T-Rex Laser
(Laser Shooting)

MANUAL

⚠ **Warning**

✧ Please read the manual before installation and use.

✧ Please put the manual together with the machine.

ACE AMUSEMENT

ACE Amusement Technologies Co., Ltd.

ADD: No.5 Building, No. 6, HengFeng 6ᵗʰ Road, Gangkou
   Town, Zhongshan, Guangdong, P.R. China
   PC: 528400
TEL: (+86) 760 8848 8920
E-Mail: Sales@ACE-Amusement.com
Web: www.ACE-Amusement.com

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Introduction

I. Company Profile

Thank you for choosing the amusement machine produced by our company. We are a comprehensive enterprise integrating development, production, sales, operation and services. "Quality first, users first, services first" is our solemn promise to customers and our action guide.

Please carefully read the manual for correct, appropriate and safe use of the machine. We hope it can help you to succeed!

II. Introduction to the Product:

"T-Rex Laser" is an indoor simulation amusement machine newly developed by our company and especially designed for the public amusement. It is novel and beautiful in appearance, safe and reliable, and easy to operate, so it is the most valuable amusement product with a higher coin collecting rate in the amusement park.

III. Features of the Product:

✧ Novel gameplay full of fun;

✧ Elegant appearance, bright-colored and exquisite patterns, made of MDF, plywood, angle iron and metal plate, safe and durable due to rust-proof treatment;

✧ Large-scale integrated circuit, built-in program, stable and reliable working performance;

✧ Sophisticated and adjustable game program and win ratio.

IV. Note on Safety:

Before use, please note the safety warning stickers on the machine; while reading the manual, please pay special attention to some signs. We divide the safety warnings into 3 categories as follows. They mean different levels of danger.

- **Danger** It means there will be danger of harm to people due to improper operation.

- **Warning** It means there will be possibility of harm to people due to improper operation.

- **Attention** It means there will be possibility of harm to people or the machine due to improper operation.

Please pay attention to the following signs on the machine:

High temperature sign	High voltage sign
No touching sign	

Specifications and Technical Parameters

Unit: cm

233cm

106cm   250cm

1) Operating voltage: AC220V - 240V 50/60 Hz   or   AC 110V±5%, 60Hz.
   For the specific voltage, see the nameplate on the machine.

2) Maximum power: 400W

3) Dimensions: W106 × D250 × H 233 (cm)

4) Weight: About 280kg

5) Operating environment: Temperature (indoors): 0℃～35℃；

   Humidity: ≤90%；
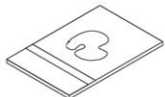
   Atmospheric pressure: 86Pa～106Pa.

⚠ **Warning:** After turning off the machine, please wait 1 minute if you want to turn it on.

⚠ **Attention:** The above technical parameters are subject to change without prior notice.

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:

No.	Name	No./Specification	Quantity	Unit	Picture	Remark
1	Cable	10A/250V-3M	1	Piece		
2	Fuse	Φ5×20mm T10A 250VAC	1	Piece		
3	Manual	English	1	Piece		
4	Key	AA33	2	Piece		
5	Key	AA32	2	Piece		

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

⚠ **Attention:** The above technical parameters are subject to change without prior notice.

How to Move and Position the Machine

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.
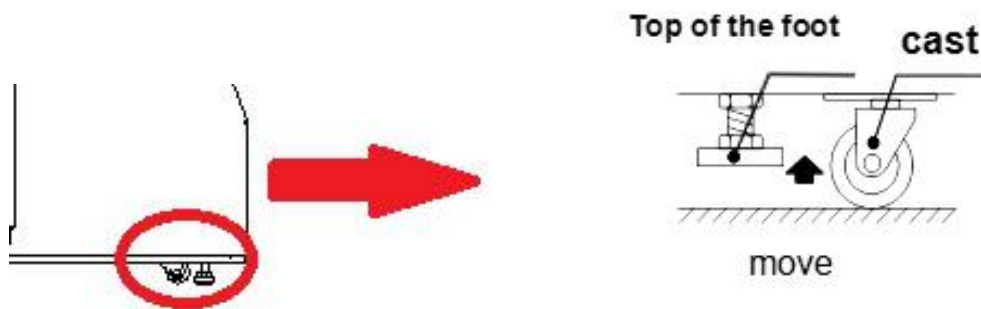
When moving the machine for a short distance, you should raise the foot to make the trundles touch the ground and push the machine.

When you move the machine and pass uneven places or place with steps, 4 people or more are needed to lift the machine for safety.

ATTENTION

Please unplug the power socket before moving to prevent accidents and failure.

Please do not damage the cable when moving to prevent accidents and failure.

Please move the machine before raising the foot margin as much as you can to prevent accidents and failure.

The machine shall be moved by at least two people to prevent injury caused by the accident.

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.
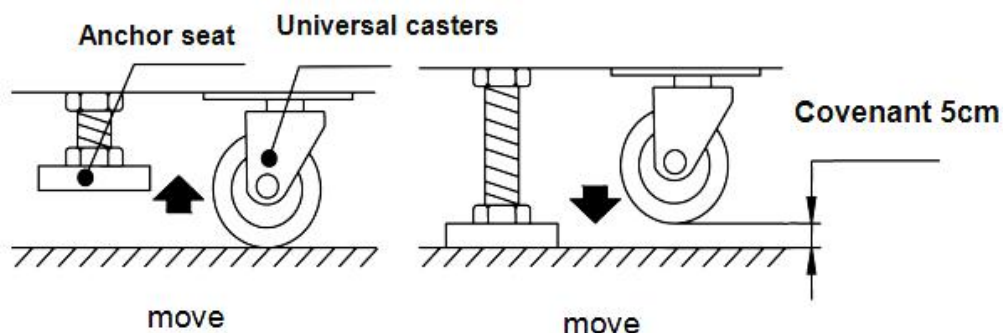
Unsuitable places

➢ 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;

➢ Dusty place.

Where to Place

⚠ **Warning:** The machine is only suitable for indoor use, not outdoor use.

⚠ **Warning:** Please do not use the forklift to move the machine, otherwise it may be damaged.

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: 500mm
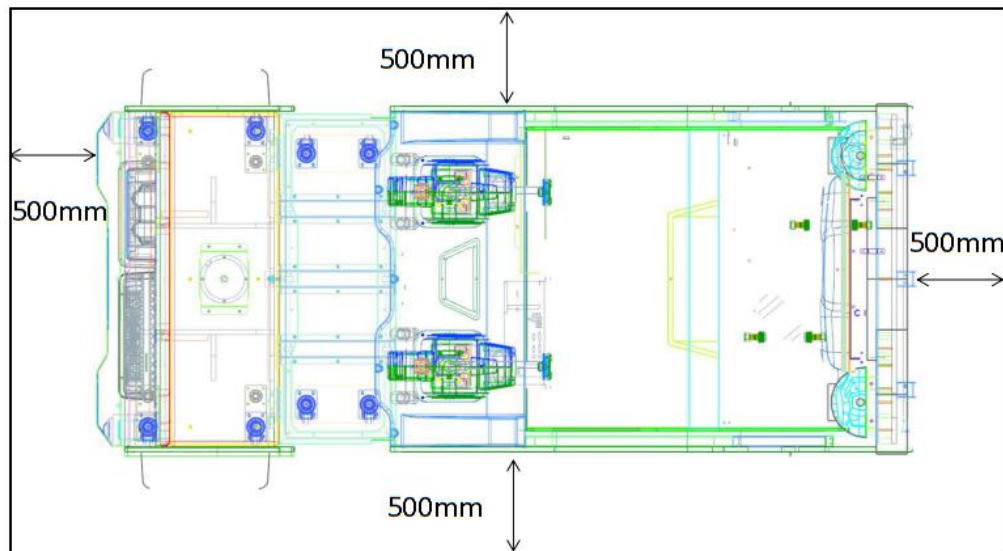
⚠ **Attention:** The machine should not be placed at inclined place, or there may be an accident.

⚠ **Attention:** The division of the game area should refer to labels of each machine.

Precautions before Startup

1) Check parameters of the power supply. Ensure parameters of the machine meet the requirements, or the machine might be damaged or there might be fire accident.
2) Excessive loads on a power socket might cause socket overheat and fire accident.

⚠ Warning

◎   Do not change or replace parts by yourself when installing the machine to prevent fire accident or short circuit.

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 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.

⚠ **Warning:** The working voltage of the machine is 220V. Please connect the power supply according to the label, or the machine might be damaged.
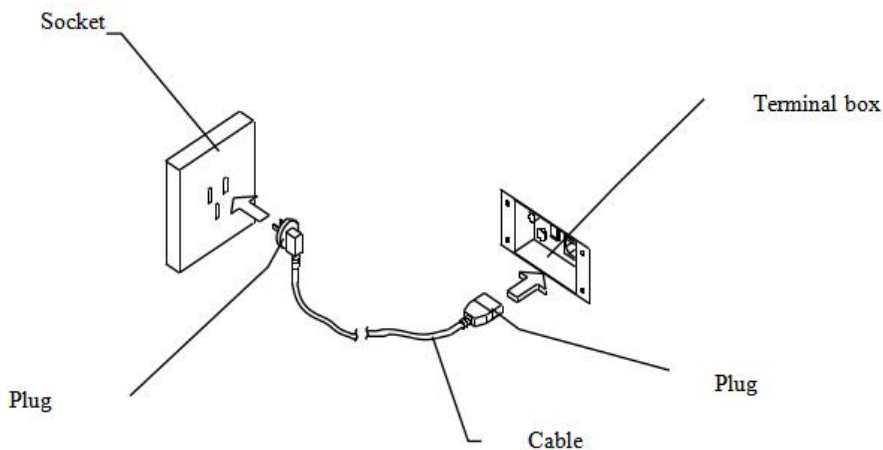
⚠ **Attention:**

- The cable cannot be pressed by heavy objects, or it might be easily damaged and cause short circuit, and even fire disaster.
- When unplugging the cable, you should grasp the plug instead of the cable.
- It is not allowed to directly unplug with wet hands.
- It is not allowed to forcibly stretch, twist or expose the cable, or put it close to high-temperature objects.
- It is not allowed to put the cable at places where it may be easily kicked or touched.
- Use correct voltage and fuse (refer to technical parameters).
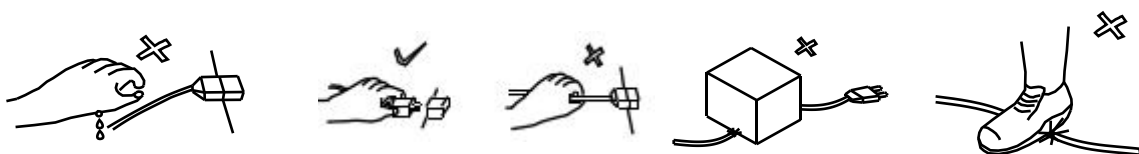
Installation and Maintenance

Installation and commissioning

➢ Please check the accessory list to assemble components before installation;

➢ The ground must be flat and solid. After placing the machine, adjust the feet to the ground and horizontally fix it;

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

Visual inspection

To safely use 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 machine's.

➢ 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 trundle and the top foot is proper.

➢ Whether the machine is placed properly.

Operation inspection

➢ Whether the speaker works normally.

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

➢ Whether the image is clear and normal.

Maintenance

➢ Before operation, confirm the machine runs normally and then use it;

➢ 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.

Cleaning

➢ Housing

Clean dirt on the surface of the machine with clean and soft cotton cloth.

➢ Display

Clean the outside of the display with clean and soft Display screen with no water; anything with acid is forbidden to touch the surface of the display.

➢ Exhaust fan

The exhaust fan is one of the main tools of dissipating heat inside the machine. It has to be clean and run normally with unobstructed outlet.

⚠ 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 user's 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 by yourself.**

It may cause short circuit and machine failure, and even fire disaster.

Do not place vases, cups, 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 air outlet of the machine.**

● The blocked air 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.

Troubleshooting

Common failure

Phenomenon	Main cause	Solution
After the machine is powered on, there is no response and the screen is not on	The power supply is inconsistent with the machine's parameters	Please check whether the power supply is consistent with the machine's parameters
	The fuse is burnt	Please replace the fuse
	The power supply is not connected	Please confirm the 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 has a raster, but no image and sound	The +5V and +12V power supplied to the main board are not normal	Please check the screen. If it is normal, then the main board is faulty. Return it to the manufacturer or professionals for repair
	The fuse is burnt	Please replace the fuse of the same model
The machine is not powered on	Check whether the input of the 220V power supply is right. The short circuit is not allowed.	Please check whether the voltage of the circuit board inside the machine is normal
The control board is not powered on	Check whether the output of 5V, 12V and 24V 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 loose due to vibration	Please check the power supply circuit or replace the cable
	The display is not on	Turn on the machine manually or with the remote control
No bowling comes out after the game starts	The 24V power supply has no voltage output	Please replace the 24V power supply box
	Bowling flipping and feeding machine do not work	Please replace the bowling feeding machine and the high-power driver board
After the machine is powered on, the display shows a white screen without image and sound	The host does not work	Please manually start the host
	The power supply box of the host goes wrong	Please replace the power supply box
	The memory bank of the host is in poor contact	Please re-assemble or replace
	The main board of the host goes wrong	Please contact professionals and the manufacturer
The power supply is suddenly cut off	The circuit protector works, while the power switch is off (note: when the abnormal current runs, the circuit protector cuts off the current)	Please turn on the power switch again. When the circuit protector repeatedly works, it means there is something wrong with the machine. Please contact the distributor
Bowling shooting and feeding are unsmooth	There are foreign matters or dirt blocking the non-working path of the shooting machine	Please check the circuit and replace the shooting machine and clear foreign matters or dirt
Press the transmission button, no bowling is fed	The microswitch on both sides of the handle is broken	Please replace the microswitch
Press the start button, and the game cannot start	The holder of the start button falls off or goes wrong; the switch cable falls off; the switch of the start button goes wrong	Please check the holder of the button; press and plug the switch cable; replace the switch of the start button
Fail to shoot well	Check whether the potentiometers up, down, left and right are damaged	Replace the potentiometer and re-adjust the gun

Phenomenon	Main cause	Troubleshooting
The coin collector does not respond	The coin collector is damaged	Replace the coin collector
	The signal wire of the coin collector is loose	Check whether the signal wire of the coin collector is loose
	The IO control board is damaged	Replace the 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 it
	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 proper token
	The gear of the switch (normally on, normally off) is incorrect	Please check whether the gear of the switch (normally on, normally off) is correct
	The socket of the coin connector is in poor contact	Please check whether the socket of the coin connector is in poor contact
The coin collector retains coins	The COIN signal time switch (SW2) is incorrect	Please adjust the COIN signal time switch (SW2)
	There is something on the path of the coin collector, making the coin collecting unsmooth and the coins blocked	Please check whether there is something on the path of the coin collector
	The coin outlet is unsmooth	Please check whether the coin outlet is smooth
The coin collector is unsmooth	Adjust the VR rotary button	Please adjust the VR rotary button clockwise
	Adjust the precision switch (SW3)	Please adjust the precision switch (SW3) to the normal gear
	The sample coin is not placed well	Please check whether the sample coin is placed well, or try another sample coin
Fake coins pass through the coin collector	Adjust the VR rotary button	Please adjust the VR rotary button counterclockwise
	Adjust the precision switch (SW3)	Please adjust the precision switch (SW3) to the precision gear
The speaker does not make a sound	The volume is too low	Please turn on the volume
	The power amplifier and the speaker go wrong	Please replace the power amplifier and the speaker
	Whether the audio connection port falls off or is damaged	Please re-connect the audio connection port
No ticket fed	The ticket machine goes wrong or the switch is turned on wrong	Please replace the ticket machine or set the switch to the factory settings

Instructions on Game

Game logo / Standby image

<I>. Game interface:

① 1. UI interface of the player's status

② Game props to increase the shooting power

③ .The player's front sight to aim at the target

<II>. Characteristics of the machine:

☆ The scene map of the game is divided into several areas: City Center, Factory, Cemetery, Pharaoh's Tomb, Hospital, and Overpass. After the corresponding story is completed in each area, the player can go to the next map.

☆ There are some hidden props which can produce very powerful damage.

☆ The player will face various zombies. Different zombies with different attacks make the player's sense of freshness and tension stronger.

☆ There are many bosses in the game, giving the player's much amusement of challenging.

<III>. Scene

<IV>. Game play:

1. Standby image

2.Task pass image

3.Plot production before the pass. Press "Start" to skip the plot

4.Game start image

Adjustment of the Game Program Setting

Option	KEY1	Test (choose)
	KEY2	Confirm (replenish tickets)
	KEY3	Confirm (modify)

Main Menu
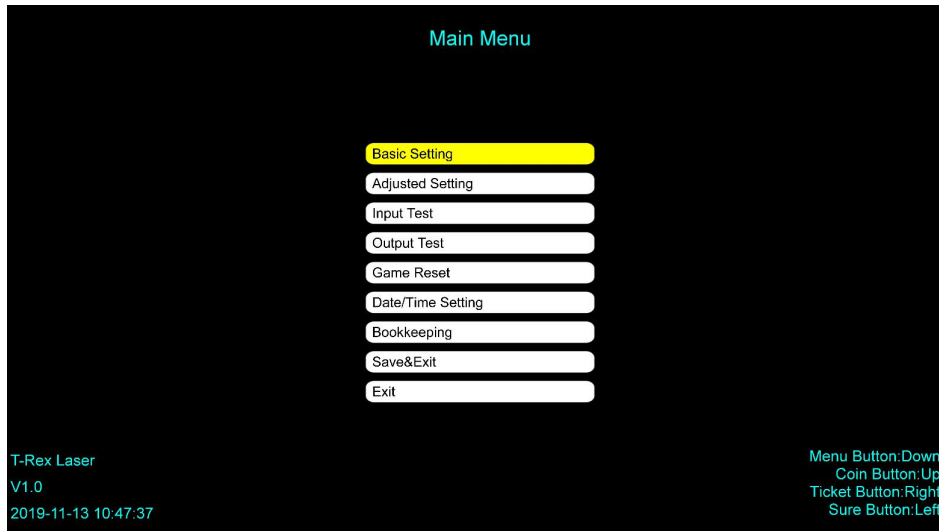
1. **Basic Setting: Enter the basic setting interface**

2. **Adjustment Setting: Enter the adjustment setting interface**

3. **Input Test: Enter the input test interface**

4. **Output Test: Enter the output test interface**

5. **Game Reset: Enter the game reset interface**

6. **Date/time Setting: Enter the date/time setting interface**

7. **Language: Switch languages**

8. **Revenue Record: Enter the revenue record interface**

9. **Save & Exit：Save the data and exit to the previous menu interface**

10. **Exit：Doesn't save the data and exit to the previous menu interface**

Basic Setting
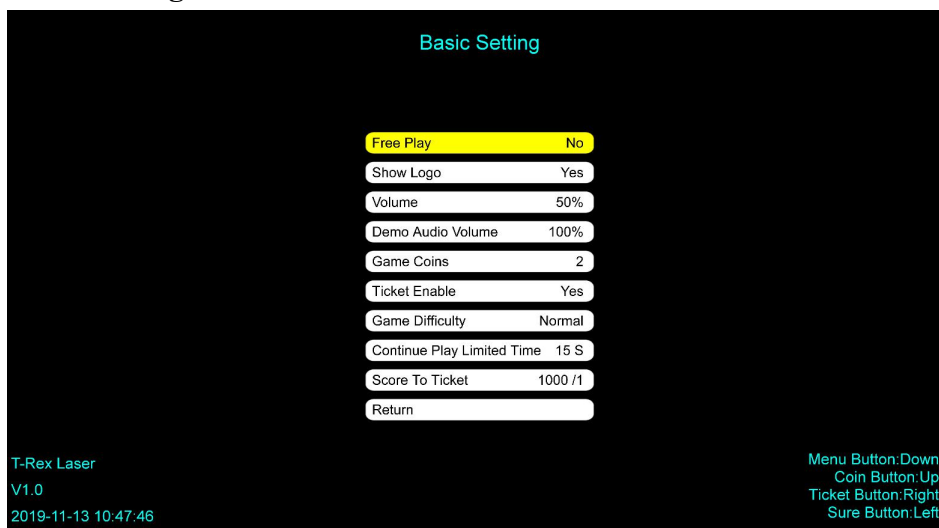
1. **Free Play：Choose pay play mode or free play mode.**

    No：Need to pay to play

    Yes：Free play

2. **Show Logo：Choose to show Logo or not**

    No：Doesn't show Logo

    Yes：Show Logo

3. **Volume：Volume setting**

    Range：0%~100%

4. **Demo Audio Volume：Demo volume setting**

    Range：0%~100%

5. **Game Coins：Coin(s) / Play setting**

    Range：1~99

6. **Ticket Enable：Choose payout ticket or not**

    No：Don't payout ticket

    Yes：Payout ticket

7. **Game Difficulty：Game difficulty setting**

    Range：Easy, Normal, Difficult

8. **Continue Play Limited Time：Set within how long need to decide to continue play**

    Range：5~60 seconds

9. **Score to Ticket：Set how many scores for one ticket**

    Range：100~30000 Scores / Ticket

10. **Return：Return to previous menu**

Adjusted Setting

```
                        Adjusted Setting




                    ┌──────────────────────────┐
                    │ 1P AD Adjusted           │
                    ├──────────────────────────┤
                    │ 2P AD Adjusted           │
                    │ 1P Normal Shake       20 │
                    │ 1P Strong Shake       35 │
                    │ 2P Normal Shake       20 │
                    │ 2P Strong Shake       35 │
                    │ Return                   │
                    └──────────────────────────┘



T-Rex Laser                                  Menu Button:Down
V1.0                                          Coin Button:Up
2019-11-13 10:47:57                        Ticket Button:Right
                                             Sure Button:Left
```
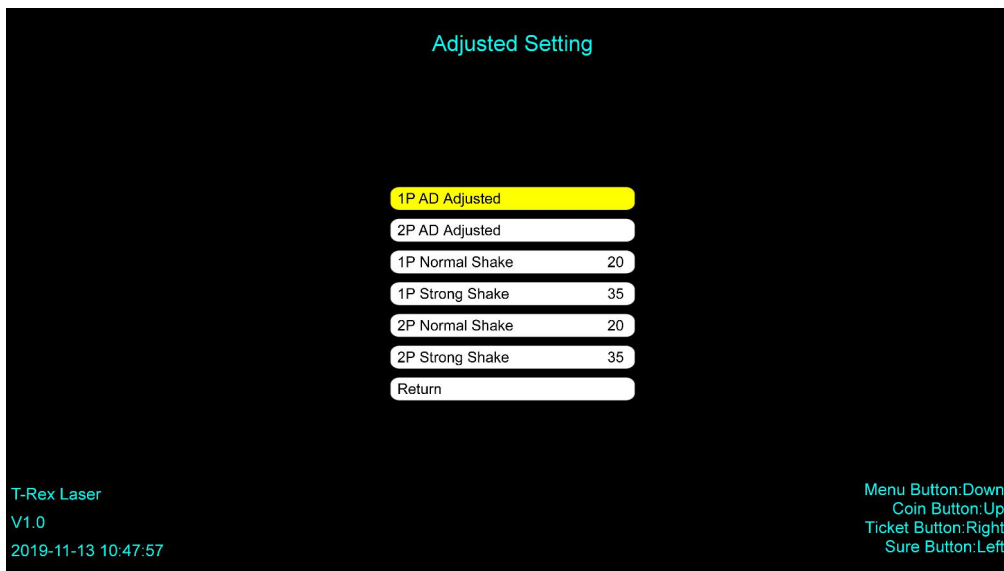
1P AD Adjusted: Calibrate the 1P Potentiometer

2P AD Adjusted：Calibrate the 2P Potentiometer

1P Normal Shake：Set 1P Regular Shake strength

1P Strong Shake：Set 1P Strong Shake strength

2P Normal Shake：Set 2P Regular Shake strength

2P Strong Shake：Set 2P Strong Shake strength

Return：Return to the previous menu interface

Input Test
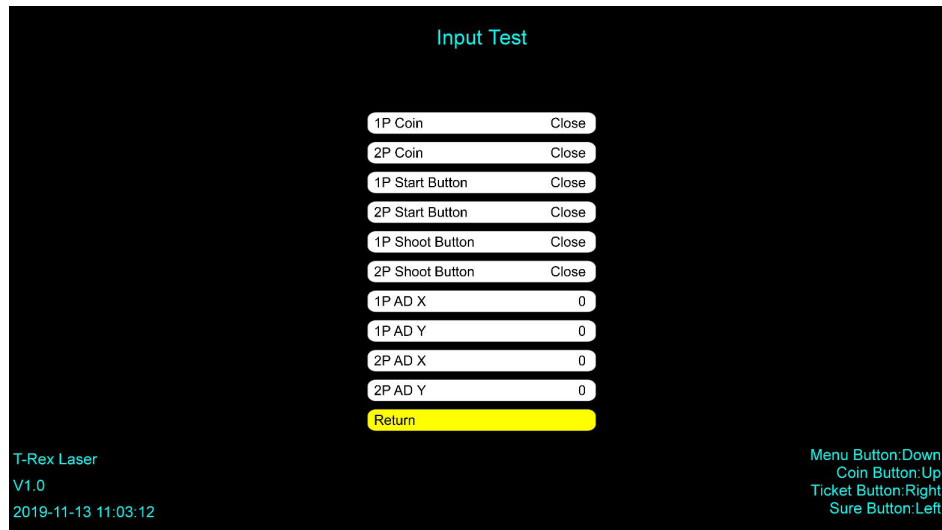
1P Coin：Test 1P Coin Selector

    Close：Haven't insert coin

    On：Have insert coin

2P Coin：Test 2P Coin Selector

    Close：Haven't insert coin

    On：Have insert coin

1P Start Button：Test 1P Start Button

    Close：Haven't pushed Start Button

    On：Have pushed Start Button

2P Start Button：Test 2P Start Button

    Close：Haven't pushed Start Button

    On：Have pushed Start Button

1P Shoot Button：Test 1P Shoot Button

    Close：Haven't pushed Shoot Button

    On：Have pushed shoot Button

2P Shoot Button：Test 2P Shoot Button

    Close：Haven't pushed Shoot Button

    On：Have pushed shoot Button

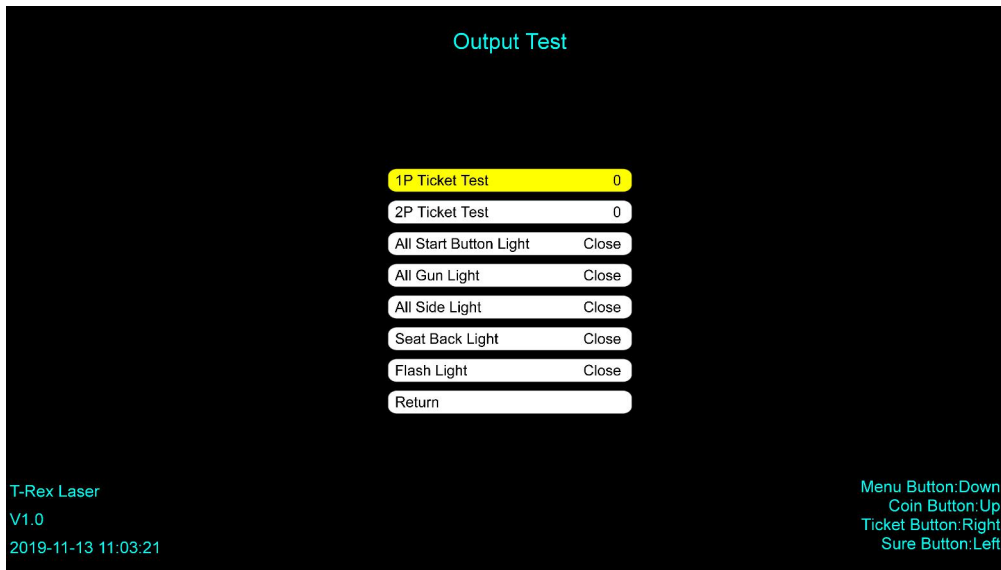**1P AD X：Read 1P Potentiometer X Data**

1P AD Y：Read 1P Potentiometer Y Data

2P AD X：Read 1P Potentiometer X Data

2P AD Y：Read 1P Potentiometer Y Data

Return: Return to the previous menu interface

Output Test

1P Ticket Test：Test 1P Ticket Dispenser can work normal or not

2P Ticket Test：Test 2P Ticket Dispenser can work normal or not

All Start Button Light：Test all Start Button Lights can work normal or not
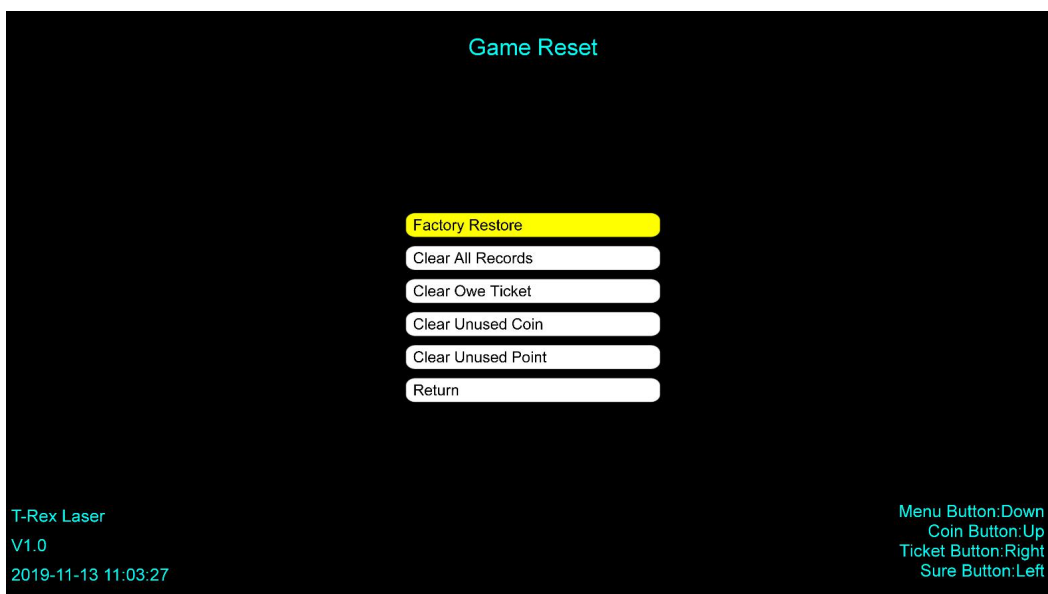
All Gun Light：Test all Gun Lights can work normal or not

All Side Light：Test all Side Lights can work normal or not

Seat Back Light：Test all Seat Back Lights can work normal or not

Flash Light：Test all Flash Lights can work normal or not

Return: Return to the previous menu interface

Game Reset

Factory Restore: All settings return to Factory Restore setting

Clear All Records: Clear all game date record, back to default date

Clear Owe Ticket: Clear all owed tickets

Clear Unused Coin: Clear all unused coins

Clear Unused Pint: Clear all unused points

Return: Return to the previous menu interface

Date / Time Setting

Date/Time Setting

Year	2019
Month	11
Day	13
Hour(24)	11
Minute	3
Second	37
Return	

T-Rex Laser

V1.0

2019-11-13 11:03:38

Menu Button:Down
Coin Button:Up
Ticket Button:Right
Sure Button:Left

Bookkeeping

Bookkeeping

Player	Coins	Tickets	Prizes	Ticket Rate
1P	8	3	4	0.38
2P	4	0	2	0.00
Total	12	3	6	0.25

Day Date	Run Time	Coins	Tickets	Prizes	Ticket Rate
2019-10-23	00H:03M	4	0	2	0.00
2019-10-24	00H:02M	4	0	2	0.00
2019-10-25	00H:03M	4	3	2	0.75
2019-11-13	00H:16M	0	0	0	0.00

P1 / 1

T-Rex Laser

V1.0

2019-11-13 11:03:44

Return
Next Page
Prev Page
Clear Data

Menu Button:Down
Coin Button:Up
Ticket Button:Right
Sure Button:Left

Check Game Data

Start Adjust! Remain 2 Point...
X: 64 Y: 1047

1.Shoot Left Down, Please Start Button
2.Shoot Right Up, Please Start Button

20

Error Code

Cause: The communication with the I/O Board been disconnected.
Solution: Restart the machine, and press the "Reset Button" on the I/O Board. (There's only one button on the I/O Board).
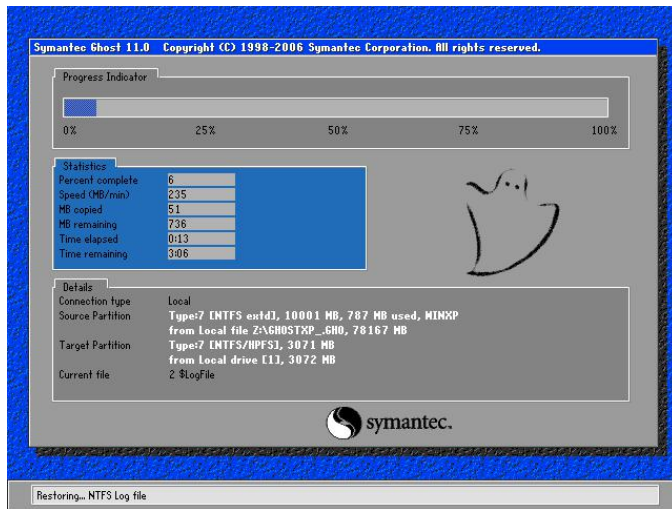

Cause: The RAM memory of the host is insufficient.
Solution: Move out the RAM of the host, and then, install this RAM to the host again.

Cause: Something wrong from the Ticket Dispenser.
Solution: Full fill ticket, if still couldn't work, replace a new Ticket Dispenser.

Instructions on Restoring U Disk

When the machine is turned off, plug the U disk into the USB port behind the host, and the U disk will restore after the machine restarts. As shown in the figure, the system is restoring, and it needs about 20 minutes.

Complete prompt. The system restoring is completed as shown in the left figure, and you can unplug the U disk.

The system restoring needs about 20 minutes. Please do not cut off the power supply and wait patiently! Please forgive if there is any inconvenience!

⚠ Attention: The above technical parameters are subject to change without prior notice.

ACE Amusement Technologies Co., Ltd.

ADD: No.5 Building, No. 6, HengFeng 6th Road, Gangkou Town, Zhongshan, Guangdong, P.R. China
PC: 528400
TEL: (+86) 760 8848 8920
E-Mail: Sales@ACE-Amusement.com
Web: www.ACE-Amusement.com