Air Combat

MANUAL

⚠ **Warning**

* Please read the manual before installation and use.

* Please put the manual together with the machine.

CONTENTS

Introduction to the Product

Air Combat is a new indoor medium and high-end air fighting simulation game machine developed by our company. The unique aircraft theme is beautiful and pleasing. Reasonable ergonomic design allows players to feel better the pleasure of the game. At the same time, it is a high-yield amusement product in the amusement park.

➢ Small machinery products;
➢ The game play is novel, exciting, highly interactive, and highly entertaining;
➢ The appearance design is artistic, the pattern is bright and delicate, and the materials are strong and endurable;
➢ Adopt integrated circuit, built-in program, stable working performance, good safety and reliability;
➢ Adapt to universal tickets;
➢ The standalone control computer is stable and reliable.

I Specifications and Technical Parameters

1) Operating voltage: AC220V - 240V, 50/60 Hz (or AC 110V ±5%, 60Hz. For the specific voltage, see the nameplate on the machine).
2) Dimensions: W314 × D197 × H235 (cm)
3) Maximum power: 900W
4) Ambient condition: Temperature (indoors): 0℃ ～ 35℃;
5) Humidity: ≤90%;
6) Atmospheric pressure: 86Pa ～ 106Pa.
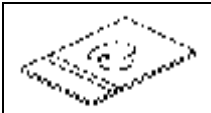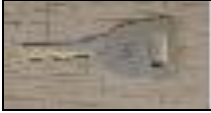
⚠ **Warning:** After turning off the machine, please wait 1 minute if you want to turn it on.

II Accessory List

For the normal use of the machine, please open the package and carefully check whether the following items are included.

The accessory list is below:

Name	Unit	QTY	Picture	Equipment
Manual	Copy	1		
Power cord	Piece	1		
Fuse 10A	Piece	5		Air Combat
AA32 Key	Piece	2		
AA33 Key	Piece	2		

Please open the package and check whether all accessories are included. If not, please contact the distributor of the machine for check.

III How to Move and Position the Machine

(I) How to Move the Machine

There are trundles under the machine. When moving the machine for a short distance, you should raise foot to make the trundles touch the ground and push the machine. As there will be danger of overturning when the foot hits obstacle on the ground, you should move the foot up as much as you can and pay attention to obstacles ahead and uneven places when moving the machine along the ground.

(II) How to Position the Machine

➢ Please place it on flat ground where it won't slide easily;
➢ Please use the following foot to fix the machine (as shown below)
1. Loosen the tightly locked nuts of the foot, tighten the bolts of the foot with a wrench, and keep the trundle approximately 5mm away from the ground.
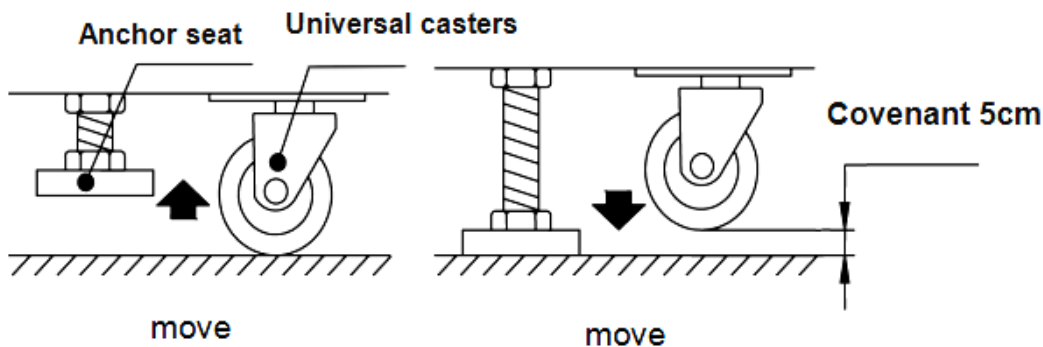2. Tighten the nuts clockwise and fix them.

(III) Product Placement

Do not place the product in the following places:
➢ Place in which the machine may have condensate water or with high humidity;
➢ Place close to high-temperature objects;
➢ Place close to dangerous substances;
➢ Smooth or unstable place;
➢ Place close to equipment that may easily produce sparks;
➢ Place with heavy vibration;

⚠ **Caution:** Please unplug the power plug before moving to prevent accidents and faults.

Please take care not to damage the power cord during moving to prevent accidents and faults.
Please raise the foot to the maximum height before moving to prevent accidents and faults.

(IV) Installation Location Dimension

The machine should be placed according to the following dimensions for customers' safety and enough space to run the machine.

Game area:

50 cm

Product Placement Area

50 cm   50 cm

50 cm
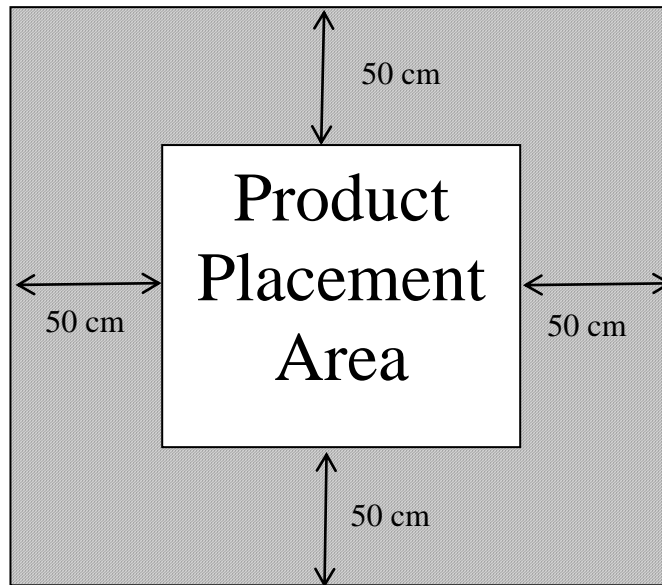
IV Wiring and Precautions

➢ Connect one end of the cable to the terminal box of the machine, and connect the other end to the socket.

➢ Connect the power supply according to the voltage (110V or 220V) on the label, or the machine might be damaged.

➢ Please confirm whether there is grounding in the socket to avoid unnecessary damage.

➢ If the grounding cannot be done through the socket, please try other methods.

Socket

Terminal

Plug

Plug

Cable
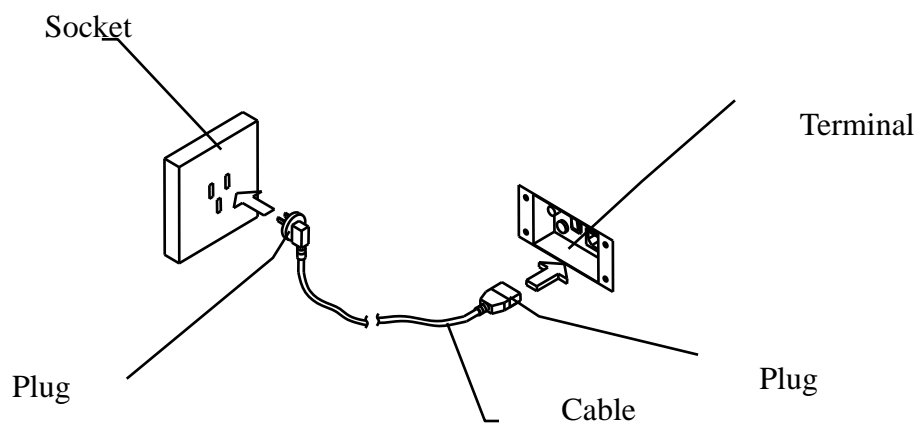
V Instructions on Game

(II) Game Interface

1. Player's HP: Shows the player's current HP. The game ends when HP becomes zero.
2. Score: Player's current score.
3. Player's photo: Player's photo will be displayed here after taking the photo.
4. Missiles and Speed: Shows the player's current number of remaining missiles and flight speed.
5. Enemies: Destroying enemies for bonus.
6. Props: Get different bonus after picking up props.

(III) Characteristics of the Machine

➢ There are 4 scenarios in the game. Each area has a corresponding storyline.
➢ Get the hidden obstacle props in the scene which can create a very powerful sense of oppression.
➢ There are different enemy planes and missile attacks in the game that make players' feeling of freshness and tension more intense.
➢ Different props in the game that give players a great challenge of speed and different fun.

(VI) Game Scenes

1) Desert Assault

2) The Arctic Chase

3) Battle of Windy Valley
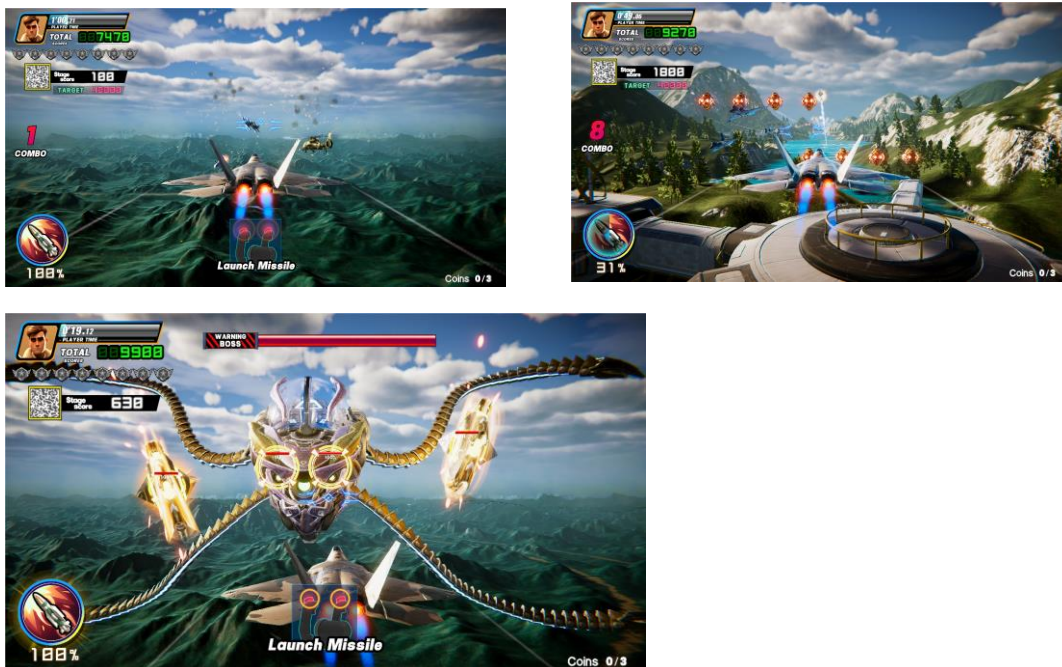
4) Battle at sea

(V) Gameplay

1. Insert coins and take a photo.
2. Select the game mode. There are single player mode and multiplayer mode, two modes that you can choose.

3. Select the scenario. Players can choose different maps.
4. Select the character. There are 6 kinds of aircraft that players can choose their favorite character to play the game.

5. After entering the game, players need to control the direction to avoid obstacles, pick up score props to get score bonus, and pick up special props to get powerful attack or acceleration effect. At the same time, players can also shoot monsters to win more scores.

6. BOSS fighting. Level completion and settlement.

VI Adjustment of the Game Program Setting

Option	KEY1	Test (Choose)
	KEY2	Confirm (Replenish lotteries)
	KEY3	Confirm (Modify)
	KEY4	Return (Previous Step)

(I) Main Menu
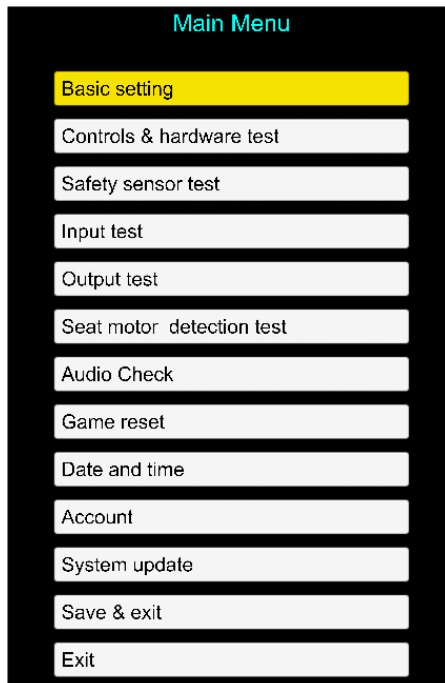
1. **Basic Setting:** Enter the basic setting interface.
2. **Controls&Hardware Test:** Enter the input test interface.
3. **Safety senor Test:** Enter the safety and security test interface.
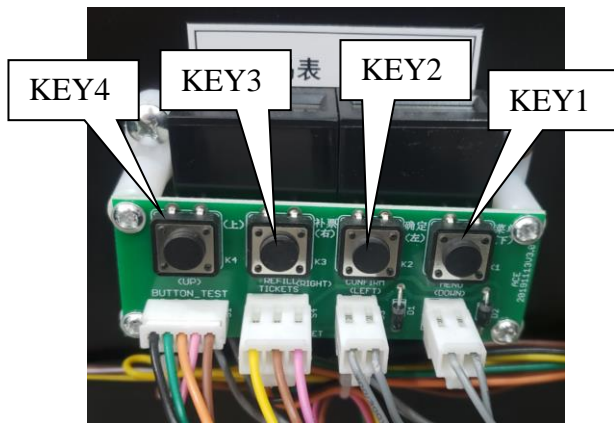4. **Input Test:** Enter the output test interface.
5. **Output Test:** Enter the adjustment setting interface.
6. **Game Reset:**Enter the game reset interface.
7. **Seat motor detection test:** Enter the Seat motor detection test.
8. **Audio Check:** Enter the Audio Check
9. **Game reset:** Enter the game upgrade screen.
10. **Date and time:**Adjust the date and time.
11. **System update:**Update the newest system.
12. **Save&Exit:** Save modified settings and return to the game interface.
13. **Exit:** Exit the back end and go back to the game interface.

(II)   Basic Setting
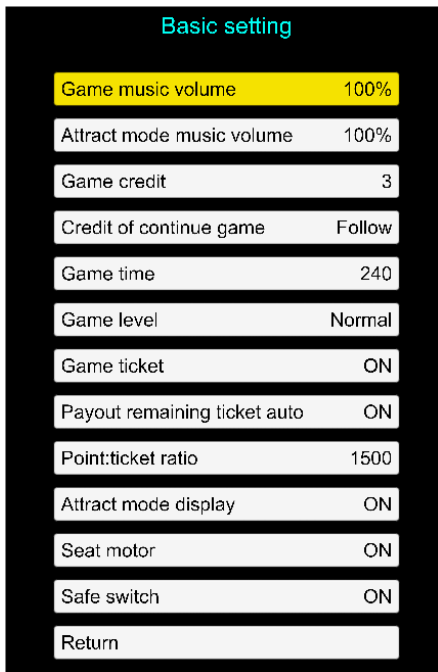
1. **Game music volume**: Set game music volume.

    Range: 0%~100% (Default: 100%)

2. **Attract mode music volume:** Set attract mode music volume

    Range: 0%~100% (Default: 100%)

3. **Game credit:** Set the required number of coins at the beginning of each round.

    Range: 1~100, Free (Default: 4)

4. **Credit of continue game:** Set the number of coins needed to continue the game.

    Range:1~100 (Default :follow)

   PS: "Follow" means that the number of coins required by the player to renew coins is the same as that set in "coins per game"

5. **Game time:** Set the time of a game

Range: Life mode, 30~600 seconds (default 240 seconds)

6. **Game level:** Set the difficulty of the game

7. **Tickets Out:**Choose whether to feed tickets. (Default: On)

    Off: No

    On: Yes

8. **Point:ticket ratio:** Set the number of points needed to get 1 vote

    Range: 1~90000 (Default: 1500)

9. **Payout remaining ticket auto:** Set whether to automatically replenish tickets in case of ticket shortage.

    Off: Not Automatic Ticket Replenishment

    On: Automatic Ticket Replenishment

10. **Attract mode display:** Whether display the logo of the company in standby. (Default: On)

    Off: Non-display

    On: Display

11. **Seat motor:** Set whether to open the seat rocking function (Default: On)

    Off: No

    On: Yes

12. **Safety switch:** Set whether to open the safety guard switch. The seat will stop rocking when is on. (Default: On).

      Off: No

      On: Yes

13. **Return:** Directly return to the previous menu.

(III) Hardware Adjust
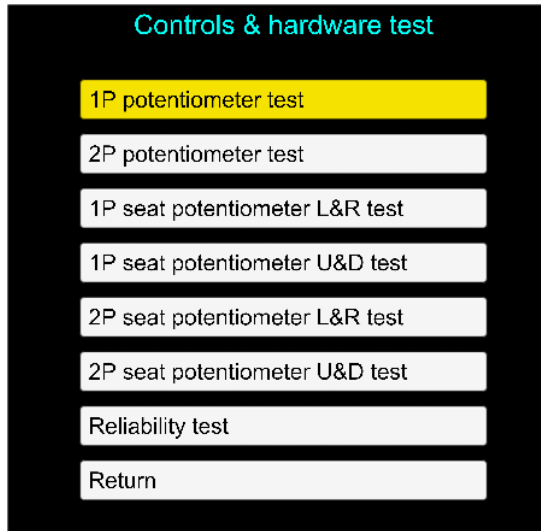
1. **1P potentiometer test:** Follow the steps shown in the following figure to correct the steering rod of the aircraft
2. **2P potentiometer test:** Follow the steps shown in the following figure to correct the steering rod of the aircraft
3. **1P potentiometer L&R test:** Follow the following steps to correct the left and right swing of the airplane seat
4. **1P potentiometer U&R test:** Follow the steps in the following figure to correct the front and back swing of the aircraft seat
5. **2P potentiometer L&R test:** Follow the following steps to correct the left and right swing of the airplane seat
6. **2P potentiometer U&R test:** Follow the following steps to correct the front and back swing of the aircraft seat
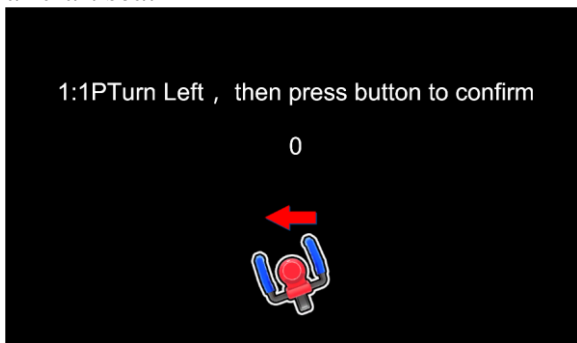
7. **Reliability test:** Hardware aging test
8. **Return:** Directly return to the previous menu.

(IV) Safety and Security Test
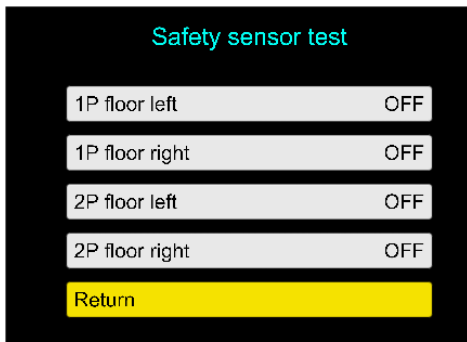
1. **1-2P floor left:** Detects whether the security test on the left is running
2. **1-2P floor right:** Detects whether the security test on the right is running
3. **Back:** Directly return to the previous menu.

(V) Input Test
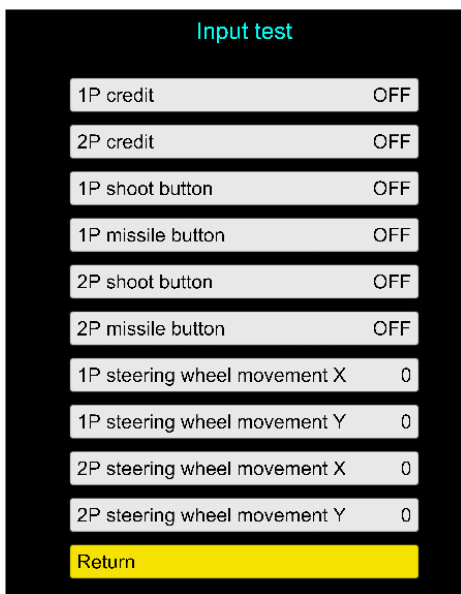
1. **1-2P Credit:** Test whether 1P, 2P coins selector work properly.

   Turn off: No inserting coins

   Turn on: Inserting coins

2. **1-2P Shoot Button:** Test whether 1P, 2P shoot button work properly.

   Turn off: No pressing

   Turn on: Pressing

3. **1-2P Missile Button:** Test whether 1P, 2P missile button work properly.

   Turn off: No pressing

   Turn on: Pressing

4. **1-2P steering wheel movement X:** Test the X-direction potentiometer of the 1P, 2P steering wheel work properly.
5. **1-2P steering wheel movement Y:** Test the Y-direction potentiometer of the 1P, 2P steering wheel work properly.
6. **Return:** Directly return to the previous menu.

(VI) Output Test
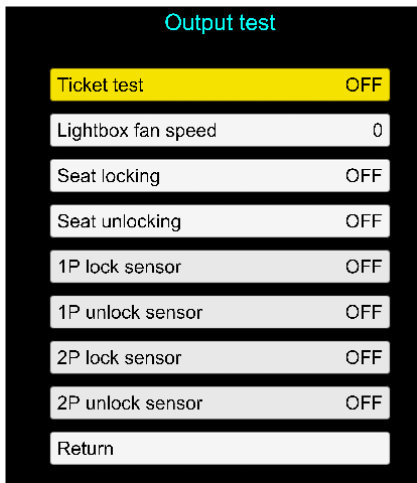
1. **Ticket Test:** Tests that all ticket machines are working properly.
2. **Light box fan:** Test whether the light box fan can work properly.
3. **Seat Locking:** Test the seat locking function works properly.
4. **Seat Unlocking:** Test the seat unlocking function works properly.
5. **1-2P Locked Sensor:** Test 1P, 2P locked sensor work properly.
6. **1-2P Unlocked Sensor:** Test 1P, 2P unlocked sensor work properly.
7. **Return:** Directly return to the previous menu.

(VII) Game Reset
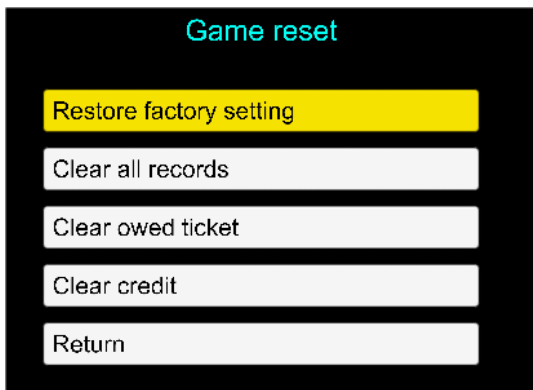
1. **Restore Factory setting:** Restore all data and settings to the factory settings.
2. **Clear all records:** Restore all data records to the default settings.
3. **Clear owed ticket:** Clear the number of lack tickets.
4. **Clear credit:** Clear unused coins.
5. **Return:** Return to the previous menu.

(VIII) Date/Time Setting

(IX) Book-keeping

(X) Certificate Update

Update the trial version.

(XI)   Channel test

Test the horn of the machine according to the screen prompt

(XII) Seat motor ditection test
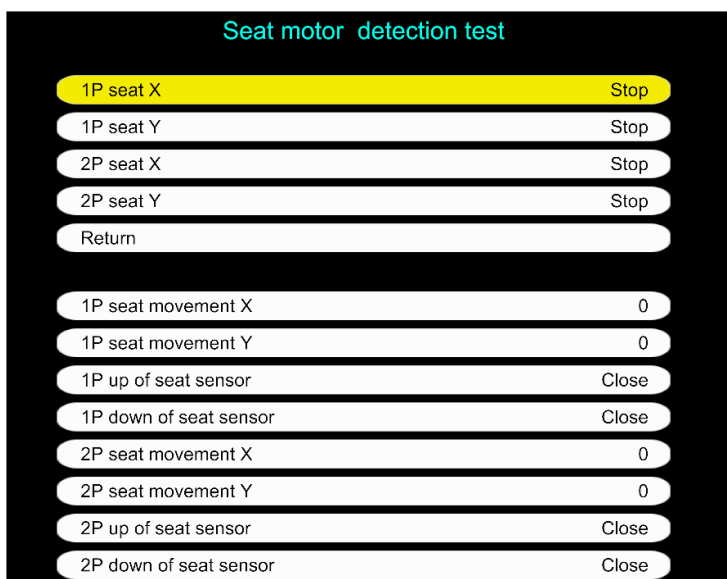
1P-2P seat X: Test the motor around 1P,2P to the left, right, stop function is normal
1P-2P seat Y: Test whether the motor forward, backward and stop function is normal around 1P,2P
Return: Return to the previous menu.

1P-2P seat movement X: Shows whether the potentiometers around the 1P,2Pseat are working
properly
1P-2P seat movement Y: Shows whether the potentiometers at the front and rear of the 1P seat are
working properly
1P-2P up of seat sensor: Shows whether the limit switch in front of 1P,2P is working properly
1P-2P down of seat sensor: Shows whether the limit switch behind 1P,2P is working properly

Save&Exit: Save modified settings and return to the game interface.

Exit: Exit the back end and go back to the game interface.

VIII Fault Analysis and Maintenance

(I) Installation and Commissioning

➢ Please check the components according to the list to assemble components before installation.

➢ After installation, plug the cable and turn on the machine to check whether each part runs normally. If no, immediately turn off the machine for troubleshooting.

(II) Appearance Inspection

➢ To ensure the safe use of the machine, please check the following before startup.

➢ Whether the warning sign is intact, visible and stuck correctly.

➢ Whether parameters of power supply are consistent with the requirements of the machine.

➢ Whether screws of each component and components of the steering wheel are loose.

➢ Whether the connectors and terminals are loose.

➢ Whether the machine is placed stably; whether the adjustment of the casters and the top foot are proper.

➢ Whether the machine is placed in the proper area.

(III) Running Inspection

➢ Whether the speaker works normally.

➢ Whether the daylight lamp and the button light are on.

➢ Whether the image is clear and normal.

(IV) Maintenance

➢ Before operation, test run must be done before the machine is used.

➢ When there is dirt on the machine, wipe it with a soft cotton cloth with detergent.

➢ After the new machine has been used for one month, check whether each part runs normally.

➢ Often check the machine.

➢ The machine must be cleaned and maintained once a month.

➢ Screen PVC will crack and wear in the use process, please check and clean once in a week.

IX Fault Analysis and Troubleshooting

Fault phenomena	Main cause	Corrective action
After the machine is powered on, nothing happens and the screen is not lit.	The power supply is inconsistent with the machine's parameters.	Please check whether the power supply is consistent with the machine's parameters.
	Fuse is burnt out.	Please replace the fuse.
	The power supply is not connected.	Please confirm 110V~220V power supply is connected and the power switch is on
	The signal wire of the display is not connected or damaged.	The signal wire of the display is not connected or damaged.
The machine is not powered on.	Check whether the input of the 110V~220V power supply is right. The short circuit is not allowed.	Please check whether the voltage of the circuit board inside the machine is abnormal.
The control panel is not powered on	Check whether the output of 12V of the power supply box is normal.	Please adjust the cable to the correct position.
The display has no raster.	The cable of the display might fall off or be loosen due to vibration.	Please check the power supply circuit or replace the power line.
	The display is not on..	Turn on the machine again manually.
The power is off on the midway.	The circuit protector generates an action and the power switch is turned off (Note: The circuit protector cuts off the current when the abnormal current flows).	Please turn on the power switch again. When the circuit protector repetitively acts, it indicates that the machine is abnormal. Please contact the dealership.
After the product is powered on, the display is a white screen without any image or sound.	The host machine does not work.	Manually start the power start button of the host machine.
		The host power is bad or replaced.
		The motherboard memory bank is bad or replaced.
		The motherboard is bad. Please contact professional and manufacturer.
Pressing start key cannot start the game.	The start button holder is loose, and the switch line is loose.	The button holder is broken or replaced, the switch wire is pressed, and the start button switch is broken or replaced.
No response to coin collector.	The coin collector is damaged.	Replace coin collector.
	The signal line of the coin collector is loose.	Check if the signal line of the coin collector is loose.
	IO control board is damaged.	Replace IO control board.
Coins are blocked in the coin collector	The sample coin is not placed well.	Please check whether the sample coin is placed well, or try another sample coin.
	The coin slot is not aligned or deformed.	Please check whether the coin slot is

		aligned or deformed, and adjust coin slot.
	The coin collector is not assembled properly. The red braking bar above the coin collector is pressed.	Please re-insert it into the coin collector.
The coin collector does not score.	Check whether there is signal feedback.	Please re-connect the coin collector. It will make a sound if there is signal.
	The connected target board is not connected to the pull-up resistor.	Please connect the pull-up resistor.
	Check whether the token in the coin collector is the same with that inserted in the coin collector.	Please replace it with the proper token.
	The gear of the switch (normally on and normally off) is incorrect	Please check whether the gear of the switch (normally on, normally off) is correct.
	The socket outlet of the coin connector is in poor contact.	Please check whether the socket outlet of the coin connector is in poor contact.
The speaker does not make a sound.	Whether the circuit board of the power amplifier is powered on.	Please turn on the switch of the amplifier circuit board to power on
	The volume is too low.	Please turn the volume up.
	Whether the audio connection port falls off or is damaged.	Please re-connect the audio connection port.
	The circuit board of the power amplifier goes wrong.	Please replace the circuit board.
	The speaker goes wrong.	Please replace the speaker.
No lottery fed.	The ticket machine goes wrong or the switch is turned on wrongly.	Please replace the ticket machine or set the switch to the factory settings.

IX Error Message

⚠ COM1 ERROR

1. **Cause:** Disconnection with the IO board.
2. **Solution:** Restart the machine, and press the reset button on the IO board (there is only one button on the board).

⚠ TICKET ERROR

1P Tickets Owed:

1. **Cause:** No enough lotteries, or the ticket machine is damaged.
2. **Solution:** Replenish lotteries; replace the ticket machine.

⚠ Warning:

➢ **Cut off the power supply for maintenance and repair of the machine.**
   To prevent short circuit, relevant personnel should cut off the power supply when touching internal components of the machine. If the operation requires power supply, it should meet the requirements of the manual.

➢ **Use proper parts for replacement.**
   Improper parts may cause short circuit, and damage of the main board and the components.

➢ **Do not disassemble, assemble and change the equipment randomly.**
   It may cause short circuit and machine failure, and even fire disaster.

➢ **Do not place vases, cups and containers with water, chemicals or heavy objects on the machine.**
   The spilt liquid may cause short circuit and damage of parts. Meanwhile, falling objects may injure people and damage the machine.

➢ **Do not place objects in the exhaust outlet of the machine.**
   The blocked exhaust **outlet** may cause temperature rise inside the machine, affect the normal operation of the game, and even damage the parts.

➢ **Do not repair the machine by yourself.**
   It may cause short circuit or malfunction and other failure.