## OPERATORS MANUAL PRIZE BOX



## PLEASE NOTE:

Read this manual BEFORE operating the machine.
Keep this manual for your reference.
Go to www.LAlgames.com click on Support to register your games and receive future updates.


LAI Games

Correspondence regarding this machine should be addressed to your closest LAI Games office, or LAl Games Distributor.
For contact details, refer to the back page of this manual.

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## LAI Games Note

## Dear Customer,

Keep up to date with new software updates or Service Bulletins for this game.

Check our website at WWW.Iaigames.COM and click on Support, where you will find links to all the Bulletins and Software updates to keep your game in top working order.

Thanks,


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## SAFETY PRCAUTIONS

The following safety precautions and advisories are used throughout this manual and are defined as follows.

> *WARNING! *
> Disregarding this text could result in serious injury.

## * CAUTION! *

Disregarding this text could result in damage to the machine.

* NOTE! *

Is an advisory text to hint or help understand.

## BE SURE TO READ THE FOLLOWING

## * WARNING! *

Always turn OFF Mains AC power and unplug the game before opening or replacing any parts.
Always grasp the plug, not the line cord, when unplugging the game from an electrical outlet.
Always connect the Game Cabinet to a grounded electrical outlet with a securely connected ground line.
Do Not install the Game Cabinet outdoors or in areas of high humidity, direct water contact, dust, high heat or extreme cold.
Do Not install the Game Cabinet in areas that would present an obstacle in case of an emergency, i.e. near fire equipment or emergency exits.

## * CAUTION! *

Always use a Digital Multimeter, logic tester or oscilloscope for testing integrated circuit (IC) logic PC boards. The use of a continuity tester is not permitted.
Do Not connect or disconnect any of the integrated circuit (IC) logic PC boards while the power is ON.
Do Not uses any fuse that does not meet the specified rating.
Do Not Subject the game cabinet to extreme temperature variations. Reliability of electrical components deteriorates rapidly over $60^{\circ} \mathrm{C}$.

## MACHINE INSTALLATION AND INSPECTION

When installing and inspecting Prize Box be very careful of the following points and pay attention to ensure that the players can enjoy the game safely.

- Be sure to turn the power OFF before working on the machine.

> * WARNING! *

Always Turn OFF mains power before removing safety covers and refit all safety covers when work is completed.

- Make sure the power cord is not exposed on the surface (floor, ground, etc.) where people walk.
- Check that the rubber glide feet levelers are set correctly on the floor so that the game cabinet is level and stable.
- Always make complete connections for the integrated circuit (IC) logic PC Boards and other connectors. Insufficient insertion can damage the electrical components.

> * CAUTION! *

Before Switching the machine on be sure to check that it has been set on the correct voltage for your area!

Refer To the mains voltage adjustment section of this manual. Machines are normally shipped on 220V AC unless otherwise specified.

- Only qualified personnel should inspect or test the integrated circuit (IC) logic PC Boards.
- If any integrated circuit (IC) logic PC Boards should need servicing, please contact the nearest LAI Games Distributor. (Refer to the back page of this manual)


## INTRODUCTION

Congratulations on your purchase of Prize Box by LAI Games. We hope you take the time to read this manual and learn about the many features and user-friendly adjustments that can be made to fine-tune the game for maximum earning potential.

## DESCRIPTION

Prize Box is a compact and easy to understand claw game that gives players an advantage by letting them see the playing field from the top down.

## PACKAGING

## CONTENTS

- Prize Box Cabinet
- Operator Manual


## SPECIFICATIONS DIMENSIONS

- Height: 908 mm
- Width: 853 mm
- Length: 850.25 mm
- Power: 140W,120VAC / 240VAC.

Please ensure that your power supplies are set correctly before applying power.


850.25

## LOCATION REQUIREMENTS

- Ambient temperature:

5C-40C

- Ambient humidity:

Low

- Ambient U.V. radiation: Very low
- Vibrations level:

Low

## GAMEPLAY AND MODES

## OBJECTIVE

Players aim to position the claw in the correct position so that when they lower it, they are able to grab a prize and bring it back to the prize chute.

## HOW TO PLAY

1. Coin in.
2. Move the claw to the desired location using the joystick.
3. Press the button to lower the claw.
4. The claw then attempts to grab onto a prize.
5. The claw returns to the home position, whether it successfully grabbed a prize or not.
6. If a prize was grabbed, it is released into the prize chute.

## OPERATION

## GAME SETTINGS AND ADJUSTMENTS

## ENTER GAME SETTINGS MODE

Turn the machine on, and press S1 to enter settings mode.
Continue to press S1 to cycle through the settings.


The left display indicates currently selected setting


| Function or Mode shown in the Display | Description |
| :--- | :--- |
| 00 | Normal operation |
| 10- Switch and Input Test | The code value of the switch and Inputs are <br> displayed in the second LED display (please refer <br> to the "Switch Test Codes" in the table below) |
| 20- Forward and backward Crane Movement <br> Test | This is to operate and test the forward and <br> backward motors, control circuit, front and back <br> limit switches. <br> Use the Joystick to move forward and backward, <br> pressing the drop switch returns to normal <br> operation. |

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| 30-Left and right Crane Move, Movement <br> Test | This is to Operate and test the left and right <br> motors, control circuit, left and right limit <br> switches. <br> Use the Joystick to move left and right, pressing <br> the drop switch returns to normal operation. |
| :--- | :--- |
| 40-Up and down Claw Movement Test | This is to Operate and test the up and down <br> motor, control circuit, up and down limit switches. <br> Use the drop switch to lower and raise the claw. |
| 50-Strong Claw Power Adjustment (NOTE: <br> the Strong Power setting must be more than <br> the Weak Power Setting) | Move the Joystick forward and backward to <br> change the claw grab power voltage, Press the <br> Drop Switch to close and check the claw power. <br> Adjust the voltage so the claw has a strong holding <br> power for the Plush/Toys that are used |
| 60-Weak Claw Power Adjustment (NOTE: the <br> Weak Power setting must be less than the <br> Strong Power Setting) | Move the Joystick forward and backward to <br> change the claw grab power voltage, press the <br> Drop Switch to close and check the claw power. <br> Adjust the voltage so the claw only just holds the <br> Plush/Toys that are used. |
| 70- Up Down Speed | Sets the up and down speed of the motor. |$|$| Se Left Right / Front Back Speed |
| :--- | | Sets the left to right and front to back speed of the |
| :--- |
| motor. |

## DIP SWITCH SETTINGS SW1

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | The frequency control form of strong and weak power <br> to catch the dolls- SW1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | OFF | OFF | OFF | OFF | Not Used always OFF |

## DIP SWITCH SETTINGS SW2

| Coin <br> Numbers |  | Gantry <br> Adjust | Game <br> Time <br> Adjust | Claw Adjust (not in air) | Background Music (standby mode) | Background Music | No Function | SW2 Coin Number Settings and Functions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
|  |  |  |  |  |  | - |  | Standard music |
|  |  |  |  |  |  | ON |  | Kids music |
|  |  |  |  |  | - |  |  | Background music replays every 10 minutes |
|  |  |  |  |  | ON |  |  | Background music replays in less than 10 minutes |
|  |  |  |  | - |  |  |  | No catch when not in air |
|  |  |  |  | ON |  |  |  | Catch function in air |
|  |  |  | - |  |  |  |  | 20 seconds game time |
|  |  |  | ON |  |  |  |  | 25 seconds game time |
|  |  | - |  |  |  |  |  | Gantry return synchronous |
|  |  | ON |  |  |  |  |  | Gantry return nonsynchronous |
| - | - |  |  |  |  |  |  | 1 game |
| ON | - |  |  |  |  |  |  | 2 games |
| - | ON |  |  |  |  |  |  | 3 games |
| ON | ON |  |  |  |  |  |  | 4 games |

## HARDWARE TEST AND CLAW POWER SETTINGS



For the game to control payout correctly it is important to set the Claw Power correctly for differently sized or weighted toys.
To enter the Test and Claw settings, press the S1 button on the Main PCB, the larger button next to the 7 Segment Displays. The settings are as follows in the table below:

| 10- Switch Test and Numbers Displayed |  |  |  |
| :---: | :---: | :---: | :---: |
| Value | Switch | Value | Switch |
| 1 | Forward Switch | 9 | Front Stop Switch |
| 2 | Back Switch | 10 | Back Stop Switch |
| 3 | Left Switch | 11 | Right Stop Switch |
| 4 | Right Switch | 12 | Left Stop Switch |
| 5 | Down Switch | 13 | Up Stop Switch |
| 6 | Crane Drop Switch | 14 | Down Stop Switch |
| 7 | Coin Switch | 15 | Main Board Clear Switch |
| 8 | Prize Sensor | 16 | Main Board Test Switch |

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## INTERNAL ACCOUNTING

## VIEW INFORMATION

1. While the game is in attract mode, press the $S 2$ button.
2. The drop OK button and joystick will flash to confirm that the accounting mode has been entered.
3. The credit display will now show a 1. This is the resettable coin counter audit number. The internal displays will show the amount. The credit display will show the audit location (1), and the internal display on the CPU will display the actual resettable count in memory at that location (1).
4. Press the drop OK button, and the credit display will change to display a 2 . This is the resettable prize counter. The internal displays will show the amount. The information at Audit location 2 is displayed on the CPU like above.
5. Press the drop OK button, and the credit display will change to display a 3 . This is the nonresettable coin counter. This is the resettable coin counter audit number. The internal displays will show the amount. The information at Audit location 3 is displayed on the CPU like above.
6. Press the drop OK button, and the credit display will change to display a 4. This is the nonresettable prize counter. The internal displays will show the amount. The information at Audit location 4 is displayed on the CPU like above.
7. Pressing the drop OK button again will cycle back to display a 1. The internal displays will show the amount. The information at Audit location 1 is displayed on the CPU like above.
8. To exit this mode, turn the game off, then on.

## CLEAR INFORMATION

To clear the data stored in resettable counters (non-resettable counters cannot be reset), follow the instructions below.

1. While the game is switched off, hold down the S2 button and power the game on.
2. The credit and internal displays (located on the circuit board) will start counting up number, the joystick and drop OK button will flash, and music will play without stopping.
3. Press the drop OK button to return to attract mode and normal operation.
4. Drop a coin into the game to ensure that it is operating normally

## ERRORS

| Error Number | Error Description | Solution |
| :---: | :--- | :--- |
| 02 | Time Out Error for claw not reaching <br> the Down Stop switch in a certain <br> amount of time. | Examine cabling for front and <br> back motor and Down stop <br> switch. Verify switch and <br> motor operation. |
| 03 | Time Out Error for claw not reaching <br> the Up Stop limit switch in a certain <br> amount of time. | Examine cabling for up and <br> down motor and Up stop <br> switch. Verify switch and <br> motor operation. |
| 04 | Time Out Error for the crane <br> assembly not returning to the Left <br> Stop switch in a certain amount of <br> time. | Examine cabling for left and <br> right motor and Left Stop <br> switch. Verify switch and <br> motor operation. |
| 05 | Time Out Error for the crane <br> assembly not returning to the Front <br> Stop switch in a certain amount of <br> time. | Examine cabling for left and <br> right motor and Front Stop <br> switch. Verify switch and <br> motor operation. |
| 24 | Memory fault on main board. | Clear memory through game <br> settings. If unable to resolve, <br> contact LAI Games for repair. |
| 30 | Coin Switch error. | Check coin mechanism for <br> blocked coins. Check wiring <br> and coin switch settings. |
| 32 | Prize optos blocked or faulty. | Clear or remove any items <br> blocking the optos. Examine <br> and repair optic sensors if <br> faulty. |
| 33 | Prize out sensor is damaged or has a | Check the sensor is not <br> blocked. |
| 3 weak signal. |  |  |
| 3 |  |  |

For additional assistance, please contact the LAI Games Service Department.

## TECHNICAL DETAILS

It is advised that anybody using SECTION B for repairing or modifying any of the components of the game should be a qualified technician, having at least a basic knowledge of digital components, integrated circuits and electricity.

## MAIN GAME PCB



## GAME SWITCHES

## SWITCH ONE



## SWITCH TWO



## DIPSWITCHES



VOLUME CONTROL


## GAME PCB PIN INFORMATION

J1

| $J 1$ |  |
| :--- | :--- |
| 1 | 2 |
| Speaker + | Speaker- |

J2

| J2 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Up <br> Switch | Gnd | Joystick <br> back | Joystick <br> front | Joystick <br> right | Joystick <br> left | Down Switch |

J3

| J3 |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  | 1 | 1 |


| Right stop micro switch ON | 7 | 2 | GND |
| :--- | :--- | :--- | :--- |
|  |  | 0 |  |
| Left stop micro switch ON | 8 | 2 | GND |
|  |  | 1 |  |
| Up stop micro switch ON | 9 | 2 | GND |
|  |  | 2 |  |
| Down stop micro switch ON | 1 | 2 | GND |
|  | 0 | 3 |  |
| Empty | 1 | 2 | Empty |
|  | 1 | 4 |  |
| Empty | 1 | 2 | Empty |
|  | 2 | 5 |  |
| Empty | 1 |  |  |
|  | 3 |  |  |

J4

| J4 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | +12 V | GND | Insert coin 2 signal <br> NO | +12 V |
| GND |  |  |  |  |  |

J5

| J5 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| GND | Prize signal NO | +12 V | GND | Right stop micro <br> switch ON | +12 V | GND | SSR | +12 V |

J6

| J6 |  |  |
| :--- | :--- | :--- |
| 1 | 2 | 3 |
| +12 V | Out <br> list | Coin in |

## J7

| J7 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |  |
| GND | +5 V |  | GND | +48 V | +12 V |  |

## J8

| $\mathrm{J} 8(2510-5 \mathrm{P})$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 |
|  | Switch Light- | +12 V |  |  |

J9

| 19 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| COM5 | COM4 | A | B | C | D | E | F | G |

## CONTROL PANEL DISPLAY



## PRIZE SENSOR PCB

ONE

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| P1 |  |  |
| :--- | :--- | :--- |
| 1 | 2 | 3 |
| +12 V | Prize NO | GND |

TWO


| P 2 |  |
| :--- | :--- |
| 1 | 2 |
| +5 V | GND |

## PCB DIP SWITCHES AND TEST SWITCHES



1. SW1, SW2, Dip Switch (Note Dip Switch 3 is Not Used and not installed on the PCB)
2. Switch 2
3. Switch 1
4. Volume Adjustment

## Disclaimer

## OPERATOR WILL TAKE NOTE

By accepting delivery of and placing this hardware and licensed software into operation, the Operator represents and warrants that it will only operate the hardware and licensed software provided by LAI Games in compliance with the regulatory requirements of the country, state, and/or municipality in which the hardware and licensed software are used and/or operated. LAI Games has provided this hardware and licensed the software only for legitimate and legal use, and any use of the hardware and licensed software in a manner that violates any laws of the country, state, and/or municipality in which the hardware and licensed software are used and/or operated is wholly unauthorized and shall be at Operator's sole and complete risk.

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Any improper and unauthorized use shall completely and totally void any and all warranties, both express and implied, of the hardware and licensed software provided by LAI Games.

## WARRANTY

LAI Games warrants its manufactured products for a period of 3 months inclusive of parts and labor from the date of sale.

LAI Games exclusive obligation is to repair any item with any defects as a result of faulty workmanship or materials, providing the defective item or items of equipment are returned to the LAI Games distributor from which the machine was purchased.

LAI Games shall have no obligation to make repairs necessitated by negligence or interference to any component by any unauthorized personal. This will automatically void any existing warranty.

IF MAKING A WARRANTY CLAIM:
(a) A Copy of the sales invoice must accompany the claim.
(b) To and from Transport and freight costs are not covered by the warranty.
(c) Warranty is not transferable with the sale of a machine from one owner to another.



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