

# OPERATOR MANUAL

Version 10

## PRIZE BOX



### PLEASE NOTE

Read this manual before operating the machine.

Visit [www.laigames.com](http://www.laigames.com) for support.



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

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# SAFETY PRECAUTIONS

The following safety precautions and advisories used throughout this manual 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:** An advisory text to hint or help understand.

## PLEASE 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** use 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 °C.

# MACHINE INSTALLATION AND INSPECTION

When installing and inspecting *game name*, 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 levellers 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

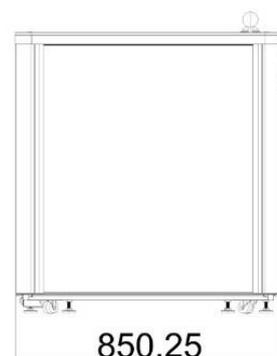
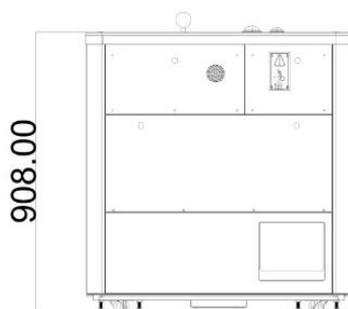
### CONTENTS

- 1 x Prize Box Cabinet
- 1 x Operator Manual
- 1 x Power cord
- 1 x Security Allen Key
- 1 x Coin box key
- 2 x Coin Door/Prize door keys

## SPECIFICATIONS

### DIMENSIONS

- Height: 908mm (35.75")
- Width: 853mm (33.58")
- Length: 850.25mm (33.48")



## SIDE AND BACK GLASS

The two side and back panels of **Prize Box** are made up of clear, tempered glass with seamed edges.

Measurements are as follows:

- Height: 31.5" / 800mm
- Width: 28" / 742mm
- Thickness: 0.18" / 4.6mm

## ELECTRIC SUPPLY

- Voltage: 120VAC / 240VAC
- Watts: 140W
- Amps at 110V: 1.3A
- Amps at 220V: 2.6A
- Mains fuse at 110V: 2A
- Mains fuse at 220V: 3A

## LOCATION REQUIREMENTS

- Ambient temperature: 5C - 40C
- Ambient humidity: Low
- Ambient U.V. radiation: Very low
- Vibrations level: Low

## PRIZE REQUIREMENTS (STANDARD CLAW)

- Plush: Up to 6" (153mm)
- Ball: Up to 2.5" (63.5mm)

**NOTE:** Prize Box can accept other sizes and types of claws to accept bigger/smaller prizes, **but the prizes must be able to fit in the prize chute area.**

## GAMEPLAY AND MODES

### OBJECTIVE

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

### HOW TO PLAY

1. Insert credit.
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

Game settings are set by adjusting the two dip switches located on the main board. Be sure to turn off power to the game prior to adjusting dip switches.



**NOTE:** “Pure Skill” and “Win Every Time” settings are only available on main PCB version 6.2 or greater.

### DIP SWITCH SETTINGS SW1

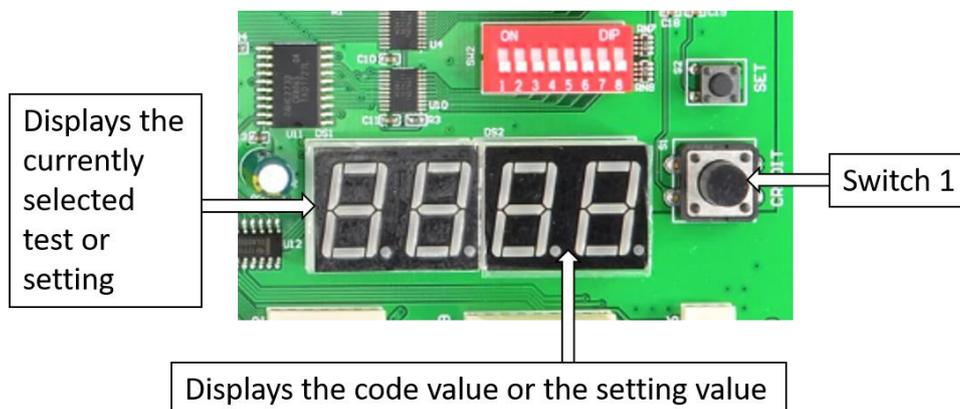
1	2	3	4	5	6	7	8	Setting
ON	ON	ON	ON	ON	ON	OFF	OFF	Pure Skill (Claw always maintains same strength)
ON	ON	ON	ON	OFF	OFF	ON	ON	Win Every Time (Player will get as many turns as necessary until a prize is dispensed)
OFF	Setting for approximately one win every 5 Games							
ON	OFF	Setting for approximately one win every 10 Games						
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Setting for approximately one win every 15 Games
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	Setting for approximately one win every 20 Games
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	Setting for approximately one win every 25 Games
ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	Setting for approximately one win every 30 Games
OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	Setting for approximately one win every 35 Games
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	Setting for approximately one win every 40 Games
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 45 Games
ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 50 Games
OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 55 Games
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 60 Games
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 65 Games
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 70 Games
OFF	ON	ON	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 75 Games
ON	ON	ON	ON	OFF	OFF	OFF	OFF	Setting for approximately one win every 80 Games

## DIP SWITCH SETTINGS SW2

Coin Numbers		Gantry Adjust	Game Time 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 non-synchronous
-	-							1 game
ON	-							2 games
-	ON							3 games
ON	ON							4 games

## TEST & SETTINGS MODE

Turn the machine on, and press Switch 1 to enter Test/Settings/Audits mode. Continue to press S1 to cycle through the settings. Used the joystick to change the value of the selected setting.



Function or Mode shown on the Display	Description
00	Normal operation
10- Switch and Input Test	The code value of the switch and Inputs are displayed in the second LED display (please refer to the "Switch Test Codes" in the table below)
20- Forward and backward Crane Movement Test	This is to operate and test the forward and backward motors, control circuit, front and back limit switches. Use the Joystick to move forward and backward, pressing the drop switch returns to normal operation.
30- Left and right Crane Move, Movement Test	This is to Operate and test the left and right motors, control circuit, left and right limit switches. Use the Joystick to move left and right, pressing the drop switch returns to normal operation.
40-Up and down Claw Movement Test	This is to Operate and test the up and down motor, control circuit, up and down limit switches. Use the drop switch to lower and raise the claw.
50- <u>Strong</u> Claw Power Adjustment (NOTE: the Strong Power setting must be more than the Weak Power Setting)	Move the Joystick forward and backward to change the claw grab power voltage, Press the Drop Switch to close and check the claw power. Adjust the voltage so the claw has a strong holding power for the Plush/Toys that are used
60- <u>Weak</u> Claw Power Adjustment (NOTE: the Weak Power setting must be less than the Strong Power Setting)	Move the Joystick forward and backward to change the claw grab power voltage, press the Drop Switch to close and check the claw power. Adjust the voltage so the claw only just holds the Plush/Toys that are used.
70 – Up Down Speed	Sets the up and down speed of the motor.
80 – Left Right / Front Back Speed	Sets the left to right and front to back speed of the motor.
81 – Coins Per Credit	This controls how many coins need to be inserted before a credit is granted. Move the joystick forwards and backwards to adjust from 1 – 20.

Switch test codes are on the following page.

## SWITCH TEST CODES

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

## AUDITS MODE



## VIEWING AUDITS

1. While the game is in attract mode, press the S2 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 non-resettable 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 non-resettable 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.

## CLEARING AUDITS

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 numbers, 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. Credit the game to ensure that it is operating normally.

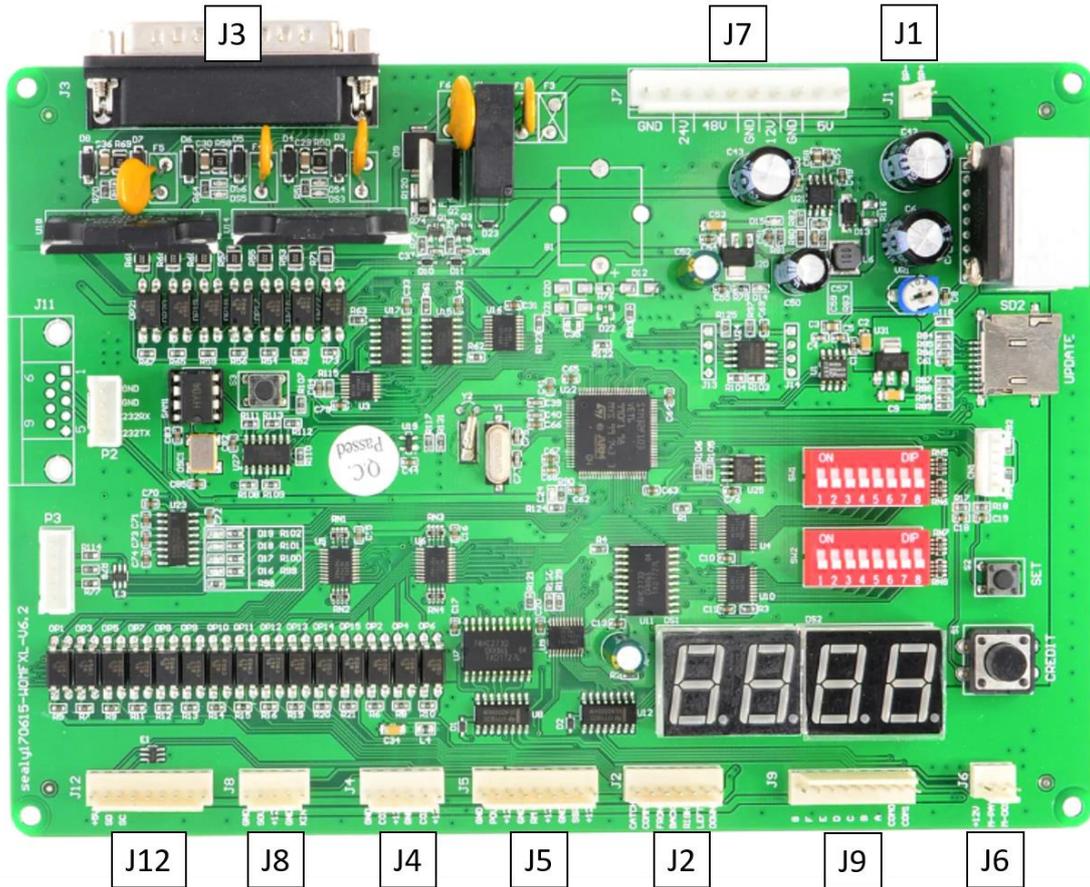
## ERRORS

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

# TECHNICAL DETAILS

**WARNING:** It is advised that anybody using this section 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 PCB



## PIN INFORMATION

J1	
1	2
Speaker+	Speaker-

J2						
1	2	3	4	5	6	7
Up Switch	GND	Joystick back	Joystick front	Joystick right	Joystick left	Down Switch

<b>J3</b>			
Front and back motor+	1	14	Front and back motor-
Left and right motor+	2	15	Left and right motor-
Up and down motor+	3	16	Up and down motor-
Claw coil power+	4	17	Claw coil power-
Back stop micro switch ON	5	18	GND
Front stop micro switch ON	6	19	GND
Right stop micro switch ON	7	20	GND
Left stop micro switch ON	8	21	GND
Up stop micro switch ON	9	22	GND
Down stop micro switch ON	10	23	GND
Empty	11	24	Empty
Empty	12	25	Empty
Empty	13		

<b>J4</b>					
1	2	3	4	5	6
GND	Insert coin 1 signal NO	+12V	GND	Insert coin 2 signal NO	+12V

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

<b>J6</b>		
1	2	3
+12V	Out list	Coin in

<b>J7</b>					
1	2	3	4	5	6
GND	+5V		GND	+48V	+12V

<b>J8(2510-5P)</b>				
1	2	3	4	5
	Switch Light-	+12V		

<b>J9</b>								
1	2	3	4	5	6	7	8	9
COM5	COM4	A	B	C	D	E	F	G

## PRIZE SENSOR

### OPTIC RECEIVER



P2		
1	2	3
+12V	Prize NO	GND

### OPTIC EMITTER



P2	
1	2
+5V	GND

## SOUND



## LAMPS

Button lamp is 12VDC T10 LED or equivalent. All remaining lighting is 12VDC RGB LED strips.

**WARNING:** Always turn **OFF** mains power and unplug the game, before replacing any lamps or LED strips.  
**Always** replace the lamps with the same or equivalent size, wattage and voltage.

# MAINTENANCE

**WARNING:** Always turn **OFF** mains power and unplug the game before cleaning the exterior of the machine.

**WARNING:** Always turn **OFF** mains power and unplug the game before cleaning the interior of the machine.

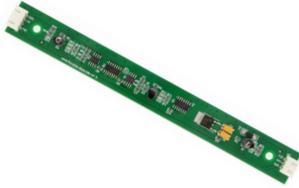
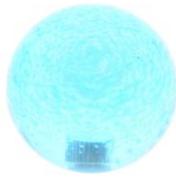
## EXTERIOR

- Regularly dust and clean the external cabinet areas as required, using a soft water-damp cloth and mild soap.
- Check for blown bulbs and replace as required. Check all LED strips are functioning and replace as required.

## INTERIOR

- Regularly dust and vacuum the interior of the cabinet, taking care to remove any objects that may have fallen.
- Check and tighten all fixing hardware and fasteners as required.
- Regularly test gantry and crane performance to ensure proper functionality. Roller kits, belts, motors and other gantry items are available from our parts department.

## COMMON PARTS LIST

PART NUMBER	DESCRIPTION	PHOTO
LPC-125	MAIN PCB	 A green printed circuit board (PCB) populated with various electronic components including integrated circuits, resistors, capacitors, and a four-digit LED display.
LPC-124	OPTIC EMITTER	 A long, narrow green PCB strip with several surface-mounted components, including what appears to be an optical emitter.
LPC-123	OPTIC RECEIVER	 A long, narrow green PCB strip similar to the emitter board, but containing an optical receiver component.
LEA-187	2-DIGIT CREDIT DISPLAY	 A green PCB featuring two red seven-segment LEDs. The display shows the number '88'. Various test points and labels are visible on the board.
LEA-172	CHROME BUTTON	 A cylindrical chrome button with a black top and a silver base, featuring a three-pin electrical connector.
LPL-018	JOYSTICK BALL	 A spherical, translucent blue joystick ball with a textured surface.
LEA-176	JOYSTICK FULL ASSEMBLY	 The complete joystick assembly, showing the blue ball mounted on a metal base plate with a PCB underneath.

PART NUMBER	DESCRIPTION	PHOTO
LEA-294	CLAW ASSEMBLY W/ COIL	
LEA-174	CLAW COIL	
LEA-175	GANTRY MOTOR	
LEA-177	GANTRY SWITCH	
MAC-931	GANTRY DRIVE BELT	
MAC-932	GANTRY POLE W/ BOLTS	
LEA-233	IR RGB CONTROLLER	

PART NUMBER	DESCRIPTION	PHOTO
MAC-708	COIN COMPARITOR	
LEA-173	SPEAKER	
MAC-710	LOCK AND KEY SET	
LHM-285	SECURITY TOOL FOR TOP ACRYLIC	

**For other *Prize Box* parts and pricing, please visit our parts webstore @ [parts.laigames.com](http://parts.laigames.com)**

## Disclaimer

### OPERATOR, PLEASE 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.

Operator assumes any and all risk and liability for any civil or criminal legal claims or causes of action arising from the unauthorized use and/or operation of the provided hardware and licensed software, such improper and unauthorized use specifically including, but not limited to:

- (a) Operating or allowing the operation of the hardware and licensed software in a manner that violates the laws and regulations of the country, state, and/or municipality in which the hardware and licensed software are used or operated;
- (b) Assembling or causing the assembly of the hardware in a manner not authorized by or disclosed in this manual;
- (c) Any tampering with, changes to, or modifications of the licensed software that occur after the software leaves LAI Games' factory that is not made by authorized LAI Games personnel and that is directly or indirectly caused by Operator; and
- (d) Any tampering with the computer chip/electronic programmable read only memory (EPROM) by or on behalf of Operator that directly or indirectly causes the tamper-indicating holographic seal on the computer chip/EPROM to be broken or damaged in any way.

LAI Games shall have no liability related to such improper and unauthorized use and/or operation of the hardware and licensed software, and Operator shall indemnify, defend, and hold LAI Games harmless for any claim or cause of action brought against LAI Games arising from Operator's or Operator's representative's improper and unauthorized use and/or operation of the hardware and licensed software.

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.

## Disclaimer

Operators should understand that some health conditions and physical restrictions can increase a player's chance of injury while playing arcade games. LAI Games accepts no liability for any injuries to persons or damage to property while playing our machines.

## 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.

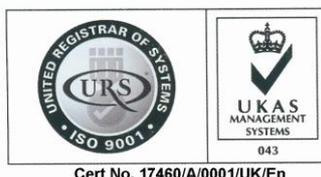
### IF MAKING A WARRANTY CLAIM:

1. Unless cosmetic damage, prior to any warranty claim, you must contact tech support to verify your parts are faulty.
2. If cosmetic damage, you must send photos of the damaged part. Any damage potentially caused by patrons or staff will not be warranted unless LAI deems it a manufacture defect.
3. A copy of the sales invoice must accompany the claim.
4. To and from transport and freight costs are not covered by the warranty.
5. Warranty is not transferable with the sale of a machine from one owner to another.



## Contact Us

Sales and Enquiries: [sales@laigames.com](mailto:sales@laigames.com)  
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