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 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! *
- An advisory text to hint or help understanding.

BE SURE TO READ THE FOLLOWING

* WARNING! *
**Always** turn OFF Mains AC power and unplugged the game, before opening or replacing any parts.

**Always** when unplugging the game from an electrical outlet, grasp the plug, not the line cord.

**Always** connect the Game Cabinet to 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, ie. 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 “Stacker”, 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 through.

- Check that the rubber glide feet levelers are set evenly on the floor so that the game cabinet is unable to roll and is 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 on page 38. 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! You have just bought the “Stacker” prize redemption game, another great product from LAI GAMES.

With a bright and attractive display, simple but exciting game play and a real “Ahh! Just missed” feeling, “Stacker” will make a great addition to any location.

We hope you take the time to read this manual and learn about the many other features and user-friendly adjustments that can be made to “fine-tune” the game for maximum earning potential.

DESCRIPTION

The “Stacker” is a quick stop skill game that is simple and fast to play and learn. The player must press the start/stop button to stack the moving blocks on top of each other. Each time the player successfully builds another layer onto the pile of blocks, the next level is progressively harder.

Once the player reaches the Minor prize level, they get to choose between a minor prize or continue to play on for the major prize. Nearly all of your customers will try to the major prize level.

PACKAGING

At delivery, the machine should arrive in good condition. To move the packaged machine for transport or placement, use a forklift and take care not to hit the package or stack heavy objects on top, as this may cause damage to the machine.

CONTENTS

- The “Stacker” cabinet
- Keys: 2 x coin door keys
  2 x prize display keys
  2 x back door keys
  2 x ticket door key (optional)
- Operator’s manual
- Quick Setup Booklet
- IEC Power Cord (In cash box)
- Parts & Accessories (In cash box)
SPECIFICATIONS

DIMENSIONS

- Weight: 163 kg (360 lb)
- Height: 2000mm (78-1/2”)
- Width: 730mm (28-3/4”)
- Length: 770mm (30-1/2”)
- Power: Maximum 300 W – (220V @ 1.4 A)(120V @ 2.5 A)
  Average 150 W – (220V @ 0.7 A)(120V @ 1.5 A)

ELECTRIC SUPPLY

- The game has the option to operate on a 110V, 120V, 220V or 240V AC 50/60Hz single phase mains electric supply.
  The supply must be a three wire grounded supply.

* CAUTION! *

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

Please Refer to the mains voltage adjustment section of this manual on page 38. Machines are normally shipped on 220V AC unless otherwise specified.

LOCATION REQUIREMENTS

- Ambient temperature: between 5°C and 40°C.
- Ambient humidity: Low
- Ambient U.V. radiation: Very low
- Vibrations level: Low
HOW TO PLAY

PLAYERS AIM TO BUILD A VERTICAL STACK OF BLOCKS TO WIN PRIZES

- Insert coin/s. *(The exact amount of coins per play is dependant on Program settings P1 through to P6. See program settings, page 14 for details).*

- Press the Start/Stop button to start a game;

- Press the Start/Stop button to stop the moving blocks at the desired position;

- Build the stack of blocks by stopping each level of blocks on top of each other;

- Players win a prize when either the Minor or Major level is reached;

- On a Minor prize win, players can elect to choose a Minor Prize or press the Continue button and try for the Major Prize Level. *(The player will not win any prizes if they choose continue & fail to reach the Major level)*

- Game ends any time the player fails to stop the moving blocks at the desired position, or they choose a Minor Prize.

Prize Selection

- Once you have won a prize, press the select button to step through the Prize Arms.

- If you won a minor prize, you can only select from the minor prize arms. If you won a major prize, you can select only from the major prize arms.

- Press the Start/Stop button to dispense a prize from the selected prize arm.
FITTING PRIZES TO THE PRIZE ARM

STEP ONE: Removal of Prize Locking Pin.

1. Unscrew the Prize Locking pin *(left-hand thread)*, by turning it in a clockwise direction.

2. Remove the pin by pulling it all the way out.

* NOTE! *
Stacker is shipped from the factory with the Locking Pins in the Cashbox.

STEP TWO: Attachment of Hanging Ties.

- Attach the prizes securely to the Hanging Ties.

* NOTE! *
Be sure to allow a loose, 3-finger gap in the ‘hanging tie’ to ensure that the ‘hanging tie’ does not interfere with the operation of the Prize Arm mechanism.

STEP THREE: Loading of Prizes.

- Load the prize arm by sliding the Hanging Tie over the entire arm, as shown making sure that the prizes are facing towards the customer.
STEP FOUR: Correct positioning of prizes.

- Position the Hanging Ties on the prize arm as shown. Space the prizes apart on the arms so they are well presented, looking from the front. Ensure the prizes do not restrict the viewing of the LED display. Do not have the prizes spaced more than ‘half an arm’ apart, or the prize arm will time out and display error Err4.

* NOTE! *
If completely filling the prize arm, start filling the prize arm from the back and work your way towards the front.

STEP FIVE: Reinsertion of Prize Locking Pin.

1. Reinsert the Prize Locking pin by positioning it in the centre of the spiral making sure it ALWAYS stays ABOVE the hanging ties.

2. Re-fit and tighten the Prize Locking pin (Left-hand thread), by turning it in anti-clockwise direction.

STEP SIX: Correct positioning of Prize Locking Pin.

- Ensure the Prize Locking Pin ALWAYS remains ABOVE the Hanging Ties.

* NOTE! *
Correct fitting of the Prize Locking Pin prevents the prizes from falling off the arm by shaking or tilting the cabinet.
 PLEASE READ THE FOLLOWING GUIDE AS A GOOD STARTING POINT FOR SETTING UP OF YOUR NEW "STACKER" GAME. BY TESTING DIFFERENT MERCHANDISE AND FINE-TUNING THE SETTINGS YOU CAN MAXIMIZE YOUR GAME EARNINGS.

* NOTE! *

All the following recommendations are based on an approximate payout of 30%. This payout is recommended for maximum earnings. 30% payout means that approximately 30% of the game income will be paid out in prizes. E.g. For every $100 in the cashbox, $30 worth of prizes should be won.

- The recommended game operation for maximum earnings, are as follows:

MAJOR WINS – Approximately ‘1’ win every ‘400’ games played.

MAJOR PRIZE VALUE – Approximately 200 times the price per play.

MAJOR PRIZES – Use good quality “IN DEMAND” Prizes
Use different types of prizes on each of the 4 Prize Arms to determine which prizes are most desired by the players. You can then use the game audits to check popularity and vary the stock accordingly. Varying the prize stock will also keep players interest in the game.

MINOR WINS – Approximately ‘1’ win every ‘1 – 2’ games played.

MINOR PRIZE VALUE – Approximately cost should be 20% of the price per play.

MINOR PRIZES – Use small cheap items, then use the game audits to check popularity and determine which prizes are most in demand.

PRIZE PAYOUT QUICK REFERENCE TABLE

<table>
<thead>
<tr>
<th>PRICE PER PLAY</th>
<th>25¢</th>
<th>50¢</th>
<th>$1.00</th>
<th>$2.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINOR PRIZE VALUE</td>
<td>5¢ ~ 10¢</td>
<td>10¢ ~ 20¢</td>
<td>20¢ ~ 30¢</td>
<td>40¢ ~ 60¢</td>
</tr>
<tr>
<td>Approximate number of Games per Minor Win</td>
<td>1 – 2</td>
<td>1 – 2</td>
<td>1 – 2</td>
<td>1 – 2</td>
</tr>
<tr>
<td>Skill Setting Minor Prize (P09)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MAJOR PRIZE VALUE</td>
<td>$35.00</td>
<td>$75.00</td>
<td>$150.00</td>
<td>$310.00</td>
</tr>
<tr>
<td>Approximate number of Games per Major Win</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Skill Setting Major Prize (P10)</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Based on an approximate payout of 30%
The “Stacker” game has six operational modes: Attract mode, Play mode, Test Mode, Programmable Adjustments Mode, Audits Mode and Game History Mode.

**OPERATIONAL DIAGRAM**

- **POWER UP**
  - **ATTRACT MODE**
    - PRESS TEST
  - **PLAY MODE**
    - *NOTE!* *Entering test mode will clear any stored credits*
  - **TEST MODE**
    - PRESS TEST
  - **PROGRAMMABLE ADJUSTMENTS MODE**
    - PRESS TEST
  - **AUDITS MODE**
    - PRESS TEST
  - **GAME HISTORY MODE**
    - PRESS TEST

**ATTRACT MODE**
- The Attract mode provides a light and sound display, while the game is not being played. This feature is to attract potential customers to play the game. The attract mode sound can be turned on and off. *(Refer to programmable adjustment P07, see page 14 of this manual).*

**PLAY MODE**
- The Stacker has two play modes. The Standard Coin Play mode, where a coin, or coins are inserted. Or Free Play where no coins are necessary.

**COIN PLAY**
- The Coin Play mode is entered from Attract mode, by inserting coins in any of the two coin slots on the front of the machine cabinet, then following the instructions in the “How to Play” section of this manual.

**FREE PLAY**
- The free play mode is entered from attract mode by holding the Service button for longer than five second, **FREE** will be displayed on the 4-digit LED display.
- For a single free game, just press the Service button once. When issuing single free games in this manner, Prizes can be won as normal.
TEST MODE

The Stacker Test mode has Three Test Configurations allowing you to test the function of the Sound, all Game Lamps, Displays, the Game Switches and the Prize Arm Motors. (Refer to the Test Mode Diagram below).

The Test mode is also used for Clearing Game Errors. If there is an active error, its code will be displayed. To try to clear the error code, press the red test button once. The error can be bypass by quickly pressing the red test button twice. (For Game Errors codes, refer to page 26).

* NOTE! *
- Entering Test Mode will CLEAR any CREDITS remaining in the game.
- If during test mode no ADJUSTMENTS or actions are made to the game for approximately four minutes, it will automatically RETURN to Attract Mode.

TEST MODE DIAGRAM
SOUND, LAMPS & DISPLAY TEST

- **ENTER** The Sound, Lamp & Display test is entered from Attract mode by pressing the test button once.

  * **NOTE!** *
  - If there is an active error displayed, press the red test button once to try and clear the error.
  - If the error code will not clear, it can be bypass by quickly pressing the red test button twice.

**DURING THE TEST:**
- Game music and a voice over will be played.
- The Prize Arm Indicator LEDs will light up in sequence.
- The Credit display will count from 0000 to 9999 and then repeat.
- The LED Playfield Display panel will run a test pattern sequence.
- The Continue, Start/Stop and Select button lamps will flash on and off

- **EXIT** The Sound, Lamp & Display test is exited by pressing the test button. The next test will be switch test.

SWITCH TEST

- **ENTER** The Switch Test can be entered by pressing the Test button once while in the Sound, Light & display test or by pressing the Test button twice while in Attract mode, **C-XXXX** will be displayed on the 4-digit display where ‘XX’ is a number representing the switch that is active.

**TESTING THE GAME SWITCHES**

All game switches have a code from C1 to C10 as tabled below. By activating any of the switches, their code will be displayed on the 4-digit display. If no switches are active then **C-0000** will be displayed.

<table>
<thead>
<tr>
<th>CODE</th>
<th>DISPLAY</th>
<th>SWITCH FUNCTION</th>
<th>SWITCH LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C0</td>
<td>C-0000</td>
<td>No Switch Active</td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>C-0001</td>
<td>Ticket Notch Active</td>
<td>Ticket Door (if fitted)</td>
</tr>
<tr>
<td>C2</td>
<td>C-0002</td>
<td>Service Switch Active</td>
<td>Service Panel</td>
</tr>
<tr>
<td>C3</td>
<td>C-0003</td>
<td>Start/Stop Button Active</td>
<td>Control Panel</td>
</tr>
<tr>
<td>C4</td>
<td>C-0004</td>
<td>Coin 1 Switch Active</td>
<td>Coin Door</td>
</tr>
<tr>
<td>C5</td>
<td>C-0005</td>
<td>Coin 2 Switch Active</td>
<td>Coin Door</td>
</tr>
<tr>
<td>C6</td>
<td>C-0006</td>
<td>Select Button Active</td>
<td>Control Panel</td>
</tr>
<tr>
<td>C7</td>
<td>C-0007</td>
<td>Prize Sensor Active</td>
<td>Prize Box</td>
</tr>
<tr>
<td>C8</td>
<td>C-0008</td>
<td>Continue Button Active</td>
<td>Control Panel</td>
</tr>
<tr>
<td>C9</td>
<td>C-0009</td>
<td>Minor Prize Button Active</td>
<td>Not Used</td>
</tr>
<tr>
<td>C9</td>
<td>C-0100</td>
<td>Tilt Switch Active</td>
<td>Cabinet Back</td>
</tr>
</tbody>
</table>

Normal condition for the game is **C-0000**, no switches are active.

* **NOTE!** *

- Several switches can be simultaneously activated in Switch test. The display will then consecutively show their codes, indicating which switches are active. However, it is much easier to test the game switches individually..
**TICKET DISPENSER NOTCH**  
(If optional Ticket or Capsule dispenser is fitted)  
The Ticket Notch Switch (C1) can be activated or deactivated from the Ticket Feed Button on the Ticket Dispenser PCB or by manually pushing the tickets from the ticket holder through the dispenser after pulling the ticket release rod upwards.

* NOTE! *

For more information on the servicing and testing the ticket or Capsule dispenser please look at the Dispenser Reference guide. (Only supplied if Optional Kit is fitted)

**EXIT**
The Switch Test is exited into Run Test Mode by pressing the Test Button once.
RUN TEST

■ ENTER The Run Test can be entered by pressing the Test button once while in the Switch Test or by pressing the Test button three times while in Attract mode, $\text{[M][M]}$ will be displayed on the 4-digit display.

■ SELECT The Service button is pressed once to start the run test mode. The credit display will indicate, $\text{[M][M]}$ the first Minor Prize Arm and also flashing the indicator LED. The Service button is then pressed again to step through each prize arm, flashing the indicator LED of the current prize arm.

■ RUN The Start/Stop Button will activate motor of the current selected prize arm as long as the button is held.

■ EXIT The Run Test is exited into Programmable Adjustments Mode by pressing the Test Button once.

PRIZE ARM LOCATION DIAGRAM
PROGRAMMABLE ADJUSTMENTS MODE

The Stacker has twenty three programmable adjustments that can be changed in this mode. They are P01 to P23 and their codes and values are displayed alternatively during the adjustment procedure.

Example: Code P01 (Number of Coins Mech 1) is displayed as P۰۱ and its value of 1 as ۰۱ on the 4-digit display.

PROGRAMMABLE ADJUSTMENTS MODE DIAGRAM

PROGRAMMABLE ADJUSTMENTS PROCEDURE

■ ENTER The Programmable Adjustments Mode can be entered by pressing the Test button once while in the Run Test or by pressing the Test button four times while in Attract mode, P۰۱ will be displayed on the 4-digit credit display.

■ SELECT The green Service button is pressed to step through each of the adjustment configurations, starting from the P۰۱ display, P01 being the first step, continuing through to P23, and then looping again from P01 to P23 until the mode is exited.

■ CHANGE The Start/Stop button is pressed to change the displayed value. The value can only be stepped up by using the Start button, but the value will loop back to its minimum value the next step after its max value.

■ NOTE! Certain program adjustments have a fast adjustment feature. By holding the Start/Stop button down, the values step through quicker.

■ EXIT The Programmable Adjustments mode is exited into Audits mode, by pressing the Test button once.
## PROGRAMMABLE ADJUSTMENTS QUICK REFERENCE TABLE

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROGRAMMABLE ADJUSTMENTS</th>
<th>OPTIONAL VALUES</th>
<th>DEFAULT SETTINGS</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>P01</td>
<td>1 – 10</td>
<td>1, 2, 3…10</td>
<td>1</td>
<td>Coin Slot 1 – Coins / Credit</td>
</tr>
<tr>
<td>P02</td>
<td>1 – 10</td>
<td>1, 2, 3…10</td>
<td>1</td>
<td>Coin Slot 1 – Games / Credit</td>
</tr>
<tr>
<td>P03</td>
<td>0 – 10</td>
<td>0, 1, 2 …10</td>
<td>0</td>
<td>Coin Slot 1 1 Bonus Credit every X coin</td>
</tr>
<tr>
<td>P04</td>
<td>1 – 10</td>
<td>1, 2,3 …10</td>
<td>1</td>
<td>Coin Slot 2 – Coins / Credit</td>
</tr>
<tr>
<td>P05</td>
<td>1 – 10</td>
<td>1, 2,3 …10</td>
<td>1</td>
<td>Coin Slot 2 – Games / Credit</td>
</tr>
<tr>
<td>P06</td>
<td>0 – 10</td>
<td>0, 1, 2 …10</td>
<td>0</td>
<td>Coin Slot 2 1 Bonus Credit every X coin</td>
</tr>
<tr>
<td>P07</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Attract sound</td>
</tr>
<tr>
<td>P08</td>
<td>1 – 6</td>
<td>1, 2, 3 …6</td>
<td>3</td>
<td>Cube Speed</td>
</tr>
<tr>
<td>P09</td>
<td>1 – 4</td>
<td>1, 2, 3…4</td>
<td>1</td>
<td>Skill Setting (Minor Prize)</td>
</tr>
</tbody>
</table>

**P09 – Skill Setting (Minor Prize)**

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROGRAMMABLE ADJUSTMENTS</th>
<th>OPTIONAL VALUES</th>
<th>DEFAULT SETTINGS</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>P10</td>
<td>1 – 10</td>
<td>1, 2, 3…10</td>
<td>8</td>
<td>Skill Setting (Major Prize)</td>
</tr>
</tbody>
</table>

**P10 – Skill Setting (Major Prize)**

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROGRAMMABLE ADJUSTMENTS</th>
<th>OPTIONAL VALUES</th>
<th>DEFAULT SETTINGS</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>P11</td>
<td>0 – 2</td>
<td>0, 1, 2</td>
<td>0</td>
<td>Mercy System Mode Adjustment (Used if Optional Dispenser Fitted)</td>
</tr>
<tr>
<td>P12</td>
<td>0 – 20</td>
<td>0, 1, 2, 3…20</td>
<td>0</td>
<td>Number of Capsules/Mercy Tickets (Used if Optional Dispenser Fitted)</td>
</tr>
<tr>
<td>P13</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>OFF</td>
<td>Prizes in free play</td>
</tr>
<tr>
<td>P14</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Minor Prize Arm No.1 Status</td>
</tr>
<tr>
<td>P15</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Minor Prize Arm No.2 Status</td>
</tr>
<tr>
<td>P16</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Minor Prize Arm No.3 Status</td>
</tr>
<tr>
<td>P17</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Minor Prize Arm No.4 Status</td>
</tr>
<tr>
<td>P18</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Minor Prize Arm No.5 Status</td>
</tr>
<tr>
<td>P19</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Minor Prize Arm No.6 Status</td>
</tr>
<tr>
<td>P20</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Major prize Arm No.7 Status</td>
</tr>
<tr>
<td>P21</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Major prize Arm No.8 Status</td>
</tr>
<tr>
<td>P22</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Major prize Arm No.9 Status</td>
</tr>
<tr>
<td>P23</td>
<td>ON or OFF</td>
<td>ON or OFF</td>
<td>ON</td>
<td>Major prize Arm No.10 Status</td>
</tr>
</tbody>
</table>
PROGRAMMABLE ADJUSTMENTS DETAILED

- **P01 = COIN MECH 1: NUMBER OF COINS PER CREDIT**
  (Default 01) (Adjustable 1 – 10)
  This variable sets the number of coins that need to be inserted into coin mechanism 1, for each credit. It can be set to either of 1, 2, 3… to 10 coins for one credit.

- **P02 = COIN MECH 1: NUMBER of PLAYS PER CREDIT**
  (Default 01) (Adjustable 1 – 10)
  This sets the number of games for each credit inserted into coin mechanism 1. It can be set to either of 1, 2, 3… to 10 plays for each credit.

- **P03 = COIN MECH 1: NUMBER of COINS for BONUS CREDIT**
  (Default 00) (Adjustable 0 – 10)
  This variable sets the number of coins that need to be inserted into coin mechanism 1 for one bonus credit. It can be set to either of 0, 1, 2… to 10 coins for one bonus credit, (0 = No Bonus).

- **P04 = COIN MECH 2: NUMBER OF COINS PER CREDIT**
  (Default 01) (Adjustable 1 – 10)
  This variable sets the number of coins that need to be inserted into coin mechanism 2 for each credit. It can be set to either of 1, 2, 3… to 10 coins for one credit.

- **P05 = COIN MECH 2: NUMBER of PLAYS PER CREDIT**
  (Default 01) (Adjustable 1 – 10)
  This sets the number of games for each credit inserted into coin mechanism 2. It can be set to either of 1, 2, 3… to 10 plays for each credit.

- **P06 = COIN MECH 2: NUMBER of COINS for BONUS CREDIT**
  (Default 00) (Adjustable 0 – 10)
  This variable sets the number of coins that need to be inserted into coin mechanism 2 for one bonus credit. It can be set to either of 0, 1, 2… to 10 coins for one bonus credit, (0 = No Bonus).

- **P07 = ATTRACT MODE SOUND**
  (Default ON) (Adjustable ON or OFF)
  This adjustment turns the *attract mode sound* ON or OFF. This is the sound and music that the game generates to attract customers when it is not being played. The music will cycle approximately every 3 minutes.
- **P08 = CUBE SPEED**
  (Default 3) (Adjustable 1 - 6)

This option is for setting the *Cube Speed*. This affects the speed of the cube block movement as the player increases in levels. A setting of [1] is the easiest up to [6], the hardest.

- **P09 = SKILL SETTING (Minor Prize)**
  (Default 1) (Adjustable 1 – 4)

This option sets the *Skill level* for players to reach the Minor Prize level, as listed in the table below. These settings are made easy on purpose, players must still be skillful to get to this level, however very few players take the minor prize, most play on to try and win the major prize.

<table>
<thead>
<tr>
<th>MINOR PRIZE SKILL SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Approx. 1 Minor Prize in Every Game</td>
</tr>
<tr>
<td>2 = Approx. 1 Minor Prize in 2 Games</td>
</tr>
</tbody>
</table>

- **P10 = SKILL SETTING (Major Prize)**
  (Default 8) (Adjustable 1 – 10)

This option sets the *Skill level* for players to reach the Major Prize level, as listed in the table below. As this is a skill game the win rate is only the approximate rate for each difficulty setting.

<table>
<thead>
<tr>
<th>MAJOR PRIZE SKILL SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Easiest (Approx. 1 Win in 20 Games)</td>
</tr>
<tr>
<td>2 = Very Easy (Approx. 1 Win in 30 Games)</td>
</tr>
<tr>
<td>3 = Easy (Approx. 1 Win in 40 Games)</td>
</tr>
<tr>
<td>4 = Easy to Medium (Approx. 1 Win in 50 Games)</td>
</tr>
<tr>
<td>5 = Medium (Approx. 1 Win in 100 Games)</td>
</tr>
</tbody>
</table>

- **P11 = MERCY SYSTEM MODE ADJUSTMENT**
  (Default 0) (Adjustable 0 – 2)

This option adjusts the way that mercy tickets or capsules paid out if the optional ticket or capsule dispenser is fitted. See **P15** for setting the number of mercy tickets or capsules that will be dispensed.

0. Mercy System disabled, no ticket or capsules will be paid. This setting must be used if optional ticket or capsule dispenser is not fitted

1. Mercy tickets / capsules are paid if no Major or Minor prize is won. Optional ticket / capsule dispenser must be fitted

2. Mercy tickets / capsules are paid on every game credit, regardless if prizes are won or not. Optional ticket / capsule dispenser must be fitted
**P12 = NUMBER of MERCY TICKETS / CAPSULES ADJUSTMENT**  
(default 0) (Adjustable 0 – 20)

This option adjusts the number of mercy tickets or capsules paid out if the optional ticket or capsule dispenser is fitted. See **P18** for setting Mercy System Mode payout options.

**P13 = PRIZES IN FREE PLAY MODE**  
(Default OFF) (Adjustable ON or OFF)

This setting controls whether or not the game dispenses prizes in free play mode. The options are **ON** or **OFF**.

**PRIZE ARM STATUS**

Prize Arm Status adjustments P17 to P26 are used to disable Prize Arms that have been removed to allow larger prizes to be dispensed. Stacker comes with all prize arms installed as default.

* NOTE! *  
Disabled Prize Arms are unable to be selected by Wining Players

**P14 to P19**  
**MINOR PRIZE ARM No.1 to 6 STATUS**  
(Default, see table below) (Adjustable ON or OFF)

This option is for enabling or disabling of Minor Prize Arms numbered 1 through to 6.

**P20 to P23**  
**MAJOR PRIZE ARM No.7 to 10 STATUS**  
(Default, see table below) (Adjustable ON or OFF)

This option is for enabling or disabling of Major Prize Arms numbered 7 through to 10.

* NOTE! *  
If all Minor and / or Major Prize Arms are set to [OFF] the error message [Err6] will be displayed in the credit display. See Error Codes on page 26 for more detail.
AUDITS MODE

The Audits Mode allows the operator to view statistics in all areas of the Game Play. This enables the operator to make calculated adjustments and “Fine Tune” the machine to maximize earning potential. The Audits mode stores bookkeeping of the games processed since the last game audits reset. While in this mode, the game audits can also be reset to zero.

The Stacker has thirty six Audits that can be viewed in this mode. They are A01 to A36 and their codes and values are displayed alternatively during the Audit Mode.

Example: Code A01 will be displayed as \text{A} \text{A} \text{A} \text{A} and a value of \text{421} as \text{4} \text{2} \text{1} on the 4-digit display.
Or it will display large values like \text{21589} as \text{2} \text{1} \text{5} \text{8} \text{9} on the 4-digit display.

AUDITS MODE DIAGRAM

* NOTE! *
- For Audit values that are greater than 9,999 the audits’ values will be displayed in two steps.
- The first number, which is displayed as \text{-\text{-\text{-2}}, has leading dash symbols (-). The number displayed here must by multiplied by 1,000 and added to the second value.
- The second value is displayed as \text{1589}, which has no dash symbols.
- In this example the final value is \text{2,1589} \{(2\times10,000) + (1589)}.
AUDIT PROCEDURE

- **ENTER**  The Audits mode is entered from Programmable Adjustments mode by pressing the Test button once or from Attract mode by pressing the Test button five times. AAAAA will be displayed on the 4-digit display.

- **SELECT**  The green Service button is pressed for advancing each step through the set of audits configurations, starting from the AAAAA display, A01 being the first step, continuing through to A36, and then looping again from A01 to A36 until the mode is exited.

- **RESET**  The entire set of user audits can be reset during any of the audit configurations, by holding the Start button for longer than 5 seconds. The displays will be cleared while still holding the button pressed and will return to the same audit step after releasing the button. The value of all audits will be reset to “00 000”.

- **EXIT**  The Audits mode is exited into Game History mode, by pressing the Test button once.

* NOTE! *

- **ALL.** Audits will **STOP INCREMENTING** when the “Total Number of Games Played”, audit A-07, reaches 60,000.

- To restart the audits they must be reset to 00 000 by holding The Start button for longer than 5 seconds while in audits mode.
## AUDITS QUICK REFERENCE TABLE

<table>
<thead>
<tr>
<th>CODE</th>
<th>DISPLAY</th>
<th>AUDIT FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01</td>
<td>A - 0 1</td>
<td>Total Coins In Mechanism 1</td>
</tr>
<tr>
<td>A02</td>
<td>A - 0 2</td>
<td>Total Coins In Mechanism 2</td>
</tr>
<tr>
<td>A03</td>
<td>A - 0 3</td>
<td>Total Number of Service Credits</td>
</tr>
<tr>
<td>A04</td>
<td>A - 0 4</td>
<td>Total Number of Major Prize Wins</td>
</tr>
<tr>
<td>A05</td>
<td>A - 0 5</td>
<td>Total Number of Minor Prize Wins</td>
</tr>
<tr>
<td>A06</td>
<td>A - 0 6</td>
<td>Total Number of Skip Minor for Major Prize attempt</td>
</tr>
<tr>
<td>A07</td>
<td>A - 1 7</td>
<td>Total Number of Games Played</td>
</tr>
<tr>
<td>A08</td>
<td>A - 0 8</td>
<td>Total number Games ending at level 1</td>
</tr>
<tr>
<td>A09</td>
<td>A - 0 9</td>
<td>Total number Games ending at level 2</td>
</tr>
<tr>
<td>A10</td>
<td>A - 1 0</td>
<td>Total number Games ending at level 3</td>
</tr>
<tr>
<td>A11</td>
<td>A - 1 1</td>
<td>Total number Games ending at level 4</td>
</tr>
<tr>
<td>A12</td>
<td>A - 1 2</td>
<td>Total number Games ending at level 5</td>
</tr>
<tr>
<td>A13</td>
<td>A - 1 3</td>
<td>Total number Games ending at level 6</td>
</tr>
<tr>
<td>A14</td>
<td>A - 1 4</td>
<td>Total number Games ending at level 7</td>
</tr>
<tr>
<td>A15</td>
<td>A - 1 5</td>
<td>Total number Games ending at level 8</td>
</tr>
<tr>
<td>A16</td>
<td>A - 1 6</td>
<td>Total number Games ending at level 9</td>
</tr>
<tr>
<td>A17</td>
<td>A - 1 7</td>
<td>Total number Games ending at level 10</td>
</tr>
<tr>
<td>A18</td>
<td>A - 1 8</td>
<td>Total number Games ending at level 11</td>
</tr>
<tr>
<td>A19</td>
<td>A - 1 9</td>
<td>Total number Games ending at level 12</td>
</tr>
<tr>
<td>A20</td>
<td>A - 2 0</td>
<td>Total number Games ending at level 13</td>
</tr>
<tr>
<td>A21</td>
<td>A - 2 1</td>
<td>Total number Games ending at level 14</td>
</tr>
<tr>
<td>A22</td>
<td>A - 2 2</td>
<td>Total number Games ending at level 15</td>
</tr>
<tr>
<td>A23</td>
<td>A - 2 3</td>
<td>No. of prize selections on Minor Prize Arm No.1</td>
</tr>
<tr>
<td>A24</td>
<td>A - 2 4</td>
<td>No. of prize selections on Minor Prize Arm No.2</td>
</tr>
<tr>
<td>A25</td>
<td>A - 2 5</td>
<td>No. of prize selections on Minor Prize Arm No.3</td>
</tr>
<tr>
<td>A26</td>
<td>A - 2 6</td>
<td>No. of prize selections on Minor Prize Arm No.4</td>
</tr>
<tr>
<td>A27</td>
<td>A - 2 7</td>
<td>No. of prize selections on Minor Prize Arm No 5</td>
</tr>
<tr>
<td>A28</td>
<td>A - 2 8</td>
<td>No. of prize selections on Minor Prize Arm No.6</td>
</tr>
<tr>
<td>A29</td>
<td>A - 2 9</td>
<td>No. of prize selections on Major Prize Arm No.7</td>
</tr>
<tr>
<td>A30</td>
<td>A - 3 0</td>
<td>No. of prize selections on Major Prize Arm No.8</td>
</tr>
<tr>
<td>A31</td>
<td>A - 3 1</td>
<td>No. of prize selections on Major Prize Arm No.9</td>
</tr>
<tr>
<td>A32</td>
<td>A - 3 2</td>
<td>No. of prize selections on Major Prize Arm No.10</td>
</tr>
<tr>
<td>A33</td>
<td>A - 3 3</td>
<td>Manufactures Audit only</td>
</tr>
<tr>
<td>A34</td>
<td>A - 3 4</td>
<td>Manufactures Audit only</td>
</tr>
<tr>
<td>A35</td>
<td>A - 3 5</td>
<td>Manufactures Audit only</td>
</tr>
<tr>
<td>A36</td>
<td>A - 3 6</td>
<td>Manufactures Audit only</td>
</tr>
</tbody>
</table>
AUDITS DETAILED

■ **A01 = TOTAL COINS IN MECHANISM 1**
   This Audit displays the total number of coins inserted into coin mechanism 1 since the audits were last cleared.

■ **A02 = TOTAL COINS IN MECHANISM 2**
   This Audit displays the total number of coins inserted into coin mechanism 2 since the audits were last cleared.

■ **A03 = TOTAL NUMBER OF SERVICE CREDITS**
   This Audit displays the total number of Service Credits since the audits were last cleared. This records the number of credits given by pressing the Service Button on the service panel.

■ **A04 = TOTAL NUMBER OF MAJOR PRIZE WINS**
   This Audit displays the total number of Major Prize Wins since the audits were last cleared.

■ **A05 = TOTAL NUMBER OF MINOR PRIZE WINS**
   This Audit displays the total number of Minor Prize Wins since the audits were last cleared.

■ **A06 = TOTAL NUMBER OF SKIP MINOR FOR MAJOR PRIZE ATTEMPT**
   This Audit displays the total number of times the Minor Prize Win was skipped for an attempt at a Major Prize Win, since the audits were last cleared.

■ **A07 = TOTAL GAMES PLAYED**
   This Audit displays the total number of Games Played since the audits were last cleared.

* NOTE! *

■ **ALL** Audits will **STOP INCREMENTING** when the “Total Number of Games Played”, audit A-07, reaches 60,000.

■ To restart the audits they must be reset to 00 000 by holding The Start button for longer than 5 seconds while in audits mode.
A08 to A22
TOTAL NUMBER OF GAMES ENDING on LEVELS 1 to 15

These Audits display the total number of games ending on level number 1 through to 15 on this machine since the audits were last cleared. Each level is a row of squares on the LED Playfield Display; row one starting at the bottom with row fifteen at the top.

A23 to A32
TOTAL NUMBER OF PRIZE SELECTIONS on PRIZE ARM POSITION NUMBER 1 to 10

These Audits display the total number of the prize selections on Prize Arm positions number 1 through to 10 on this machine since the audits were last cleared. Minor Prize Arms are A01 to A06 and Major Prize Arms are A07 to A10.

PRIZE ARM NUMBER & LOCATION

A32 to A26 = MANUFACTURE AUDITS ONLY

These are Manufacturer Audits only and serve no useful function for the operator of this game.

* NOTE! *
Customer Support may request from the operator the values of these audits.
GAME HISTORY MODE

By using the Game History Mode the operator can view the results of the last 10 games played. This enables the operator to verify players game results and verify the win / lose pattern on the LED Playfield Display.

Example: The history results for the last Game Played. H01 shows Level 5 was where the game ended and the LED block stack pattern will be shown on the LED Playfield Display.

GAME HISTORY MODE DIAGRAM

GAME HISTORY QUICK REFERENCE TABLE

<table>
<thead>
<tr>
<th>CODE</th>
<th>DISPLAY</th>
<th>HISTORY RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>H01</td>
<td>[H][0][1]</td>
<td>Level Ending &amp; LED Pattern for Very Last Game Played</td>
</tr>
<tr>
<td>H02</td>
<td>[H][0][2]</td>
<td>Level Ending &amp; LED Pattern for 2nd Last Game Played</td>
</tr>
<tr>
<td>H03</td>
<td>[H][0][3]</td>
<td>Level Ending &amp; LED Pattern for 3rd Last Game Played</td>
</tr>
<tr>
<td>H04</td>
<td>[H][0][4]</td>
<td>Level Ending &amp; LED Pattern for 4th Last Game Played</td>
</tr>
<tr>
<td>H05</td>
<td>[H][0][5]</td>
<td>Level Ending &amp; LED Pattern for 5th Last Game Played</td>
</tr>
<tr>
<td>H06</td>
<td>[H][0][6]</td>
<td>Level Ending &amp; LED Pattern for 6th Last Game Played</td>
</tr>
<tr>
<td>H07</td>
<td>[H][0][7]</td>
<td>Level Ending &amp; LED Pattern for 7th Last Game Played</td>
</tr>
<tr>
<td>H08</td>
<td>[H][0][8]</td>
<td>Level Ending &amp; LED Pattern for 8th Last Game Played</td>
</tr>
<tr>
<td>H09</td>
<td>[H][0][9]</td>
<td>Level Ending &amp; LED Pattern for 9th Last Game Played</td>
</tr>
<tr>
<td>H10</td>
<td>[H][1][0]</td>
<td>Level Ending &amp; LED Pattern for 10th Last Game Played</td>
</tr>
</tbody>
</table>
GAME HISTORY PROCEDURE

■ ENTER  The Game History mode is entered from Audits mode by pressing the Test button once or from Attract mode by pressing the Test button six times. HHHH will be displayed on the 4-digit display.

■ SELECT  The green Service button is pressed for advancing each step through the set of Game Histories, starting from the HHHH display, H01 being the first step, continuing through to H10, and then looping again from H01 to H10 until the mode is exited.

■ EXIT  The Game History mode is exited into Game Attract mode, by pressing the Test button once.
## ERRORS AND TROUBLESHOOTING

If the microprocessor detects any problems with the operation of the game, an Error will be displayed on the 4-digit display and the machine will play a voice message. “Please Call the Attendant”. Some error Messages will only be displayed when test mode is entered. Errors are displayed on the displays as \[\text{Err}\text{X}\], where ‘X’ is the error number. There are five error messages for Stacker, listed as follows:

## ERROR CODE QUICK REFERENCE TABLE

<table>
<thead>
<tr>
<th>CODE</th>
<th>ERROR DESCRIPTION</th>
<th>SOLUTION</th>
</tr>
</thead>
</table>
| Err1 | TICKET DISPENSE ERROR  
Jammed tickets, no tickets or no ticket notch pulse for longer than 3 seconds. | 1. If the optional ticket/capsule dispenser is not fitted, make sure P11 and P12 are set to “0”.  
2. If the optional ticket/capsule dispenser is fitted, clear ticket/capsule dispenser jam or replenish tickets. After this, push Test button once to clear error. |
| Err2 | START/STOP BUTTON JAMMED, active for longer then 30 seconds | Check Button function using switch test |
| Err3 | EEPROM ERROR  
Problem with on-board EEPROM | The main MCU is getting errors reading the EEPROM (24C16 IC on MCU). Send MCU PCB to the closest LAI Games distributor for repair. |
| Err4 | PRIZE DEPLOYMENT ERROR | Refill Prize Arms or test sensor using switch test. |
| Err5 | PRIZE SENSOR BLOCKED or PRIZE SENSOR FAULTY | Clear Blockage from between prize sensors or test sensor using switch test. |
| Err6 | All PRIZE ARMS STATUS are DISABLED. | Check that at lest one Minor Prize Arm (P14 to P19) and one Major Prize Arm (P20 to P23) has been set active Prize Arms ON. |
TROUBLESHOOTING GAME ERRORS

■ CLEARING GAME ERRORS
Game errors can be cleared, by pushing the test button ONCE. The game will try and check if the error is fixed. If the reason for the error is fixed, the game will continue as normal. If the error is not fixed, the error will remain on the display.

■ Err1 – TICKET ERROR
This can occur if the optional capsule/ticket dispenser is **not** installed and P11 and P12 have **not** been set to zero. If your machine does **not** have theses optional fixtures installed, please set P11 and P12 to “0” *(See Programmable settings mode, page 14 for Details)*.

Otherwise, if the optional ticket/capsule dispenser is fitted, this error usually occurs if the game has run out of tickets or there is a ticket/capsule jam. A less common reason is if the game PCB tries to dispense tickets/capsules but doesn’t get a notch pulse for approximately three seconds. Use the Switch Test and test the notch pulse by passing a ticket in and out of the notch sensor or manually activating the micro-switch on the capsule dispenser, an active notch will be display as C1, *(See Page 11 for Details)*.

If the game was out of tickets, replace the tickets, clear the ticket/capsule jam and then push the test button once to clear the error. The game will then payout any owed tickets/capsules.

■ Err2 – START/STOP BUTTON JAMMED
This error is usually displayed if the Start/Stop button is active for longer then 30 seconds Use the Switch Test and check the Stop/Start button, an active button will be display as C3, *(See Page 11 for Details)*.

■ Err3 – EEPROM ERROR
This Error is only displayed in test mode and means that the CPU cannot read the EEPROM, or is receiving errors during communication with the EEPROM *(The 23C16 IC on the main MCU PCB)*. This could cause problems with the game audits and program settings. If this error occurs, take your game to the nearest authorized LAI games dealer for repair.

■ Err4 – PRIZE DEPLOYMENT ERROR
This error is usually displayed if an empty prize arm is selected by a prize-winner or if the game activates the prize arm and does not sense a prize dropping through the prize sensor. The Err4 error code and the Prize Arm location numbers are displayed alternatively.

The error can also occur if the prize arm “TIMES OUT” caused by taking too long to dispense a prize. This can happen if there is more than half a prize arm length between prizes on the prize arm, the prize arm is not turning or the prize sensor is not working.

Test the prize arm function using the Run Test, *(See Page 13 for Details)*. Test the prize sensor using the Switch Test, *(See Page 11 for Details)*. Pass your hand through the infrared beams in the prize chute. Blocking the invisible beams should display C7 in switch test. Removing your hand from the beams should stop C7 from being displayed.
Err5 – **PRIZE SENSOR BLOCKED or PRIZE SENSOR FAULTY**

This error usually occurs if the prize sensor is blocked or a prize is jammed in the prize chute, blocking the infrared beam of the prize sensor for longer than 5 seconds. This error can also occur if the sensor output pulses or “flickers” due to misalignment for more than 20 times every 5 seconds.

The sensor can be tested using the switch test, (*See Page 11 for Details*). If the sensor is blocked C7 will be displayed in this test. Clear what ever is blocking the sensor and the error will clear itself.

If you cannot find anything blocking the sensor, there could be faulty infrared sensors or receivers on the prize sensor. The sensor PCB’s should be returned to your nearest LAI Games distributor for repair.

The Prize Sensor is designed around 12 pairs of infrared detectors and LEDs. Blocking the infrared path of any one of the 12 beams will trigger a common output. There are 6 orange LEDs on each Sensor PCB to help indicate the active pairs of infrared beams.

Err6 – **All PRIZE ARMS STATUS are DISABLED.**

This error will only be displayed if programmable adjustments **P14** to **P19** (Minor Prize Arm Status) and / or adjustments **P20** to **P23** (Major Prize Arm Status) are all set to **OFF** (Disabled).

There should be at least one Minor Prize Arm and one Major Prize Arm set to Status to **ON**. Push the test button once to enter directly to **P14** or **P20** in adjustment mode, locate what prize arms need to be active and set that Prize Arm Status to **ON**, (*See Page 14 for Details*).
**FUSE INFORMATION**

* WARNING! *

*Always* turn **OFF** Mains power and unplugged the game, before replacing any fuses.

- **MAIN AC SUPPLY FUSE** *(1 x 6 AMP FAST BLOW, M205 TYPE)*
  This fuse is for the main AC supply and is situated in the IEC mains input socket.

- **MCU POWER FUSE** *(1 x 1.5 AMP FAST BLOW, M205 TYPE)*
  This fuse is for the power supply to the MCU PCB.

- **MCU CONTROL FUSES** *(2 x 5 AMP FAST BLOW, M205 TYPE)*
  These fuses are for the DC transistor drivers on the MCU PCB.

- **3 LED PLAYFIELD DISPLAY CONTROLLER FUSES** *(3 x 2.5 AMP FAST BLOW, M205 TYPE)*
  This fuse is for the +5VDC on the three LED Playfield Display PCBs.

- **DOWN LIGHT FUSES** *(2 x 5 AMP FAST BLOW, 3AG TYPE)*
  This fuse is for the two 12VAC 20W Down Light Lamps.

* NOTE! *

- The power cord must be removed before the fuse can be accessed.

* CAUTION! *

*Do Not* use any fuse that does not meet the specified rating.

**FUSE LOCATION DIAGRAM**

*As viewed from rear*

[Diagram showing fuse locations with labels:
- LED Controller Fuses 2.5A QB M205
- Main AC Supply Fuse 6A QB M205
- MCU Power Fuse 1.5A QB M205
- MCU Control Fuses 5A QB M205
- Down Light Fuses 5A QB 3AG]
SECTION A: SERVICE INSTRUCTIONS

BE SURE TO READ THE FOLLOWING
Carefully before servicing this machine
LOCATING AND ACCESSING PARTS

PARTS LOCATION DIAGRAM
As viewed from front

Florescent FL15 Lamp
Diachronic Down Lamps
Major Prize Arms (Long)
Major Prize Arm Indicator PCBs
Minor Prize Arm Indicator PCBs
Control Panel
Continue Button
Start / Stop Button
Speakers (2 units)
Coin Door
Prize Box Door
Rubber Glide (Leg Levelers)

Header Acrylic
Prize Display Door
LED Playfield Display
Major Prize Display Area
Minor Prize Arms (Short)
Minor Prize Display Area
Select Button
Coin Mechs & DBA
Service Panel
Cash Box & Housing
Ticket Door (Optional)
Casters (4 units)
PARTS LOCATION DIAGRAM Cont.

As viewed from rear

- Florescent Lamp Deflector
- Upper Vent
- Major Prize Arms Motors
- Florescent FL15 Lamps
- LED Playfield Display PCBs
- Minor Prize Arms Motors
- Prize Box Sensor PCB (Slave)
- Main MCU PCB
- Tilt Switch
- Prize Box Sensor PCB (Master)
- +12/+5VDC Power Supply
- Sound CPU PCB
- Down Light Transformer
- Amplifier PCB
- Power Inlet (IEC)
- Ballasts and Starters
PARTS DESCRIPTION

- **COIN MECHANISMS**
  The coin mechanisms can be accessed inside the Coin door to the right on the front of the machine cabinet.

- **CASH BOX**
  The cash box is located inside the coin door on the front of the machine cabinet.

- **TICKET DOOR (Optional)**
  The ticket mechanism can be accessed inside the ticket door to the lower Right on the front of the machine cabinet.

- **SPEAKERS**
  Two speakers are located to the front of the cabinet below the control. Access is through the rear door.

- **GAME CONTROLS:**
  Located in the center of the machine cabinet. The control panel can be Access through the rear door or via the coin door.
  
  **START/STOP BUTTON:** The Start button is the large RED round illuminated button. This button is used to start / stop during a game and for test and program adjustments.
  
  **CONTINUE BUTTON:** The Continue button is the rectangular illuminated button located at the left-hand side of the control panel. This button is used to continue the game if player want to try for a Major prize.
  
  **SELECT BUTTON:** The Select button is the rectangular illuminated button located at the right-hand side of the control panel. The select button is used to step through the prize arms if a prize is won.

- **SERVICE CONTROLS:**
  Located on the service panel mounted on top of the cash box and accessed through the Coin Door.
  
  **SERVICE BUTTON:** Used to input credits to the game without activating the coin counter, and to perform test procedures in combination with the test button.
  
  **TEST BUTTON:** Used to perform the test mode, in combination with the Service button.
  
  **VOLUME KNOB:** Used to adjust the speaker’s sound level.
POWER CORD
The power cord is a standard IEC power cord (as used on computers) that is plugged in to the power inlet socket at the rear of the machine. The power cord can be removed for transport.

POWER INLET
The power inlet is located at the rear of the machine on the Left-hand side as viewed from the rear. It is a standard IEC inlet socket.

MAINS SWITCH
The mains switch is located on the power inlet assembly along with the mains fuse, and IEC inlet socket.

FUSES
For locations of all fuses refer to Fuses and Fuse location, page 29 of this manual.

* WARNING! *

Always turn OFF Mains power and unplugged the game, before replacing any fuses
Always use the correct rated fuse. Refer to page 29 for fuse information.

7-SEG DISPLAY
There is a 4-digit display located on the control panel. Access is through the back of the machine.

PCB’s
For location of all game PCB’s, refer to the Parts Location diagram page 31 of this manual.

POWER SUPPLY
The power supply is located at the back of the cabinet and is accessed from the rear of the machine. It is a 12V 13A switching power supply.

DOWN LIGHT TRANSFORMER
The down light transformer is located at the back of the cabinet and is accessed from the rear of the machine. It is 2 x 12VAC 5A supply output.

TILT SWITCH
The tilt switch is located to the left at the back of the cabinet and is accessed from the rear of the machine.

MAJOR & MINOR PRIZE ARMS
The prize arm mechanisms are located at the back of the cabinet and are accessed from the rear of the machine.
**LAMPS**

* WARNING! *
Always turn OFF Mains power and unplugged the game, before replacing any lamps.

Always allow time for cooling as Lamps that have been active for a time may still be too hot to touch.

- **COIN DOOR LAMPS**
The coin door lamps all are 12V/DC GE192 or equivalent and can be accessed through the coin door.

- **BUTTON LAMPS**
The button lamps all are 12V/DC GE192 or equivalent and can be accessed through the coin door or back door.

- **HEADER LAMPS**
There is one standard FL 15 fluorescent tube for the Header Display. Access is by the removing of the machine header cover and accessing the tube from the front.

- **PRIZE DISPLAY SIDE LAMPS**
There are two standard FL 18 fluorescent tubes for side lighting the prize display. Access is by the removing of the Lamp Brackets and accessing the tubes from the back door.

- **PRIZE DISPLAY DOWN LAMPS**
There are 2 x 12V 20W 36Dgr-halogen lamps mounted in the top of the prize display. These are standard dichroic lamps and are accessed from the prize display through the prize display door.

* CAUTION! *
Always replace the lamps with the same or equivalent size, wattage and voltage.
MAINTENANCE

CLEANING AND CHECK UP

■ 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.

  Any scratches or marks in the fiberglass or acrylic can be buffed out using car polish or cut and polish.

  * CAUTION! *
  Do not use solvents on the panels as it may affect the artwork.

■ INTERIOR
  Regularly dust and vacuum the interior of the cabinet, taking care to remove any objects that may have fallen on the PCBs. Check and tighten all fixing hardware and fasteners as required.

  * WARNING! *
  Always turn OFF Mains power and unplugged the game, before cleaning the interior of the machine.

  Always after cleaning the cabinet interior, check all harness connectors and restore all loose or interrupted connections.

  Regularly check that all the Display and Button Lamps are operating through the Sounds, Lamps and Display Test (See page 11). Replace any globes that are not operational.
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.
MAINS VOLTAGE ADJUSTMENT

- **POWER SUPPLY**
  The Switch Mode Power Supply has a switch to set the mains voltage range. It is located at the rear of the game cabinet, and is accessed via the back door. Use a thin blade screwdriver to move the selector switch to the desired mains voltage (See Diagram Below)

- **FLORESCENT TUBE BALLASTS AND STARTERS**
  Locate the fluorescent tube ballasts and starters in the back of the cabinet. If unsure of the location of any ballasts or starters, refer to Parts location diagram on page 31 of this manual. These have to be removed and replaced with an equivalent wattage at your local mains voltage level.

- **TRANSFORMER CONNECTORS**
  Locate the machine transformer(s) in the base of the cabinet. If unsure of the location of the transformer(s), refer to Parts location diagram on page 31 of this manual. Change the position of the ‘ACTIVE’ or ‘HOT WIRE’ input, (marked brown on the diagram), to the position for the desired mains voltage. (See Diagram Below)

### 6 WAY CONNECTOR PINOUT

<table>
<thead>
<tr>
<th>PIN</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>240VAC</td>
</tr>
<tr>
<td>2</td>
<td>220VAC</td>
</tr>
<tr>
<td>3</td>
<td>120VAC</td>
</tr>
<tr>
<td>4</td>
<td>110VAC</td>
</tr>
<tr>
<td>5</td>
<td>0VAV (NEUTRAL)</td>
</tr>
<tr>
<td>6</td>
<td>EARTH</td>
</tr>
</tbody>
</table>
STACKER OPTIONAL WIRING DIAGRAM

NOTICE:
Ticket Interface PCB is required to invert Ticket Drive Signal.

OPTIONAL WIRING FOR MERCY TICKET KIT

TO MAIN HARNESS

Note: Ticket Interface PCB is required to invert ticket drive signal.

OPTIONAL WIRING FOR COIN DOOR WITH MARS BILL ACCEPTOR (AE-2411-U5)

TO MARS 100V OUTLET

(SEE SHEET 2)

Note:
1/ Use only MARS Bill Acceptor Model Numbers AE-2411-UP to AE-2411-U5 (200 to 500 Note Magazines) to allow Coin Door to Close.
2/ MARS Bill Acceptor must be set to long pulse output (see MARS User Manual for Coupon Programming).

LAI Games VL

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WARRANTY

*LAI GAMES* warrants its manufactured products sold for a period of 3 months 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* office from which the machine was purchased at the purchaser's expense.

- New Machines: 3 months (including labor and parts)
- New PCB’s: 3 months (including labor and parts)
- New Monitors: 3 months (including labor and parts)
- New Power Supplies: 1 month (including labor and parts)
- Used Machines: 1 month (labor only excluding parts)

*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. In the event of a component not being covered by warranty, *LAI GAMES* will only repair the faulty item(s) providing the purchaser agrees to pay the appropriate service rates as set out in our schedule of charges from time to time.

**IF MAKING A WARRANTY CLAIM:**

(a) A Copy of the sales invoice must accompany the claim.
(b) 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.

Warranty claims made after the expiry of the warranty period will not be accepted regardless of whether the fault was reported during the warranty period or not.
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