire to clear HIGH SCORE data, do the following.

#### HOW TO SET UP

1. Enter TEST MENU and select OPTIONAL SETTING.
2. Press START BUTTON to choose HIGH SCORE CLEAR.
3. Select YES by pressing START BUTTON and pressing GUN TRIGGER to clear HIGH SCORE data.
4. The screen will return to previous screen automatically after clearing HIGH SCORE data.

#### OPTIONAL SETTING

1. HIGH SCORE CLEAR
  2. GUN ADJUST DEFAULT
  3. RETURN TO TEST MENU
- PRESS START BUTTON TO CHOOSE  
PRESS GUN TRIGGER TO SELECT

#### HIGH SCORE CLEAR

ARE YOU SURE YOU WANT TO CLEAR  
HIGH SCORE?  
YES  
→ NO

PRESS START BUTTON TO CHOOSE  
PRESS GUN TRIGGER TO SELECT

**NOTE: Do not proceed if Gun test is accurate.**

### GUN DATA DEFAULT

If you have problem with Gun sighting, you may have to clear the Gun data.

After clearing Gun data, the game will be reset to **factory default setting**.

See the following for how to clear saved data.

1. Enter TEST MENU and select OPTIONAL SETTING.
2. Press START BUTTON to choose GUN ADJUST DEFAULT.
3. Select YES by pressing START BUTTON and pressing GUN TRIGGER to clear Gun data.
4. The screen will return to previous screen automatically after clearing Gun data.

#### GUN ADJUST DEFAULT

ARE YOU SURE YOU WANT TO SET  
GUN ADJUST DEFAULT?  
YES  
→ NO

PRESS START BUTTON TO CHOOSE  
PRESS GUN TRIGGER TO SELECT

## 8. REBOOT

Use this screen to go back to normal game mode. After selecting this function, the game will automatically take you to the normal game screen.

Make sure to turn OFF "DIP SWITCH 1, #8" or you will return to test mode upon powering on.

### Returning to GAME MODE

You can return to normal game mode by doing one or the other of the following:

Turn OFF "DIP SWITCH 1, #8" and re-power on the game.

Select REBOOT at TEST MENU. (But you will have to make sure to turn OFF "DIP SWITCH 1, #8".)



## 8. TROUBLE WITH GUN SHOOTING

If you have trouble because you can't shoot to the corner of the screen, you may have to adjust the monitor brightness. Turn up the monitor brightness until you can shoot the corner of screen.

Plus, monitors tend to develop a magnetic field from continuous use, which would cause the gun unit not to function properly. Therefore, it is recommended that the monitor is demagnetized [degaussed] every so often in order to keep the gun unit functioning properly.

In addition, the following conditions of the monitor may result in Gun shooting problems:

- Picture burned on monitor screen
- Over gauzed monitor
- Non adjustable brightness feature

Also, the following conditions of the cabinet may result in Gun shooting problems.

- Combination of low performing adjustable brightness monitor and low reflection mirror
- Dirty monitor screen or monitor grass

## GUNSHOT ACCURACY IMPROVEMENT

If you have trouble because you can't calibrate the gun unit properly. For example you can't shoot corner of screen or you can shoot only in the center of the screen, do the following:

1) CHECK THE +5V LINE **ON THE PCB**. YOU CAN CHECK VOLTAGE AT THE JAMMA EDGE CONNECTOR BETWEEN PIN #2 AND #3.

2) ADJUST +5V LINE TO +5.25V BY TURNING UP POTENTIOMETER ON THE POWER SUPPLY.

**WARNING: DO NOT TURN UP VOLTAGE MORE THAN +5.25V OTHERWISE YOUR PCB WILL SUSTAIN SERIOUS DAMAGE.**

3) ENTER BACK UP CLEAR IN TEST MODE, THEN SELECT YES TO CLEAR BACK UP DATA.

**NOTE: YOU DON'T HAVE TO DO "GUN ADJUST" IN TEST MODE.**

4) ENTER GUN TEST IN TEST MODE TO CHECK GUNSHOT. IF THE GUNSHOT IS NOT CORRECTED REPEAT STEP #3.

## 9. WARRANTY

### Limited warranty, Repair and Return Policy

Sammy USA Corporation warrants all products to be free from defective materials and workmanship for a period of thirty (30) days from the Sammy USA Corporation invoice date unless otherwise specified in writing by Sammy USA Corporation. The extent of this warranty applies to all electronic assemblies only, and does not include lamps and fuses.

This limited warranty is invalid for any product that upon examination, is deemed to have been subject to misuse, improper repair or installation, neglect or violation of specification or other instructions published by Sammy USA Corporation.

There are no additional warranties which extend beyond those limited warranties described above.

The limited warranties described above shall be in lieu of any other warranty, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.

### Return Merchandise Authorization

1. Contact your authorized Sammy USA distributor to receive a Return Merchandise Authorization for return.
2. You must obtain RMA numbers from Sammy USA Corporation through an authorized Sammy USA distributor. Please have your serial number available when calling for an RMA number.
3. All items must have an RMA number marked clearly on the outside of the package.
4. Products must be shipped prepaid. Products returned without an RMA number will not be accepted.
5. Credits to accounts are subject to inspection of products for damage and suitability for resale.

# 10. ELECTRICAL WIRING DIAGRAM (WSC, DEDICATED CABINET)

JAMMA Connector (56 pins)  
on Main CPU Board

