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REDHOT!

Operation Manual



90MAN-01-B

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Red Hot Game Play

The object of Red Hot is to time the ball drop so the maximum number of balls fall into the “Red Hot” slots. Filling all 6 “Red Hot” slots wins the Jackpot. Filling less than 6 “Red Hot” slots pays outs from 2-15 tickets depending on the number of slots filled. See chart below for ticket payout. In addition to the “Red Hot” slots, there are Blue Mystery Bonus slots. Landing in 1 of those slots pays out the “Mystery Bonus” – from 2-25 tickets.

Number of Red Hots filled	Tickets Dispensed
1 Red Hot	2
2 Red Hots	3
3 Red Hots	5
4 Red Hots	10
5 Red Hots	15
6 Red Hots	Jackpot Value

LED Lighting

Red Hot utilizes low voltage (12 v) LED lighting throughout the game for general illumination and accents.



Game Set-up

Red Hot Marquee Assembly

1. Position base near power source (AC connection is located at the left rear)
2. Unscrew the Lower Marquee mounts on each side of the cabinet
3. With one person on each side slowly raise the marquee poles making sure to keep the marquee level.
4. Insert the connector for the marquee thru the hole in the RIGHT side of the cabinet
5. Secure screws to attach the lower marquee mount to the cabinet in the UP position.
6. Open RIGHT ticket dispenser door and connect the marquee power connector.
7. Connect AC line cord to power source
8. Load tickets in ticket dispenser

Marquee in the Down Position

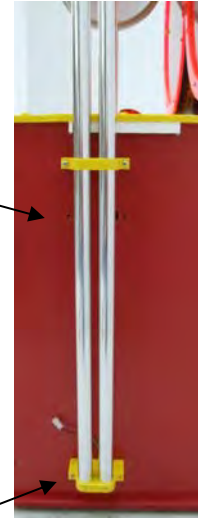


Marquee Support Poles

Move Mount to upper position and insert connector into cabinet.



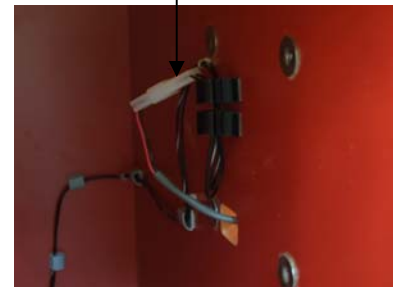
Lower Marquee Mount



Ticket Loading



Marquee Power Connector



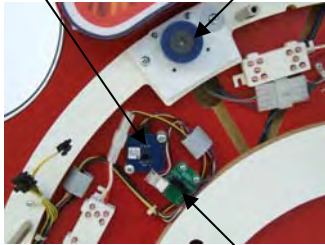
Technical Operation

Stepper Controller Board (SCB)



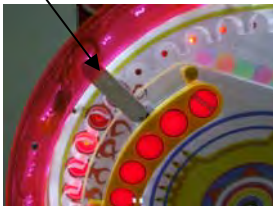
Ball Receiver Opto

Wheel Motor



Ball Transmitter Opto

Home Position Opto



Wheel Position

Wheel position in Red Hot is determined by an optical sensor that communicates with the CPU board. The CPU receives a HOME signal from an optical sensor located behind the wheel. There is a pin inserted into the wheel and when the pin passes thru the optical sensor it blocks the beam and the sensor sends a signal to the CPU telling it that it has detected the HOME pin. This HOME signal lets the CPU know the exact position of the wheel.

A stepper controller board (SCB) controls a stepper motor that rotates the wheel. The wheel rotation is broken up into many "steps" and the CPU counts these "steps." Because the CPU knows where the HOME position is and it's counting every "step" it knows exactly where the wheel is at any time.

Scoring – Ball Sensor

There is an optical transmitter located on the left side of each wheel that transmits a beam thru the holes in the wheel and a receiver behind the wheel that detects the beam. When a ball falls into a slot it blocks the optical beam and the position of that slot is communicated to the CPU. Since we know the position of the wheel at all times, we can identify each hole and know if it is a RED HOT or a MYSTERY BONUS hole. The CPU counts how many RED HOT or MYSTERY BONUS balls a player has and awards the corresponding number of tickets.

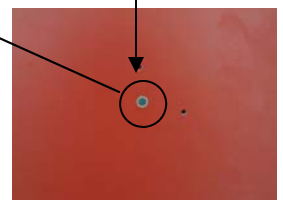
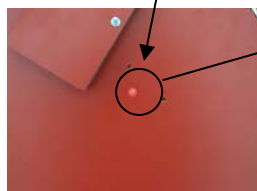
Ball Optical Sensor Observation Point

You may verify the operation of the Ball Transmitter and Receiver optos from the rear of the cabinet. There are 2 observation points; one on the left and one on the right (see pictures below). Under normal operation you should see a FLASHING LED as the beam is broken. If the LED is off or always on there is a problem with one of the optos, a voltage or wiring problem to the optos.

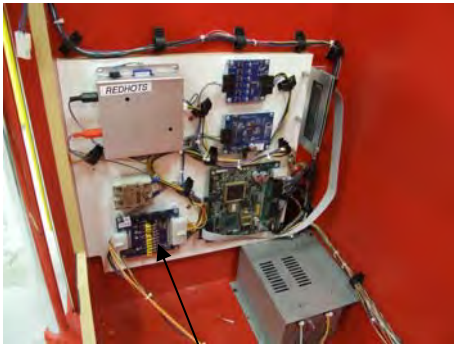
Flashing Receiver Opto

Rear Cabinet View

Flashing Receiver Opto



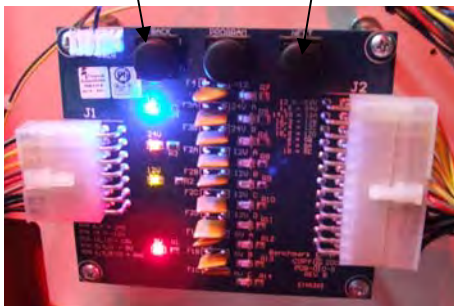
Programming Red Hot



Power Distribution Board

BUTTON 2

BUTTON 1



1. Entering Programming Mode

To enter program mode, press and hold the **RIGHT** button located on the **Power Distribution Board** located in the lower left cabinet at the front of the electronics assembly. After 2 seconds, **“TOTALS”** will appear on the **LCD Display** (located in the lower left cabinet at the rear of the electronics assembly). At this time, release the button. **“COINS IN”** with the number of coins received will be displayed. The game is now in Program Mode.

PLEASE NOTE that from this point forward, the **LEFT (BUTTON 2)** and the **RIGHT (BUTTON 1)** buttons on the Power Distribution Board are the buttons used to navigate thru the programming options. The **PROGRAM** button (middle button) is not used. Each programming option is displayed on the **LCD Display** (located in the lower cabinet at the rear of the cashbox enclosure), with the functions shown for Buttons 1 and 2.

2. COINS IN

The total coins received through the coin mechanism are displayed. The total will rollover to zero when it reaches 1,000,000,000. Depressing **BUTTON 2** will display **“TICKETS OUT”**.

3. TICKETS OUT

The total tickets dispensed are displayed. The total will rollover to zero when it reaches 1,000,000,000. Depressing **BUTTON 2** will display **“CLEAR G1 TICKETS OWED?”**, and/or **“CLEAR G2 TICKETS OWED?”** or **“ENTER PROGRAMMING MODE?”**.

4. “CLEAR TICKETS OWED?”

This option is displayed only if there are tickets that are owed that have not been dispensed, and will show the number of tickets. Depressing **BUTTON 1** will clear these tickets from the system, and **“TICKETS CLEARED”** will be displayed. This option will be shown for each game separately. Depressing **BUTTON 2** will display **“ENTER PROGRAM MODE?”**

5. “ENTER PROGRAM MODE?”

Depressing **BUTTON 1** at this time will enter the area of Program Mode where parameters may be changed. Depressing **BUTTON 2** will return the game to Run Mode.

Programming Red Hot

6. “ENTER PASSCODE?”

To be able to change programming parameters or reset the counters, a 4-digit passcode must be entered. The default passcode is 0000. To enter the passcode, Depress **BUTTON 1** to change the digit from 0 to 9, then press **BUTTON 2** to move to the next digit. After all digits have been entered correctly, depressing **BUTTON 2** will Display the first programming option, “CHANGE PASSCODE?”.

7. “CHANGE PASSCODE?”

Depressing **BUTTON 1** will allow for changing the passcode. Depressing **BUTTON 2** will move to “DISPLAY CONTRAST”.

IMPORTANT!!! ONCE THE PASSCODE IS CHANGED, THE DEFAULT OF 0000 WILL NO LONGER WORK! BE SURE TO SAVE THE PASSCODE IN A SAFE PLACE!

Entering the new passcode is accomplished in the same way that entering the passcode is done, as explained in (6.).

8. DISPLAY CONTRAST

This option sets the contrast for the LCD Display. Depress and hold **BUTTON 1** until the desired contrast is reached, then release **BUTTON 1**. Depressing **BUTTON 2** will move to the next option, “PLAY MODE VOLUME”.

9. PLAY MODE VOLUME

This option sets the speaker volume during game play. When this option is entered, the game’s background music will play continuously. Depressing **BUTTON 1** will increase/decrease the volume. As long as **BUTTON 1** is depressed, the volume will increase until the maximum is reached, then decrease until the volume is off. Depress and hold **BUTTON 1** until the desired volume is reached. Releasing **BUTTON 1** at any time and then depressing it again will change the direction of the volume adjustment. Depressing **BUTTON 2** will display the next option, “ATTRACTION MODE VOLUME”.

10. ATTRACTION MODE VOLUME

This option sets the speaker volume during Attraction Mode. When this option is entered, the game’s background music will play continuously. Depressing **BUTTON 1** will increase/decrease the volume. As long as **BUTTON 1** is depressed, the volume will increase until the maximum is reached, then decrease until the volume is off. Depress and hold **BUTTON 1** until the desired volume is reached. Releasing **BUTTON 1** at any time and then depressing it again will change the direction of the volume adjustment. Depressing **BUTTON 2** will display the next option, “JACKPOT MODE VOLUME”.

11. JACKPOT MODE VOLUME

This option sets the speaker volume during a Jackpot Event. When this option is entered, the game’s background music will play continuously. Depressing **BUTTON 1** will increase/decrease the volume. As long as **BUTTON 1** is depressed, the volume will increase until the maximum is reached, then decrease until the volume is off. Depress and hold **BUTTON 1** until the desired volume is reached. Releasing **BUTTON 1** at any time and then depressing it again will change the direction of the volume adjustment. Depressing **BUTTON 2** will display the next option, “ATTRACTION FREQUENCY”.

12. ATTRACTION FREQUENCY

This option sets the frequency at which the attraction mode occurs. The settings are from OFF to every 30

Programming Red Hot

minutes. Depressing **BUTTON 1** will change the settings in 1-minute increments from OFF to 30 minutes, then back to OFF. Depressing **BUTTON 2** displays the next option, "COINS PER CREDIT".

13. COINS PER CREDIT

This option sets the number of coins required for a credit. The settings are from 1 to 8 coins per credit. Depressing **BUTTON 1** will change the setting from 1 to 8, then back to 1. Depressing **BUTTON 2** displays the next option, "JACKPOT INCREMENT"

14. JACKPOT INCREMENT

Every time a credit is logged onto the game, the jackpot value is incremented by this amount. The setting is from 1 to 20 in increments of 1. Depressing **BUTTON 1** will change this setting from 1 to 20, and then revert back to 1. Depressing **BUTTON 2** will display the next option, "JACKPOT TYPE".

15. JACKPOT TYPE

This option selects whether the jackpot values for games 1 and 2 are independent of each other or are synchronized. Depressing **BUTTON 1** will change the option from "SEPARATE" to "COMBINED" and then back again. Depressing **BUTTON 2** will display the next option, "SELECT PAYOUT TABLE".

16. SELECT PAYOUT TABLE

This option selects the ticket payout table for the game. Options are 1-Coin, 2-Coin, 3-Coin, and 4-Coin. Depressing **BUTTON 1** will change the option. See "Settings" at the end of this section for the actual payout values. **PLEASE NOTE: changing this option sets the Coins Per Credit, Jackpot Increment, and Jackpot Starting Value to the appropriate default settings for the option selected. A change in the graphics indicating the ticket payout values will also be required.** Depressing **BUTTON 2** will display the next option, "JACKPOT START VALUE".

17. JACKPOT START VALUE

This option sets the starting value for the Jackpot. Depressing **BUTTON 1** will increment the value by 50 from the minimum to maximum allowed values for the payout table selected (please refer to Default Values at the end of this section for allowed values for each table). Depressing **BUTTON 2** will display the next option, "MERCY TICKET".

18. MERCY TICKET

This option sets the Mercy Ticket Option to Off, 1, 2, or 3 tickets. Depressing **BUTTON 1** will change the setting. Depressing **BUTTON 2** will display the next option, "WHEEL SPEED"

19. WHEEL SPEED

This option changes the speed of the wheel. Depressing **BUTTON 1** will change the setting from 1 (slowest) to 5 (fastest). Depressing **BUTTON 2** displays the next option, "DISPLAY TICKETS OWED".

20. DISPLAY TICKETS OWED

If this option is turned on, tickets that are won are displayed and counted down on the Jackpot Display. If there are no tickets to be paid out, then the Jackpot Value is displayed. If this option is turned off, then only the Jackpot Value is displayed. Depressing **BUTTON 1** will change this option. Depressing **BUTTON 2** will enter the Resetting Totals Section.

Programming Red Hot

21. RESETTING TOTALS

The totals displayed at the beginning of Program Mode (COINS IN, TICKETS OUT) may be reset to zero here. The total number for each will be displayed. Depressing **BUTTON 1** will clear the total, and zero will be displayed, confirming that the count has been cleared. Depressing **BUTTON 2** will display the next total. Depressing **BUTTON 2** after all of the totals have been displayed will display the next option, "ENTER PROGRAM MODE?"

22. "ENTER PROGRAM MODE?"

This option gives the opportunity to re-enter program mode if it is necessary to change any options again. Depressing **BUTTON 2** leaves Program Mode and the game returns to normal, Run Mode.

ERROR CODES

E-1	BALL SENSOR ERROR
E-2	HOME SENSOR ERROR
E-3	TICKET ERROR

DEFAULT SETTINGS (ALL PAYOUT TABLES)

PASSCODE	0000
PLAY MODE VOLUME	21
ATTRACTION MODE VOLUME	42
JACKPOT MODE VOLUME	MAX
ATTRACTION FREQUENCY	5 Minutes
MERCY TICKET	OFF
WHEEL SPEED	1

Programming Red Hot

SETTINGS (1-COIN PAYOUT)

COINS PER CREDIT	1 Coin
JACKPOT INCREMENT	4
STARTING JACKPOT	100
MIN-MAX STARTING JACKPOT	50-200
PAYOUT - 1 RED	2
PAYOUT - 2 REDS	3
PAYOUT - 3 REDS	5
PAYOUT - 4 REDS	10
PAYOUT - 5 REDS	15
PAYOUT - BONUS	2-25

SETTINGS (2-COIN PAYOUT)

COINS PER CREDIT	2 Coins
JACKPOT INCREMENT	8
STARTING JACKPOT	200
MIN-MAX STARTING JACKPOT	100-400
PAYOUT - 1 RED	4
PAYOUT - 2 REDS	6
PAYOUT - 3 REDS	10
PAYOUT - 4 REDS	20
PAYOUT - 5 REDS	30
PAYOUT - BONUS	4-50

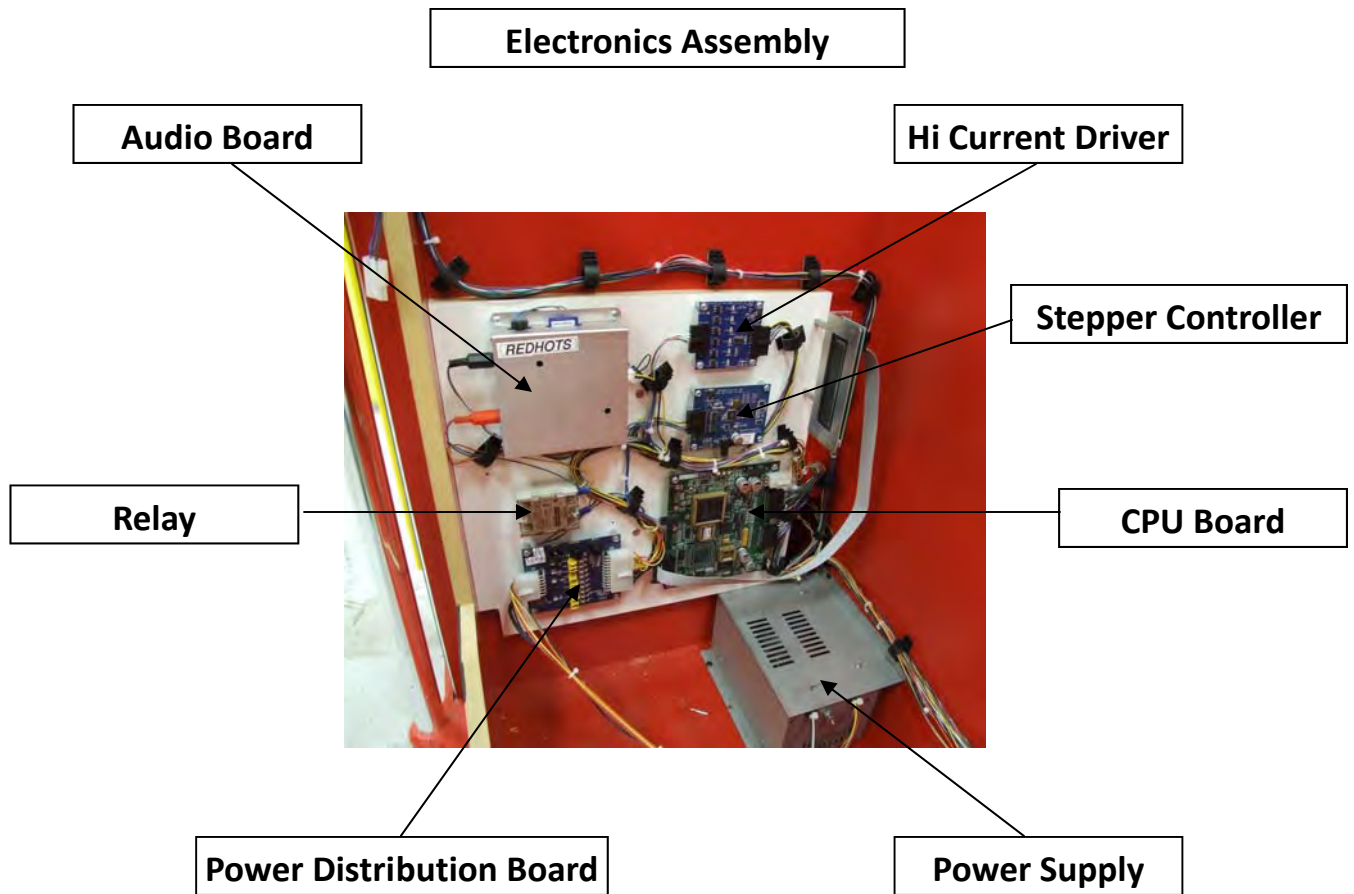
SETTINGS (3-COIN PAYOUT)

COINS PER CREDIT	3 Coins
JACKPOT INCREMENT	12
STARTING JACKPOT	300
MIN-MAX STARTING JACKPOT	150-600
PAYOUT - 1 RED	6
PAYOUT - 2 REDS	9
PAYOUT - 3 REDS	15
PAYOUT - 4 REDS	30
PAYOUT - 5 REDS	45
PAYOUT - BONUS	6-75

SETTINGS (4-COIN PAYOUT)

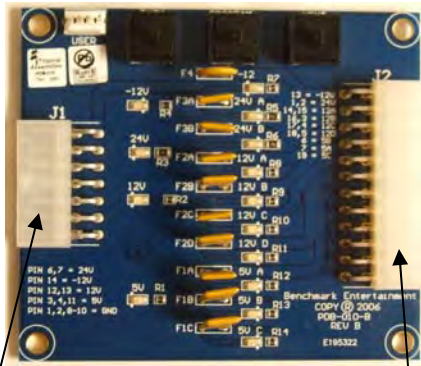
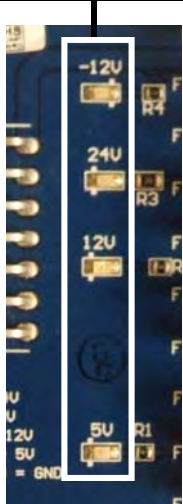
COINS PER CREDIT	4 Coins
JACKPOT INCREMENT	16
STARTING JACKPOT	400
MIN-MAX STARTING JACKPOT	200-800
PAYOUT - 1 RED	8
PAYOUT - 2 REDS	12
PAYOUT - 3 REDS	20
PAYOUT - 4 REDS	40
PAYOUT - 5 REDS	60
PAYOUT - BONUS	8-100

Electronic Components



Power Distribution Board LED Indicators

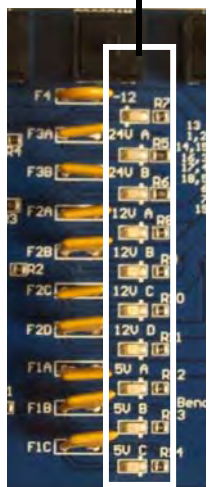
LEDs should be ON when game is powered up. They identify which voltages are present.



J1 Power IN

J2 Power OUT

LEDs should normally be OFF. If ON they indicate an overload on the indicated voltage.



Electronic Components

CPU

J4

485 Serial Connector

J3

J2

J1

CPU LED Chart

CPU LED	Flashes = OK
5 V LED	ON = 5v
24V LED	ON = 24v

Stepper Controller Board

Switch Settings
All Switches OFF

Stepper LED Chart

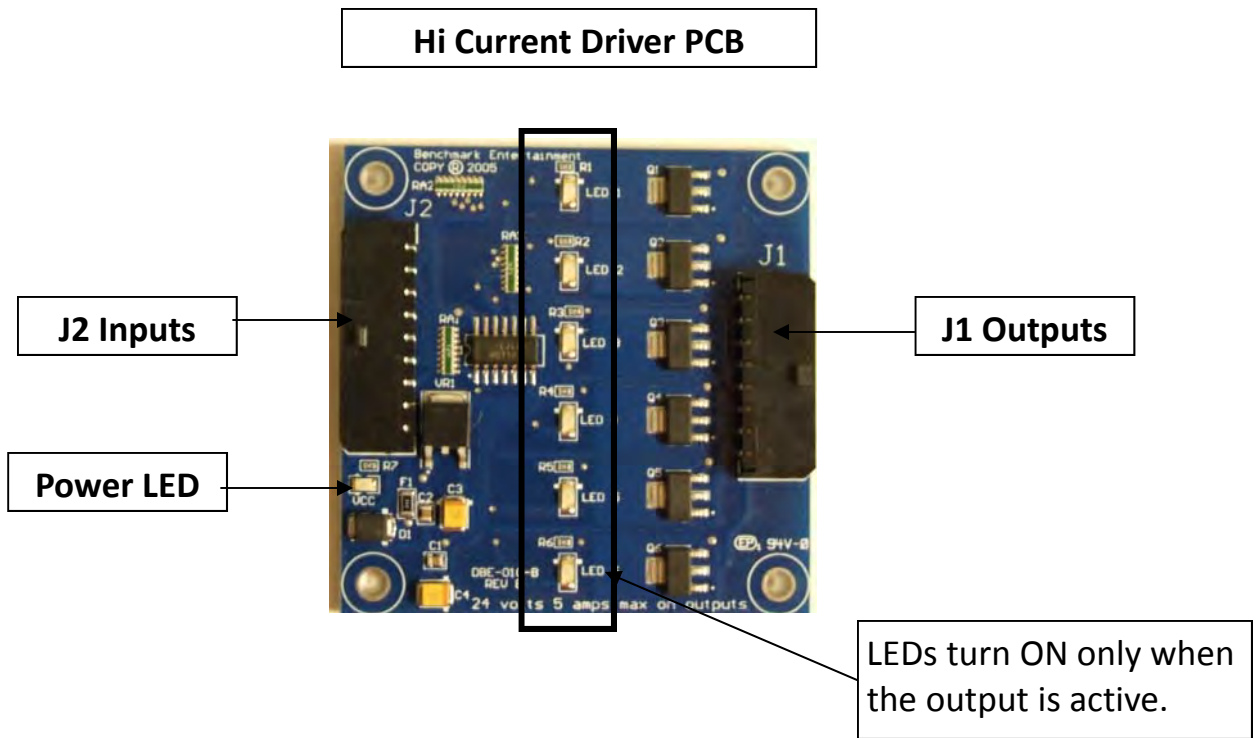
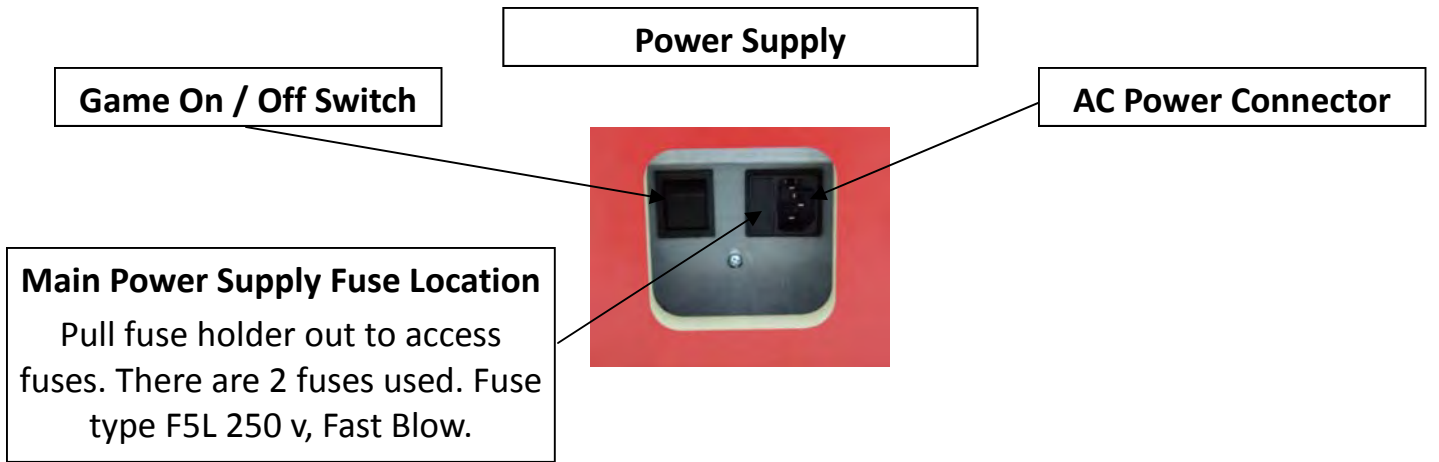
CPU LED	Flashes = OK
5 V LED	ON = 5v
HOME	ON but dim

J1

RS 485 Termination Jumper
No Jumper Required

J2

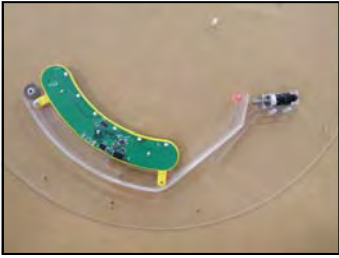
Electronic Components & Game Specs



Game Specifications

Key Numbers	All Doors - Key #322	
Weight	420 lbs (191 Kg) Created Weight (est.)	
Dimensions – Set-up	W = 56.5" (1435mm) D = 24" (610mm) H = 92.5" (2350mm)	
Power Consumption	230 Watts (Est)	
Fuses	2 - 5 Amp fuses in Power supply	F5L 250 volt FB
Ticket Dispenser	2 – Benchmark Intelli Triple	
Balls - Number / Size	6	1.0 inch

Parts



Ball LED & Solenoid



Ball LED Assy w/ Overlay



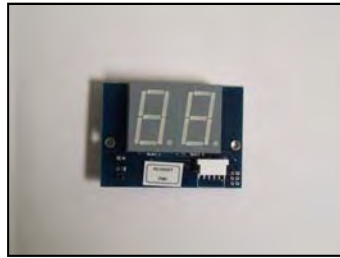
Ball Opto Transmitter



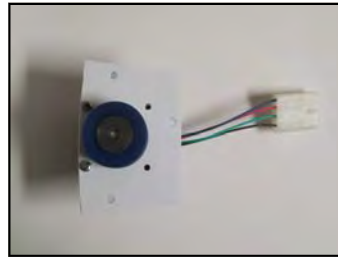
Ball LED PCB



Jackpot 5 Digit Display



Credit Display



Wheel Motor Assy



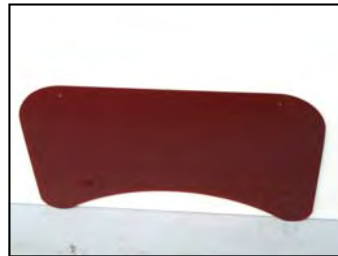
Stepper Controller



CPU



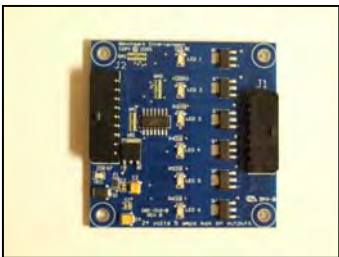
Power Distribution PCB



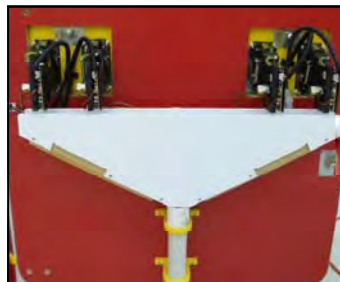
Jackpot Display Plexi



Opto Trans & Solenoid



Hi Current PCB



Coin Chute & Mechs



Wheel Assembly



Control Panel