



## ***SPINNER FRENZY***

**SF-50-1001**

### Operation & Service Manual

Version 1.0

**\* Read this manual before use**

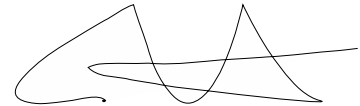


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# General Remark

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If you encounter any difficulties or if you need support on how to update and/ or install your Spinner Frenzy Arcade product, we invite you to contact your local distributor or reach us at [support@aagames.com](mailto:support@aagames.com) or by calling our support line +1-450-824-1671



Adrenaline Amusements Team

Adrenaline Amusements  
1150 Levis, Suite 302  
Terrebonne, Qc  
Canada  
J6W 5S6

# Table of Contents

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## Contents

<b>General Remark</b> .....	<b>2</b>
<b>Table of Contents</b> .....	<b>3</b>
<b>Chapter 01 - Preface</b> .....	<b>5</b>
Precaution for Game Operation.....	5
Safety.....	6
Environmental Conditions.....	6
<b>Chapter 02 - Game Features</b> .....	<b>7</b>
<b>Chapter 03 – Unit Features</b> .....	<b>8</b>
Hardware Features.....	8
Cabinet Facts .....	8
Voltage .....	9
<b>Chapter 04 – Unit Installation</b> .....	<b>10</b>
Assembling your Spinner Frenzy Unit .....	10
<b>Chapter 05 – Operator Menu</b> .....	<b>12</b>
Operator Menu .....	12
Ticket Payouts Structures.....	14
<b>Chapter 06 – Service &amp; Repair</b> .....	<b>22</b>
Computer Connections .....	22
Troubleshooting .....	23
Video Troubleshooting.....	23
Audio Troubleshooting .....	23
Monitor Replacement .....	24
Front Kickboard Assembly RGB LED replacement .....	34
Wireless Internet Configuration.....	37
<b>Chapter 07 - Parts</b> .....	<b>38</b>

Cabinet Parts .....	38
Computer & Electronics .....	40
Header & LEDs.....	41
Spinner RGB PCB .....	42
Cabling.....	43
Wiring Harness .....	44
<b>Chapter 08 – Diagrams &amp; Schematics .....</b>	<b>45</b>
I/O Board ADR-04-1001 .....	45
I/O Board - Spinner Sensors Wiring .....	48
I/O Board - Coins & Ticket Wiring .....	49
Power Distribution Schematics .....	50
RGB LED Wiring .....	52
<b>Chapter 09 – Software Recovery .....</b>	<b>57</b>
<b>Chapter 10 – Card Reader .....</b>	<b>58</b>
Embed System.....	59
<b>Limited Warranty Policies .....</b>	<b>61</b>

# Chapter 01 - Preface

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***Please read this page before preparing your Spinner Frenzy Arcade product for game play.***

The following safety instructions apply to all game operators and service personnel. Specific warnings and cautions will be included throughout this manual.

Use the following safety guidelines to help protect the system from potential damage and to ensure your personal safety:

- Electronic components in the game cabinet run on 110V AC 60Hz (220V/ 50Hz in most of Europe, the Middle East and the Far East delivered units).
- To help prevent electric shock, plug the system into a properly grounded power source. These cables are equipped with 3-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a 3-wire cable with properly grounded plugs. We do recommend a 15A rated current or higher power cord.
- To help protect your system from sudden increases and decreases in electrical power, use a surge suppressor, line conditioner or Uninterruptible Power Supply (UPS).
- Be sure nothing rests on the system's cables and that the cables are not located where they can be stepped on or tripped over.
- Keep your system far away from radiators and other heat sources.
- Do not block cooling vents.

## **Precaution for Game Operation**

Adrenaline Amusements Inc. assumes no liability for injuries incurred while playing our games.

Operators should be aware that certain health and physical conditions may make people susceptible to injury when playing video games.

## Safety

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To avoid electrical shock, unplug the cabinet before performing installation or service procedures.

If a power cord is damaged, it must be replaced by the equivalent power cord available from your distributor.

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Adrenaline Amusement Inc. assumes no liability for any damages or injuries incurred while setting up or servicing the cabinet. Only qualified service personnel should perform installation or service procedures.

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## Environmental Conditions

Cabinet is intended for indoor use only. Be sure to keep the cabinet dry and maintain operating temperatures of 59° - 86°F (15° - 30°C).

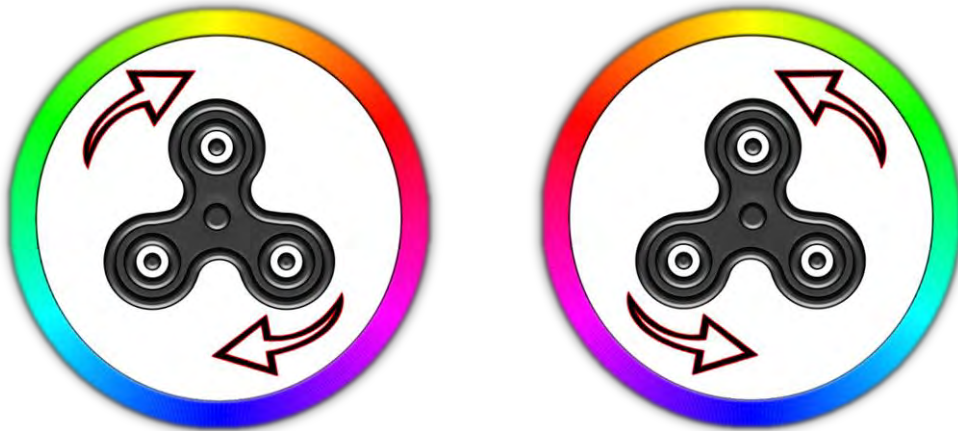
# Chapter 02 - Game Features

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**Spinner Frenzy is an addictive game!**  
**It requires precision, not strength!**

## How to Play

- Spin the Spinner Wheel to exactly 500 RPM and win the bonus!
- Spinning too fast or too slow will payout different tickets amount.
- 100% Skill game.
- Different ticket payouts structures available (See Chapter 5)

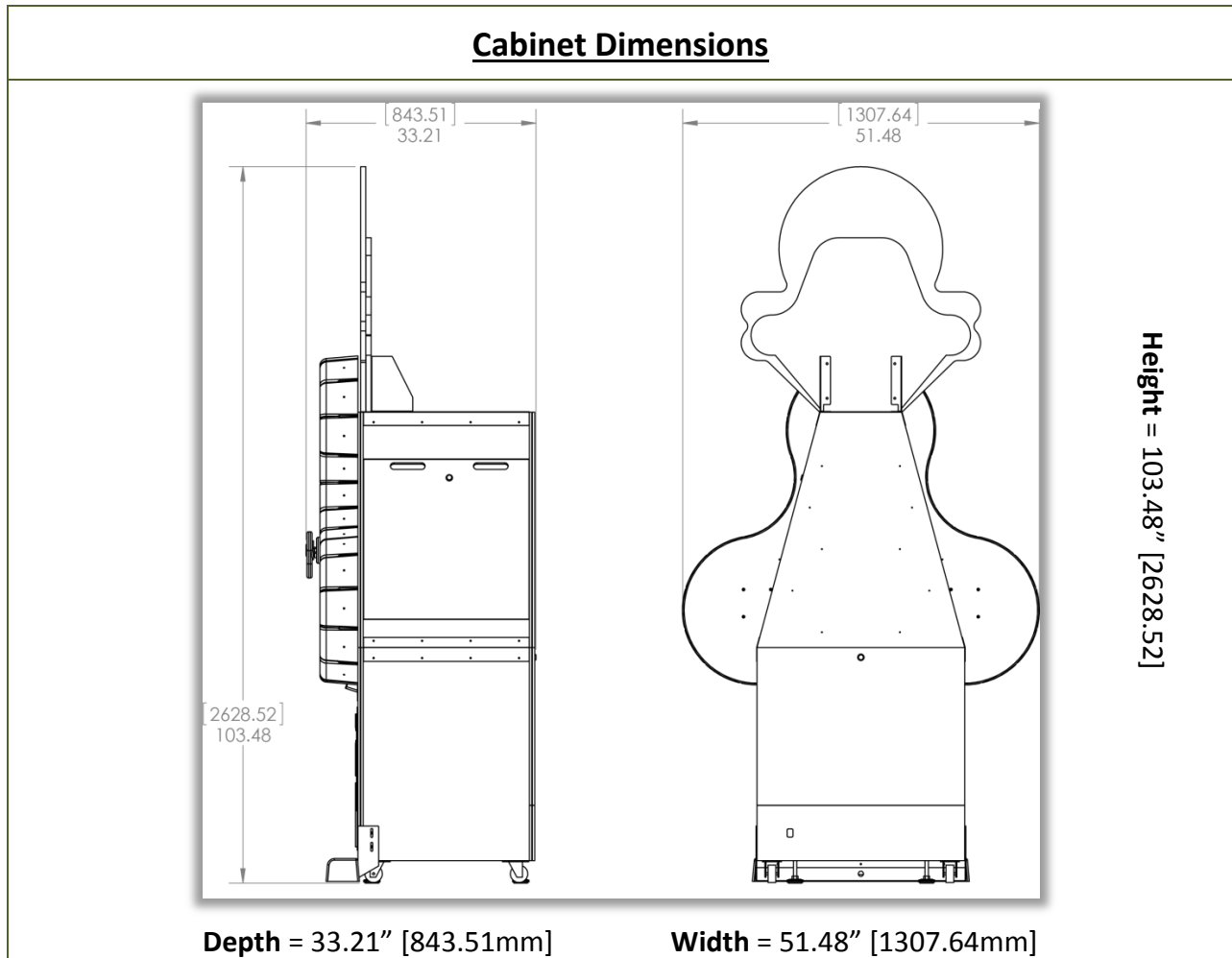


# Chapter 03 – Unit Features

## Hardware Features

- 4 Monitors (1 Hidden into Side Service Door)
- Amazing Interactive RGB LEDs animations.
- 100% Skill Game, challenge your friends!

## Cabinet Facts



<b><u>Shipping Dimensions</u></b>		
<b>Width = 54"</b>	<b>Depth = 36"</b>	<b>Height = 82"</b>
<b>Weight = 400 lbs</b>		



## Voltage

<b>Voltage</b>	<b>Operating</b>
110V AC	2.5 AMP
220V AC	1.25 AMP

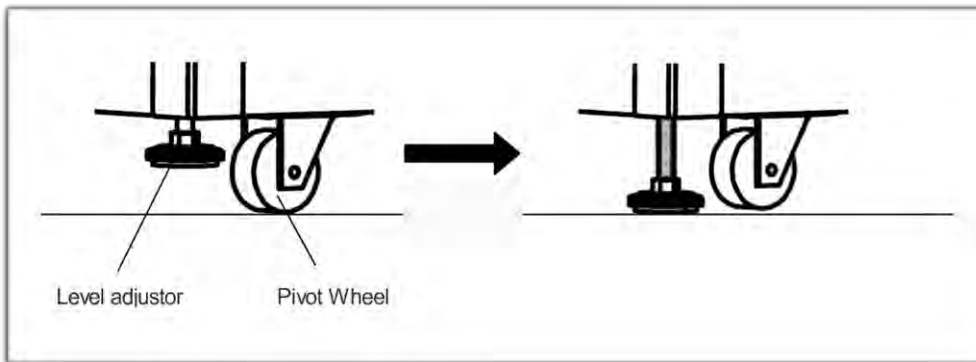
# Chapter 04 – Unit Installation

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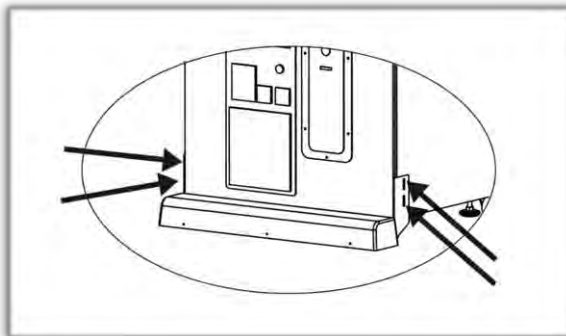
## Assembling your Spinner Frenzy Unit

**\*\*You need to be 2 persons to assemble the unit\*\***

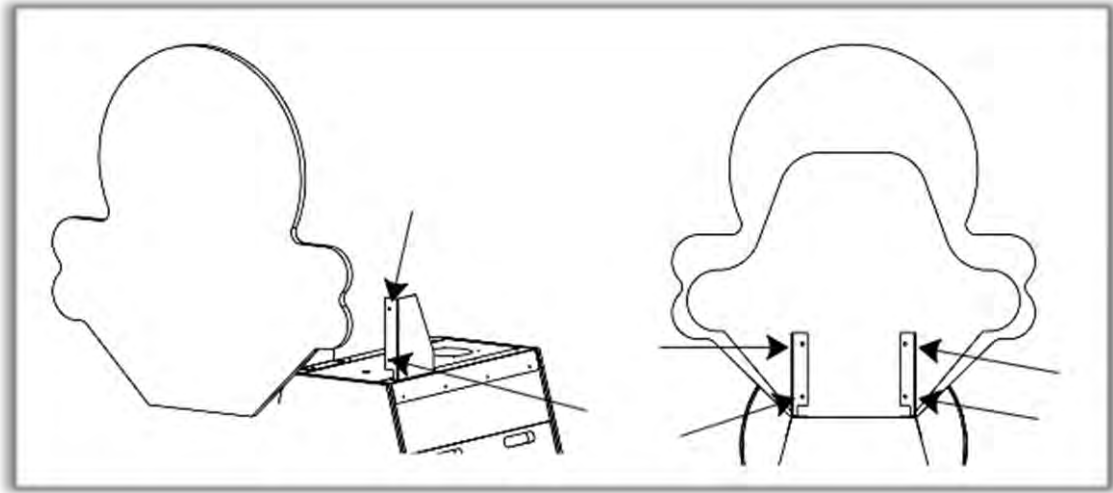
1. Carefully remove the Cabinet from the shipping container, giving you enough space.
2. Move the cabinet to the desired location.
3. Lower the four Level adjusters until the Pivot Wheels are slightly above the floor.



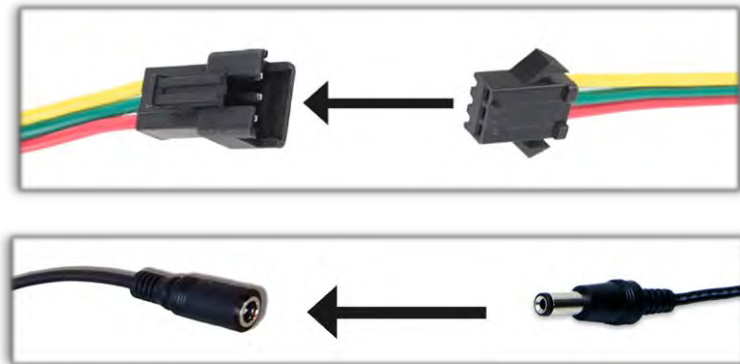
4. Install the front kickboard assembly. Connect the wires and screw the metal sides to the cabinet with the provided wooden screws.



5. Install the header using the 4 provided lock bolts.



6. Connect the cables for the RGB LEDs and the White LEDs coming from the top of the cabinet to the Header.



# Chapter 05 – Operator Menu

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## Operator Menu

Access the Operator Menu by pressing the Operator button located inside the drawer on the I/O board directly.

**Operator:** *Open the Operator Menu*

**Up/Down:** *Scroll Up/Down & Increase/ Decrease Value*

**Select Button:** *Select/Deselect*



<b><u>Operator Menu</u></b>	<b><u>Values</u></b>	<b><u>What It Does</u></b>
Credits Per Game	1-20	Adjusts the number of credits required to play. "0" sets the unit in free play mode.
Game Audio Volume	0-20	Adjusts the in-game audio volume. "0" will mute the game.
Attract Audio Volume	0-20	Adjusts the audio volume of the attract loop. "0" will mute the attract loop.
Ticket Value	1-2	Adjusts the value of physical tickets. Physical tickets are either worth "1" ticket or "2" tickets.
Payment Type	Credit / Card	Changes the credit type. "Credits" = Coins and "Card" = Card Reader. This will change the in-game text accordingly.
Redemption Unit Name	Tickets / Coupons	Adjusts the in-game text accordingly.
Bonus Value	100-200-500-1000	Adjusts the number of tickets given when the Bonus is reached. (Can be changed for all different payouts)*
Bonus Window	0-4	Adjusts the precision range to win the bonus. 0 is harder to win the bonus, 4 is easier to win it. Recommended Value: 2
Tickets Payout	1-7	Adjusts the values layout structure for % payout. (Refer page 14 to 21)

\*The Bonus Cover Value can be installed on all 7 payout structures. You only need to install the Cover matching the Operator menu desired value.

## Ticket Payouts Structures

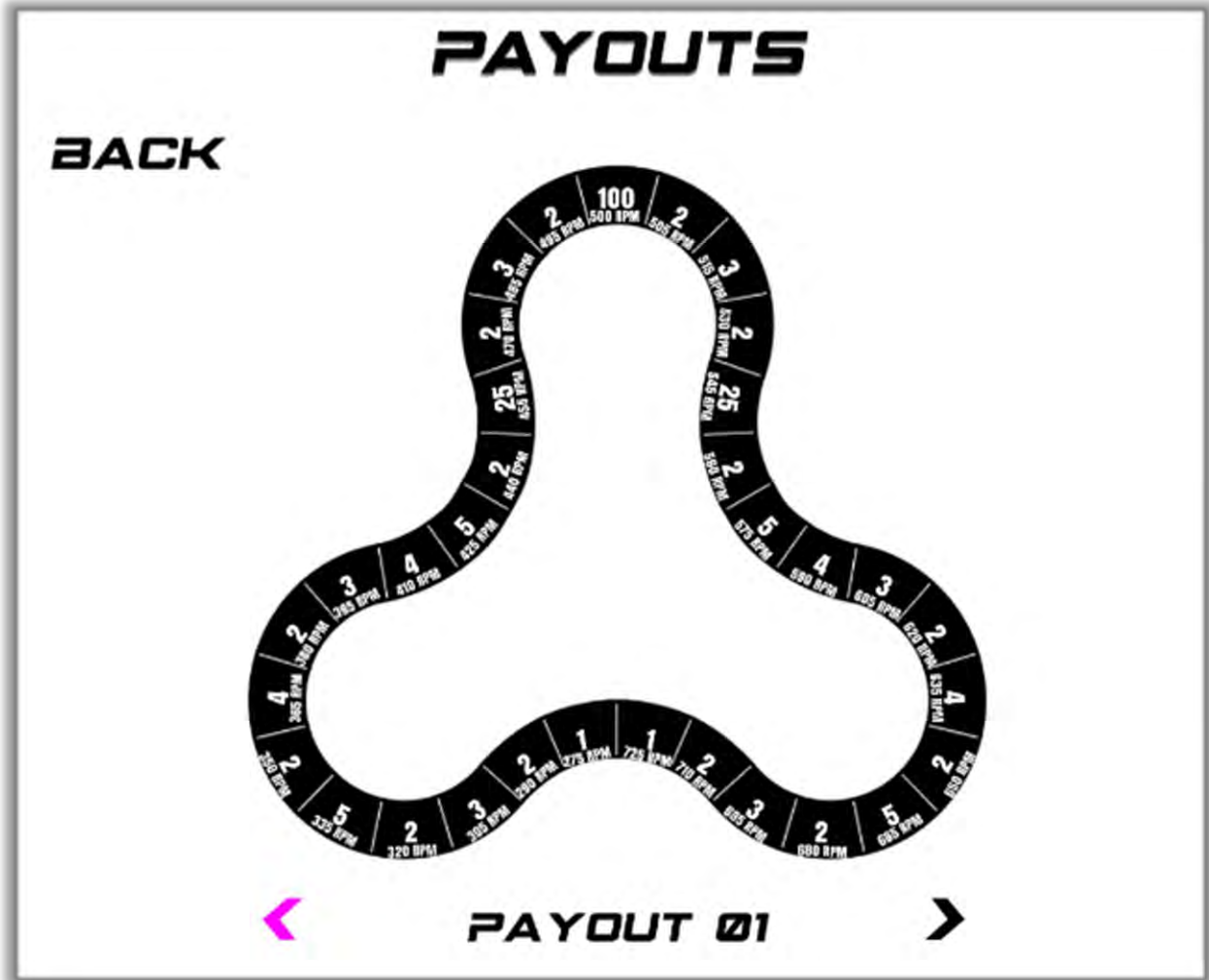
If you choose a different ticket payouts structure than the one originally installed, refer to the on-screen images to install the good values cover at their good positions.

The extra value covers are located in the bottom cabinet. Open the back service door to reach them.

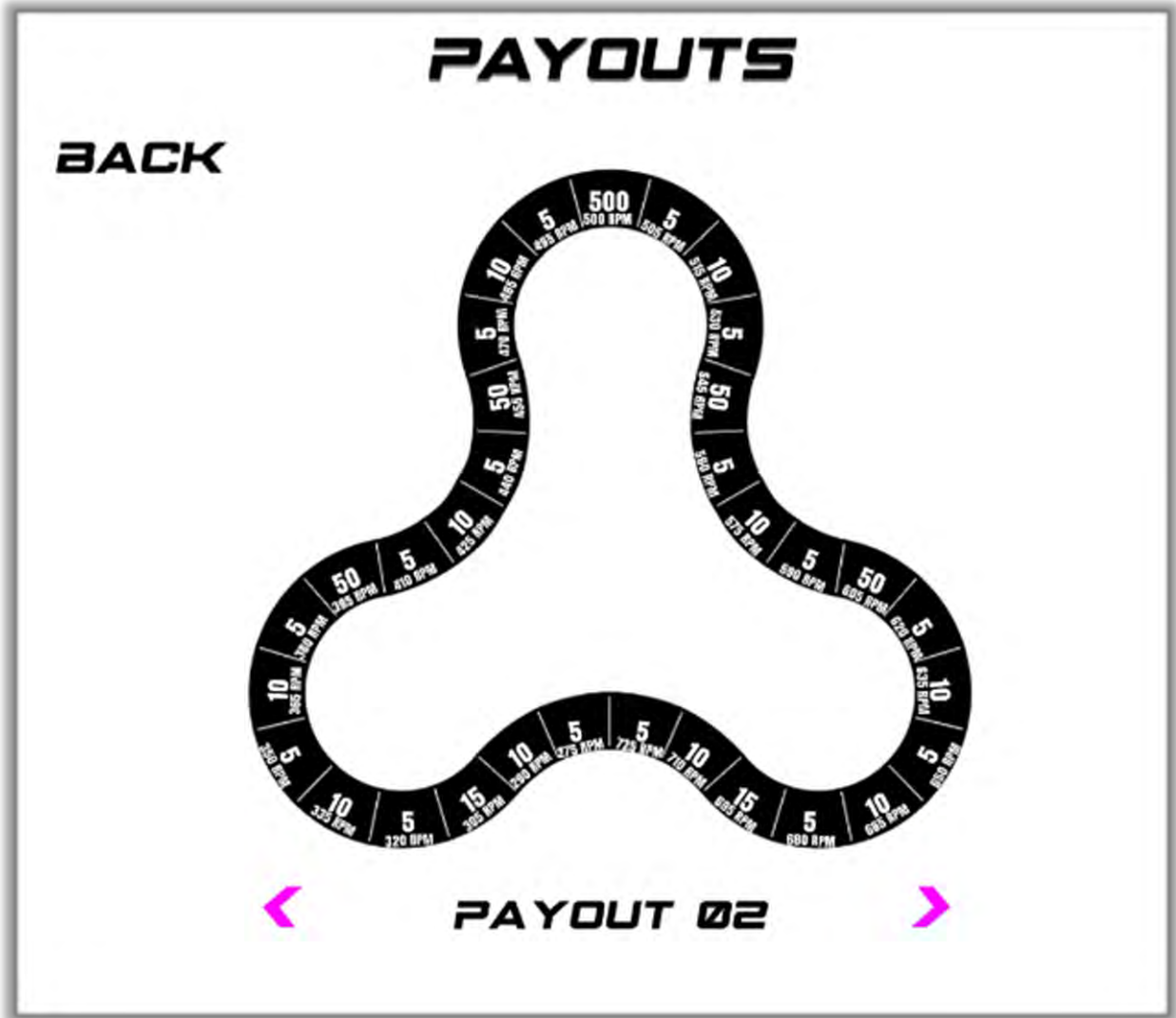
***The Payout for each layout is based from average skilled players and is not 100% accurate. Each store locations have different skill based players and the results will fluctuates.***

To change the values cover, remove the screw and gently pull out the cover. Replace the value covers following the on-screen or this manual image.



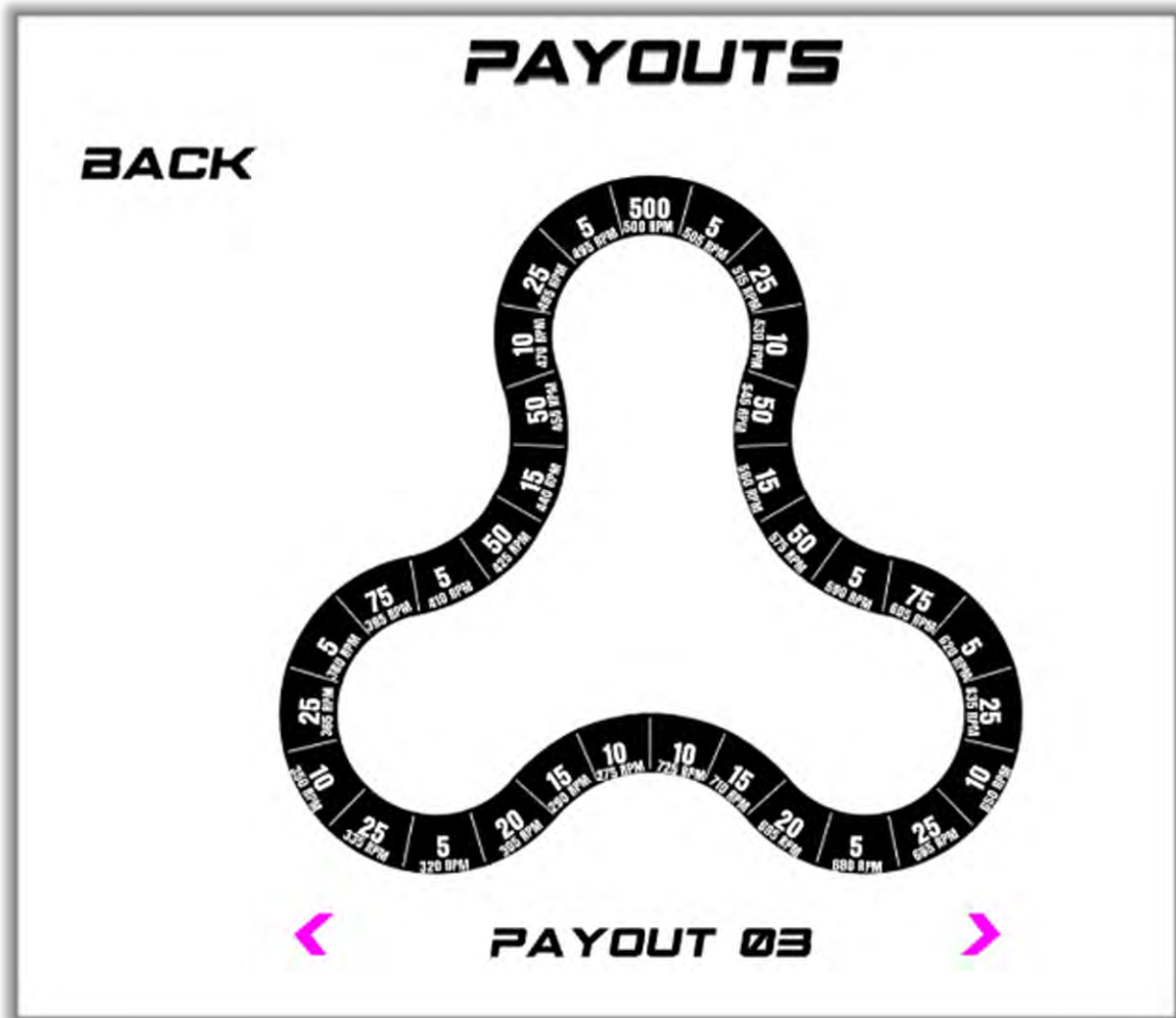


Use Payout 01 if you want to use Coin Value 0.25\$ and use Bonus Value Cover 100.

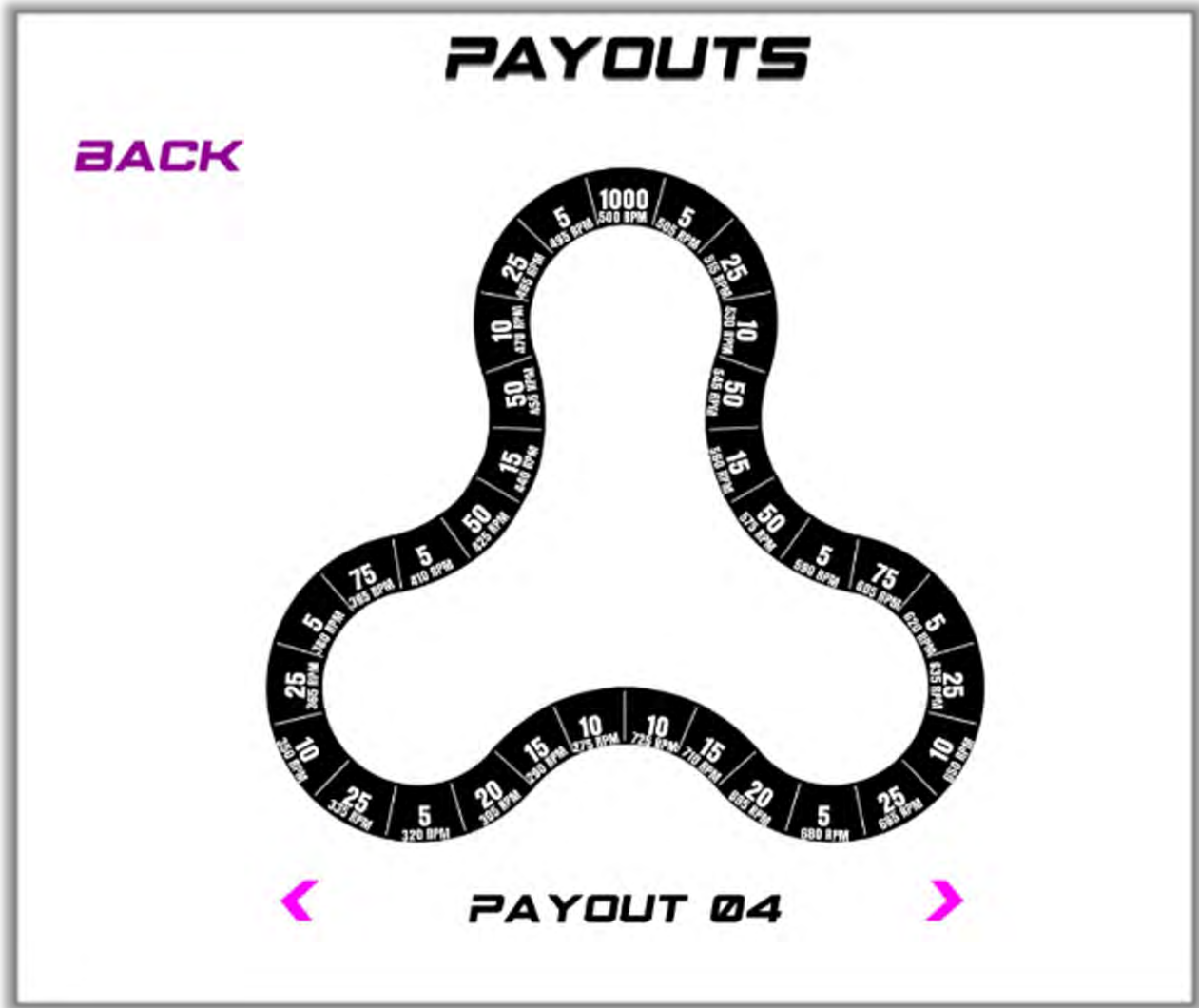


Use Payout 02 if you want to use Coin Value 0.75\$ and use Bonus Value Cover 500.

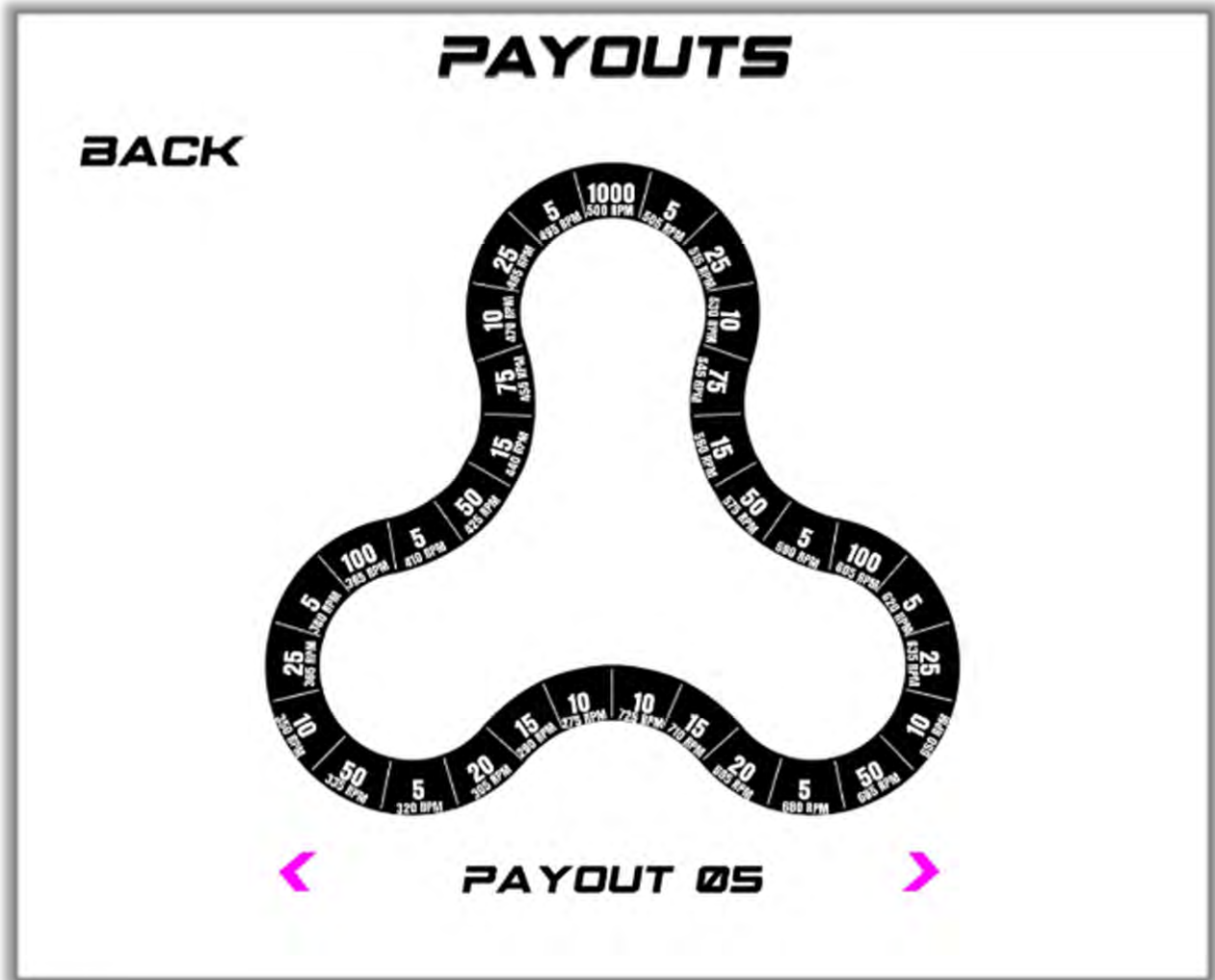




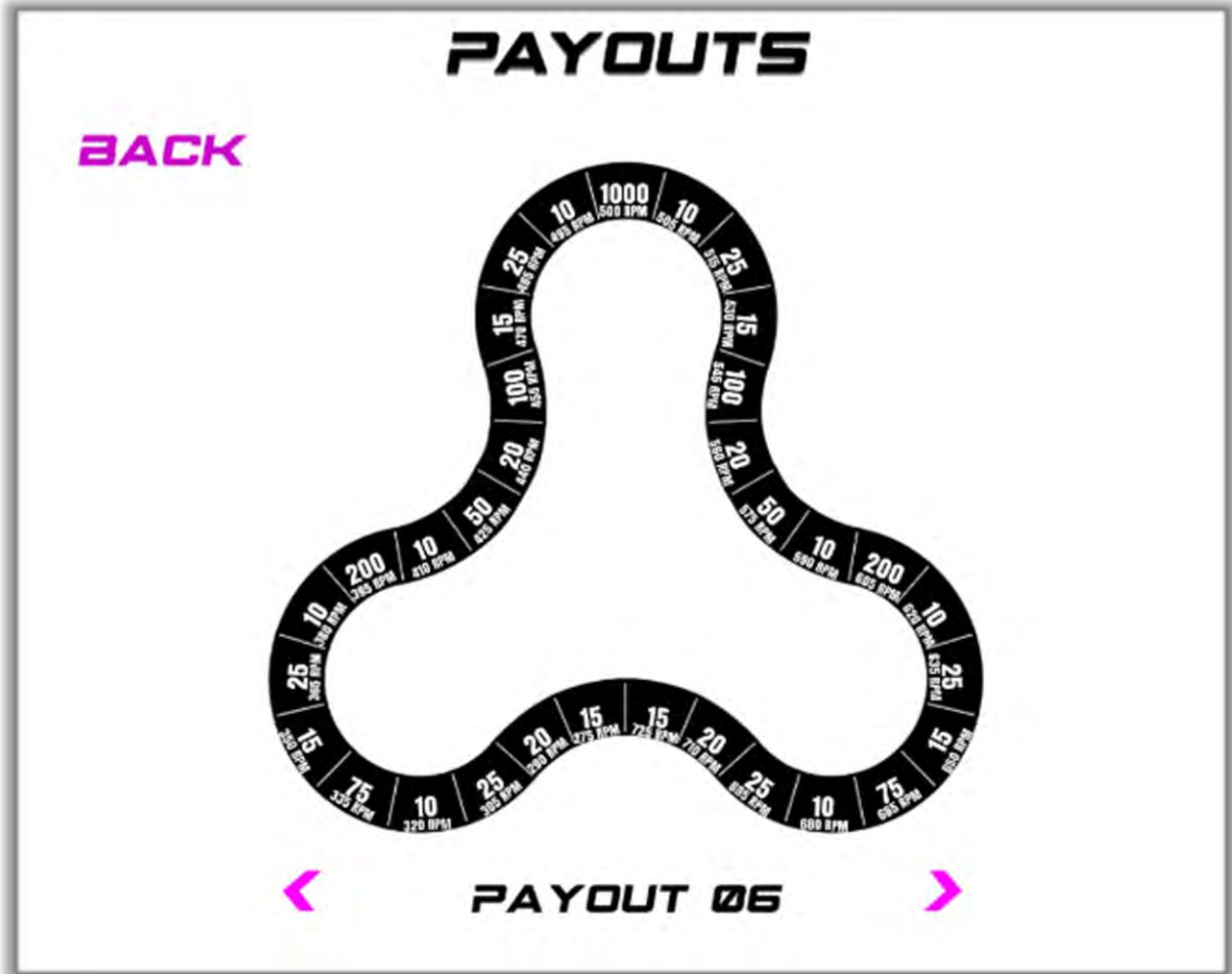
Use Payout 03 if you want to use Coin Value 1.00\$ and use Bonus Value Cover 500 for a Low Payout.



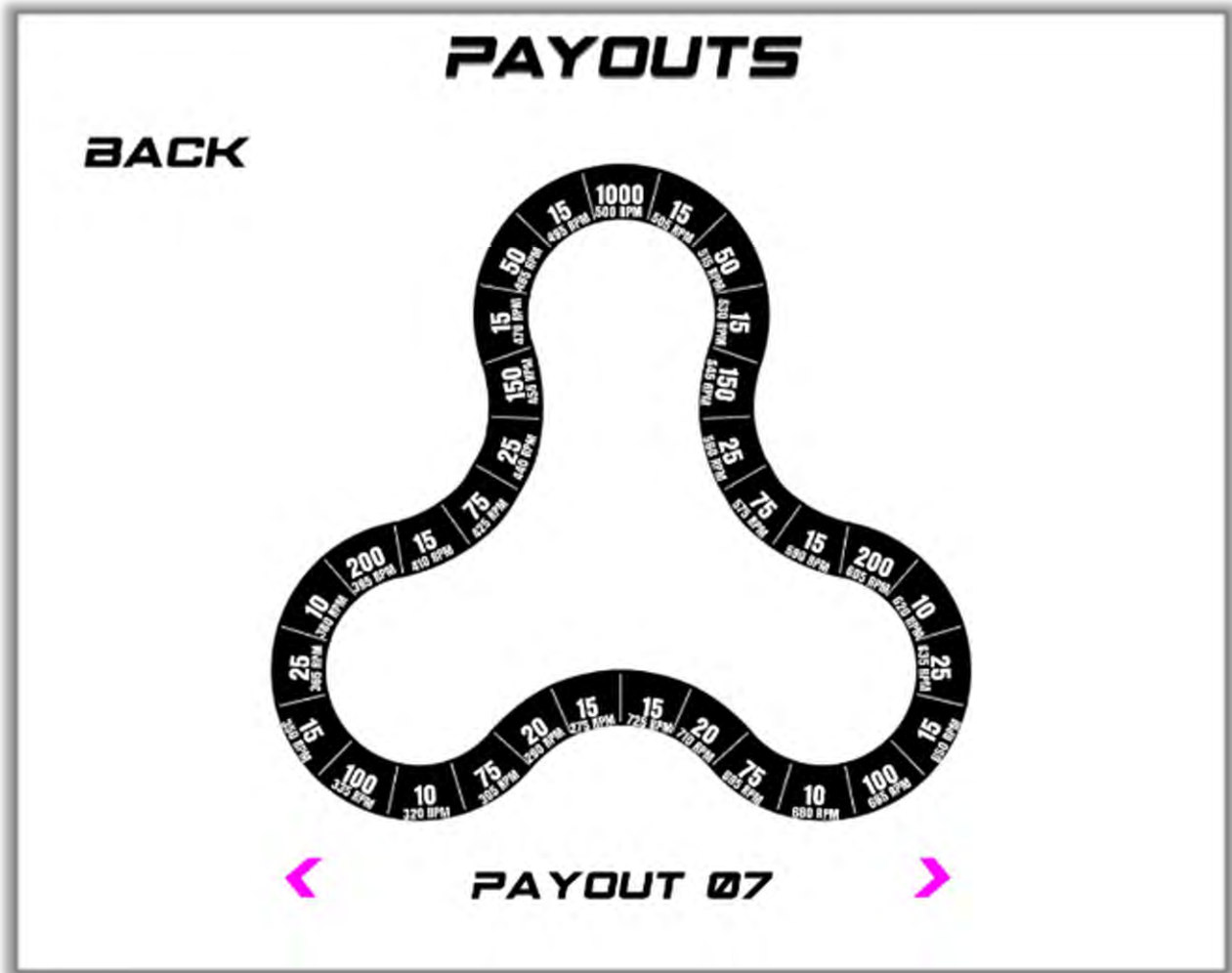
Use Payout 04 if you want to use Coin Value 1.00\$ and use Bonus Value Cover 1000 for a Medium Payout.



Use Payout 05 if you want to use Coin Value 1.00\$ and use Bonus Value Cover 1000 for a High Payout.



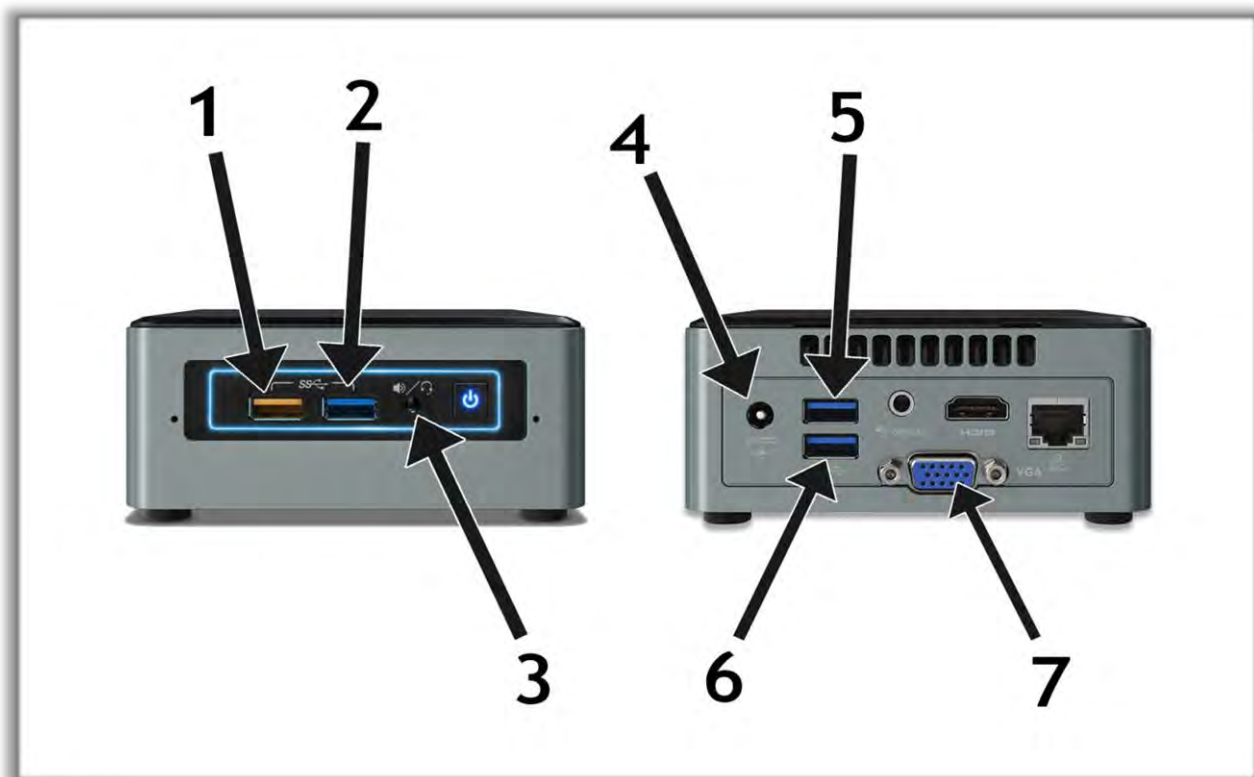
Use Payout 06 if you want to use Coin Value 1.50\$ and use Bonus Value Cover 1000.



Use Payout 07 if you want to use Coin Value 2.00\$ and use Bonus Value Cover 1000.

## Chapter 06 – Service & Repair


### Computer Connections



<u>No.</u>	<u>Description</u>
1.	USB Port to RGB LED Controller
2.	USB Port to I/O Board
3.	Audio Jack to Amplifier
4.	Power Barrel Connector
5.	USB License Dongle
6.	USB Restore Flash Drive
7.	VGA to VGA Splitter Adapter

## Troubleshooting

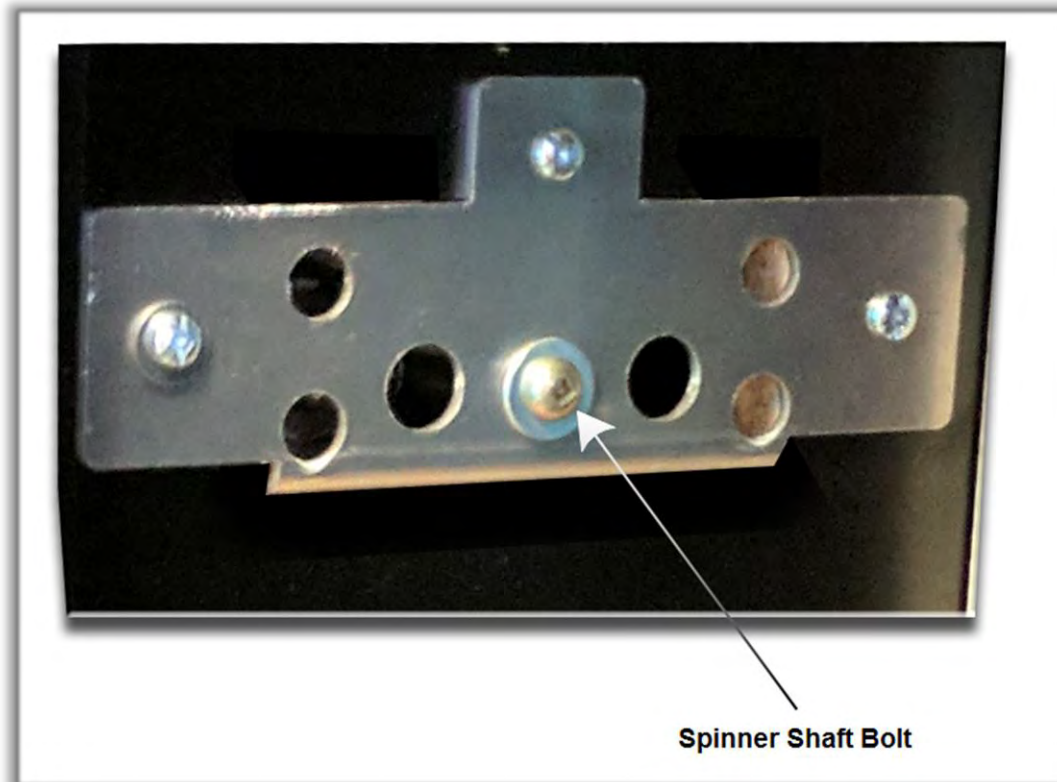
**\* NOTE: When requesting a warranty replacement you will be asked to give the unit's serial number from the back of the unit.**

<b>Video Troubleshooting</b>	
<b>No Picture or Display Problem</b>	<p>There could be loose or faulty connections between the monitor and the VGA Splitter.</p> <p>Make sure the VGA video cable is connected properly to the VGA Splitter. Verify that the VGA video cable is properly connected between the VGA splitter and the NUC computer.</p> <p>If only 1 monitor doesn't have signal, verify that the VGA cable is properly connected to it. You will need to disassemble the front cabinet (Refer to section Monitor Replacement).</p>
	<p>Verify that the NUC Computer is powered on. There should be a blue LED on the Power Button. If there is no LED, press the Power Button to start the computer.</p>
<b>Audio Troubleshooting</b>	
<b>Low Volume / No Sound</b>	<p>Increase the volume in the game by pressing the Operator Button and adjusting the volume options in the Operator Menu. You might also Quit the game to Windows desktop and increase the volume via the  Speaker icon on the bottom right of your screen.</p>
	<p>Verify the wirings behind the speakers and in the amplifier. Verify that the 1/8" audio jack is plugged in the computer's sound input jack and that the other end RCA's are plugged in the sound amplifier.</p>

## Monitor Replacement

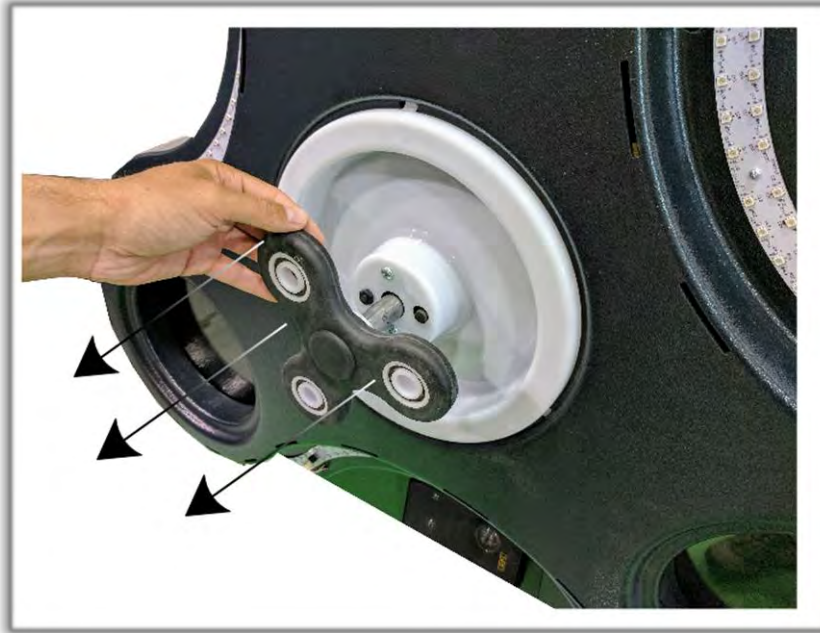
*This section covers: Monitor replacement, Monitor power supply replacement, VGA cables replacement, Spinner shaft replacement, Spinner Sensors replacement, Solenoid controller replacement, Solenoid (Brake) replacement.*

- Unlock the side service door.
- Remove the Spinner shaft bolt from inside the service door.





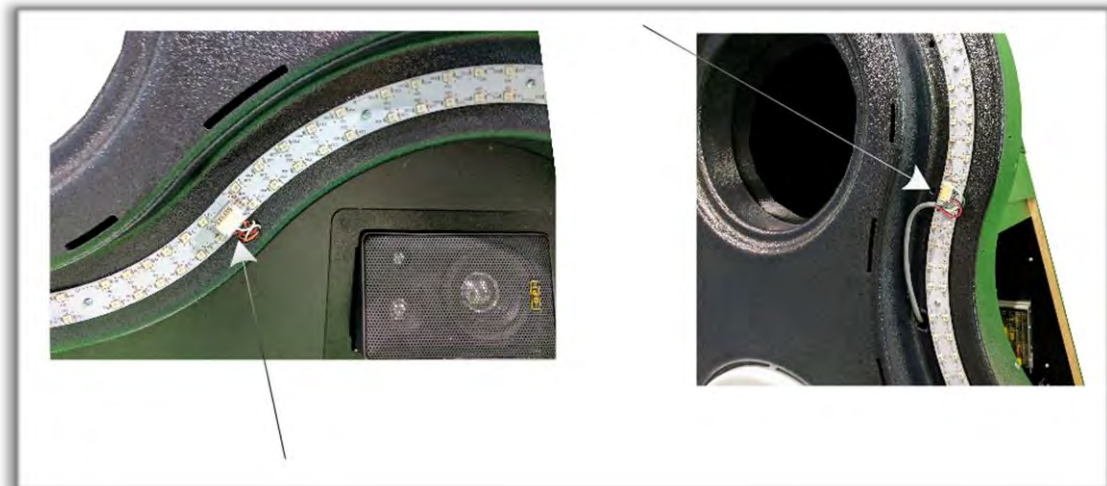
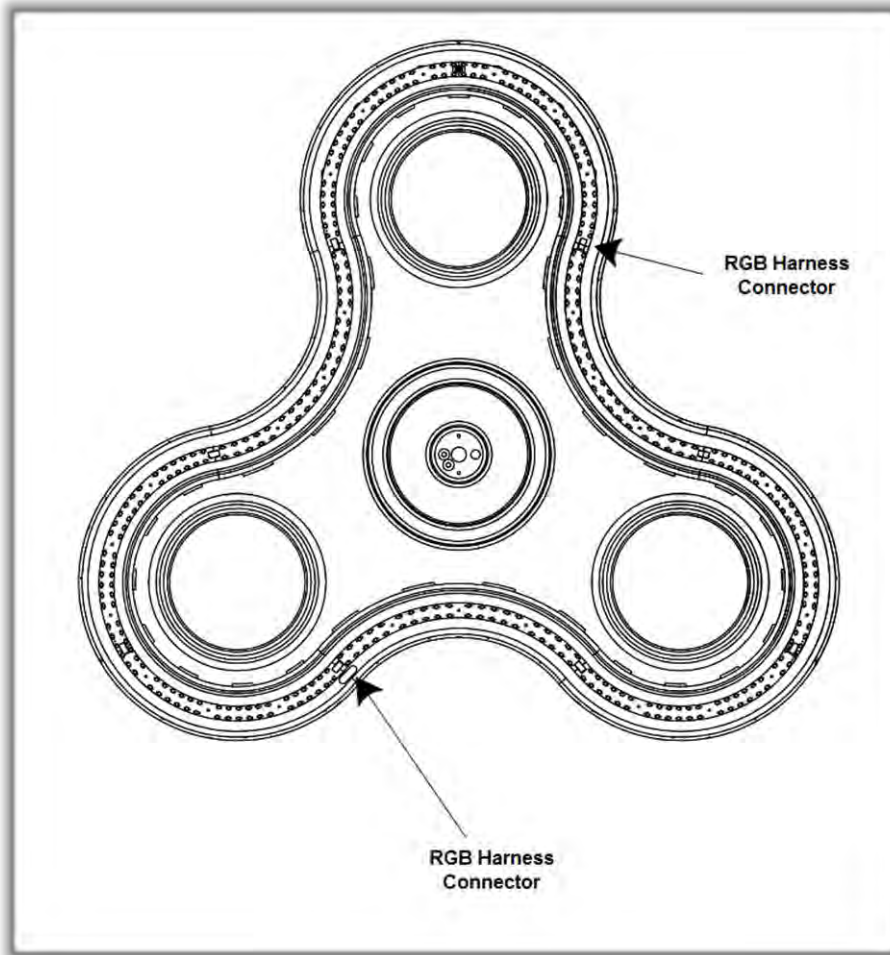
- Remove the Spinner and his shaft by pulling it from the cabinet.



- Unscrew and remove the Values cover all around the Large Spinner.



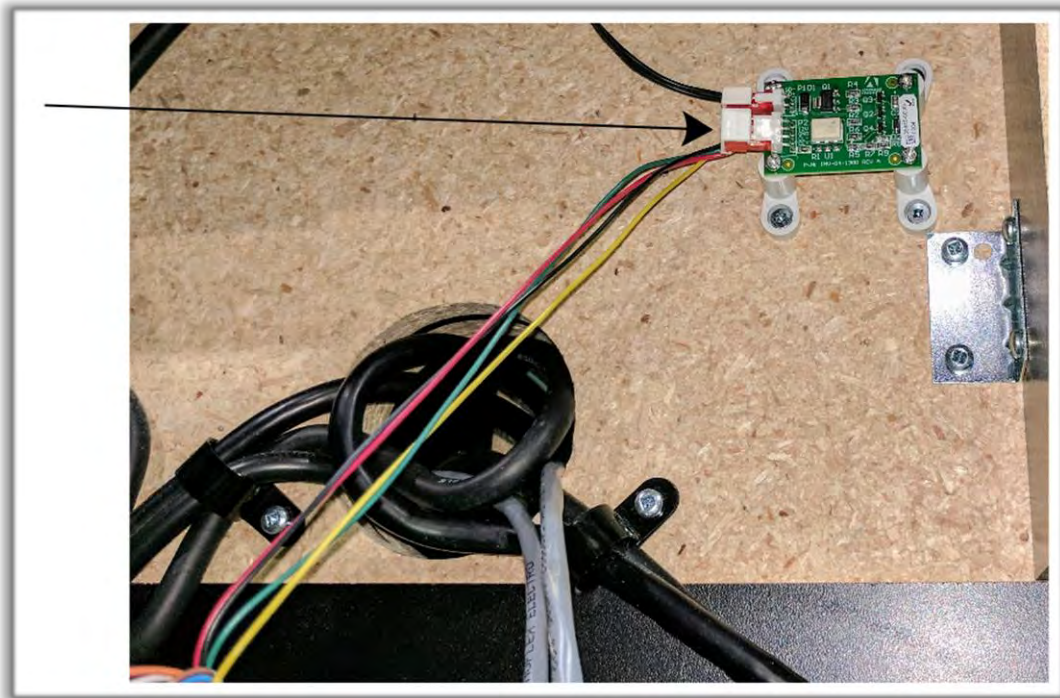
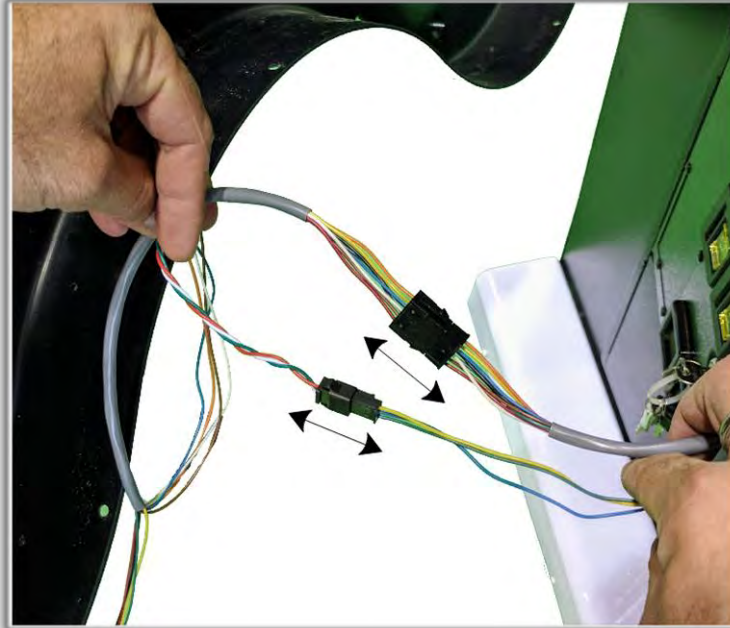
- Disconnect the 2 RGB connectors harness.



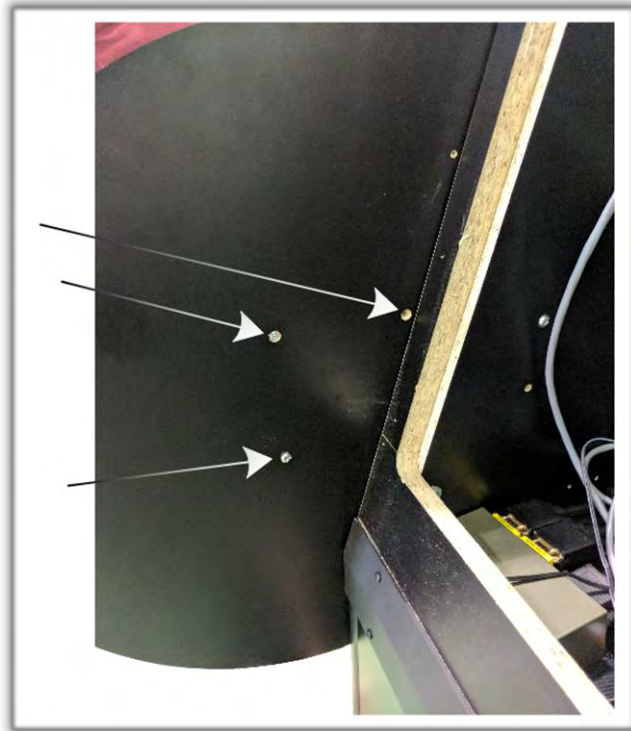
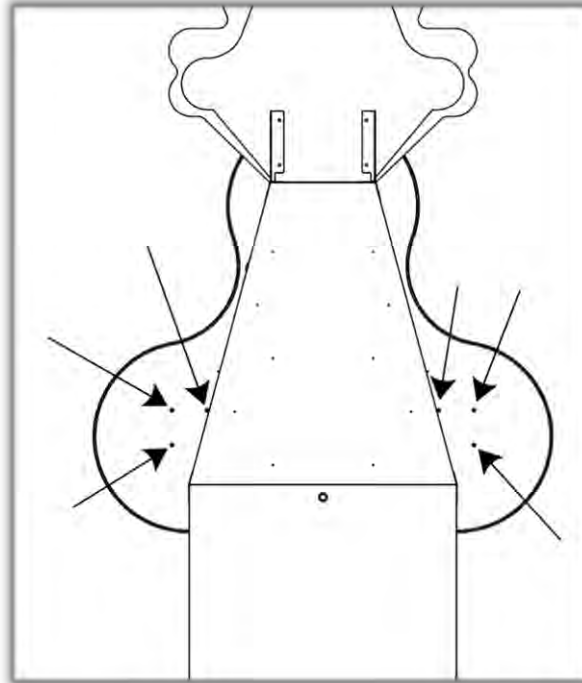
- Unscrew the Large Black Spinner by removing all the screws.  
Be careful so it doesn't drop on the floor.



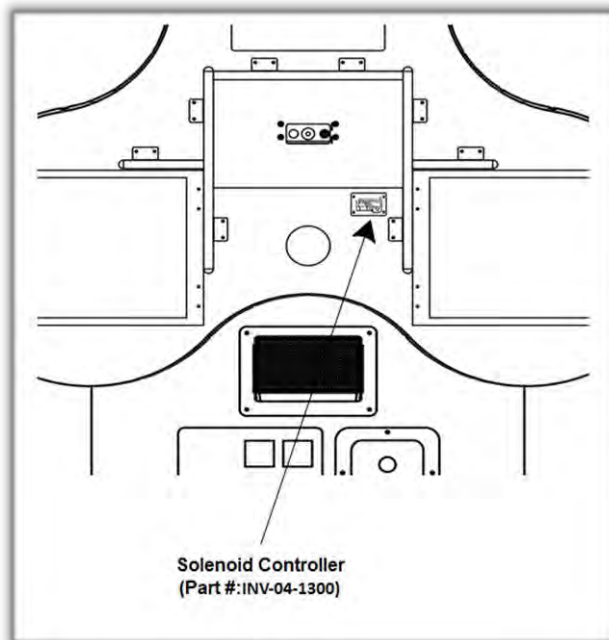
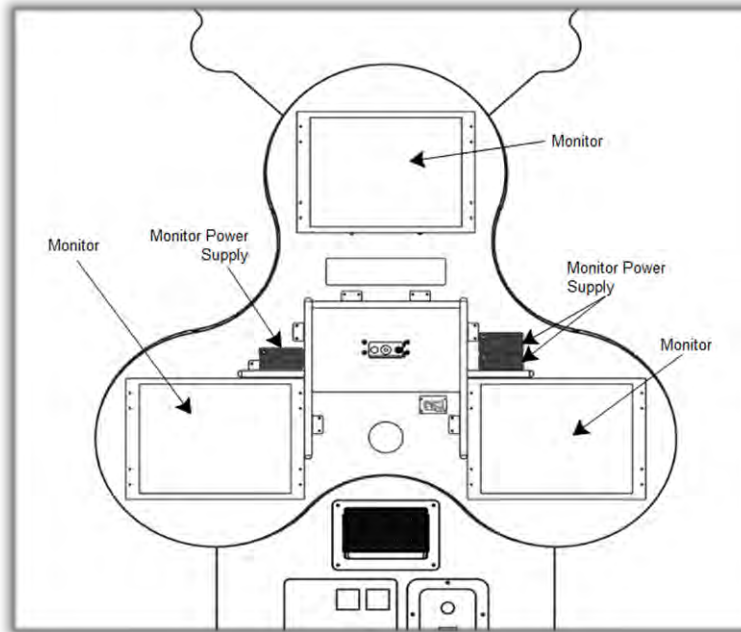
- Gently pull the large black Spinner.  
Disconnect the Solenoid Controller 4-Pins connector.  
Disconnect the RGB 3-pins wiring connector and the 10-pins connector.  
Then remove the large spinner completely aside.



- If you look from the back of the unit you can find the 3 screws that hold in place the 2 bottom monitors.

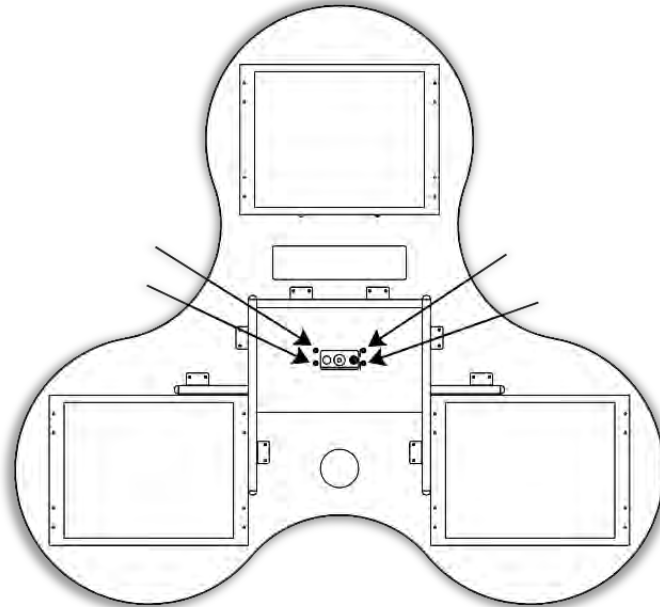


- *If you need to replace a VGA cable you need to do the previous steps.*
- *If you need to replace a monitor and/or monitor power supply you need to do the previous steps.*
- *If you need to replace the Solenoid controller you need to do the previous steps.*

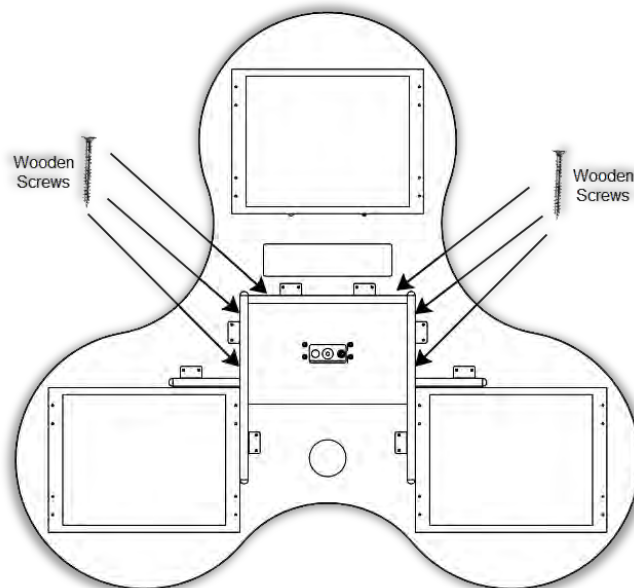


- To replace the upper monitor, remove the header first.
- Somebody needs to hold the monitor to avoid it to fall; Remove the screws holding the monitor from outside the service door.
- Then remove the screws from inside the service door.

- To replace the Solenoid (Brake)  
Remove the 4 bolts from the front plate.



- Remove the 6 screws holding the front wooden plate.





- Pull away the wooden plate with the solenoid installed on it.
- Replace the Solenoid and re-install the wooden plate.

## Front Kickboard Assembly RGB LED replacement

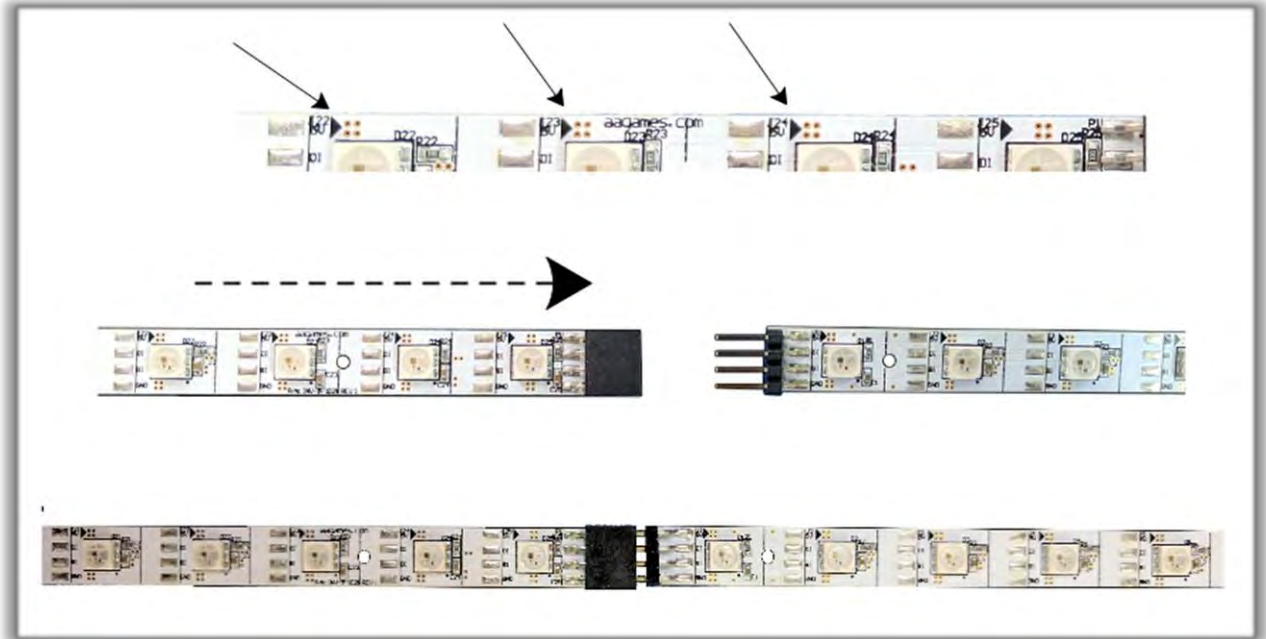
- Remove the 4 screws holding the metal footrest from the cabinet



- Remove the 3 screws on the front and 3 on the back to get access to the LEDs PCB.



When replacing the PCB verify the connections so that the arrows points always in the same direction.



## Wireless Internet Configuration

Your network can be configured via Ethernet cable or Wireless.

If you have an Ethernet cable available to be plugged in, insert it into the motherboard LAN RJ45 connector.

If not, here's how to configure your wireless network with your own existing Wi-Fi network.

-Start the unit.


-There will be Adrenaline Amusements wallpaper with a 150 seconds delay before the attract mode shows up. It gives enough time for a wireless network to connect.

*(This delay will be present on each reboot if you don't connect your unit to the Internet)\*.*

-Open the service door and press the Operator button.

-Choose Exit/Quit to Windows.

-Connect the provided USB hub and into it the USB keyboard and mouse.

- Open Connect to a Network by clicking the network icon () in the lower right corner of the screen.

-In the list of networks, click the network you want to connect to and click connect.

-Enter your security key.

-Once connected, double-click the Spinner Frenzy shortcut on the desktop.

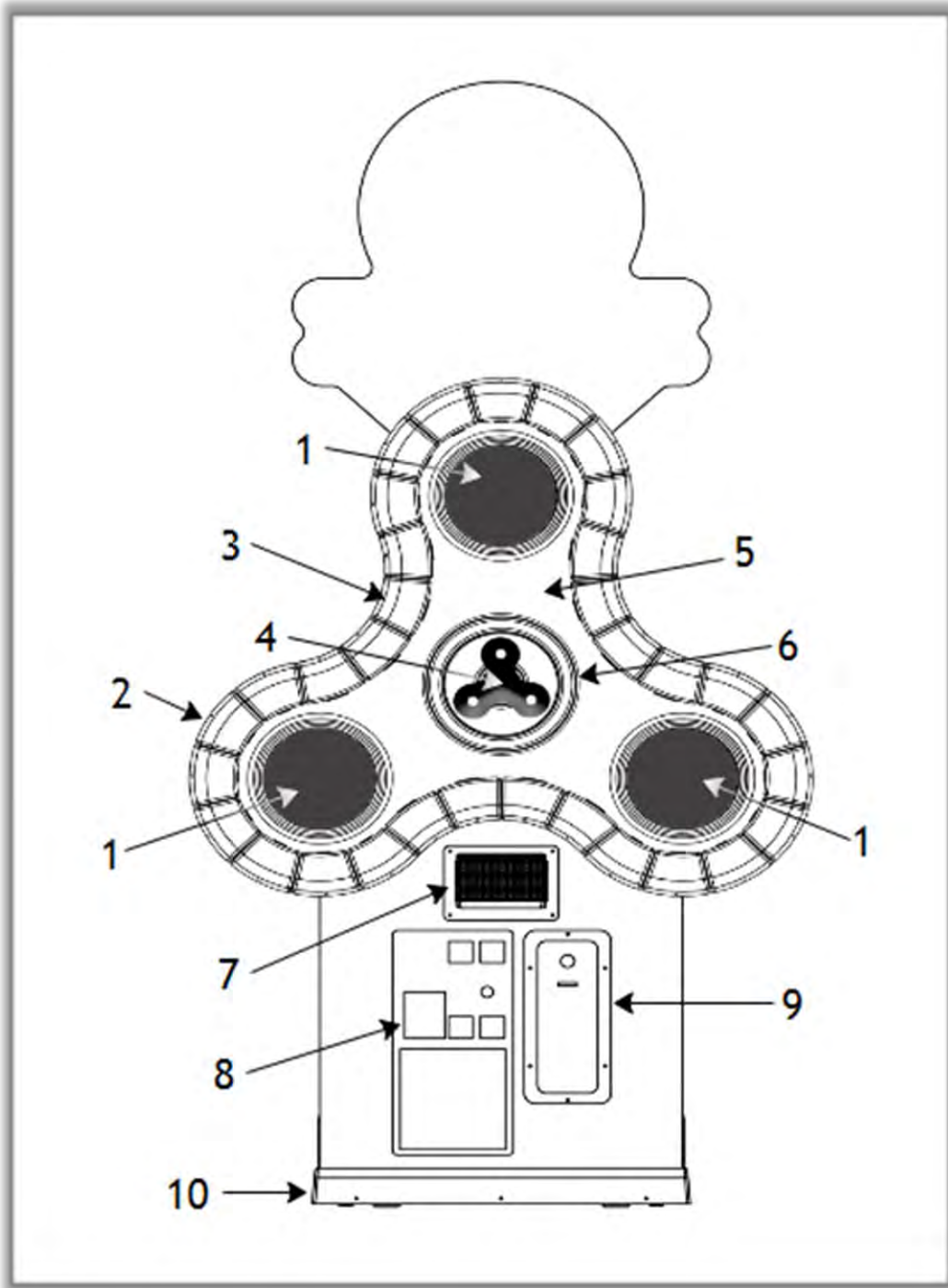
Having your unit connected to the Internet includes free software live update!

\*If you do not connect your unit to the Internet, you can double-click the Disable\_Network shortcut on the Windows desktop to bypass the 150seconds Internet lookup delay.

# Chapter 07 - Parts

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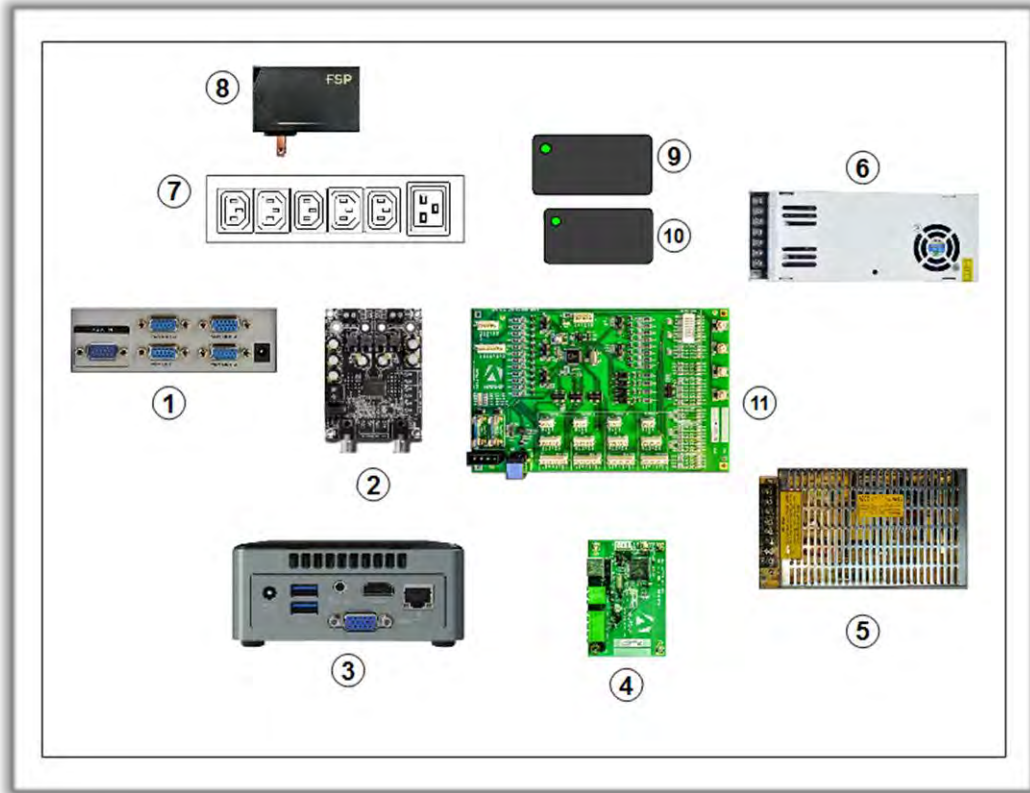
## Cabinet Parts



Spinner Frenzy Manual V1.0  
Chapter 07 – Parts

<b>Ref</b>	<b>Part Description</b>	<b>Part #</b>
1	Monitor 17" VGA with Tempered Glass	SF-10-0001
2	Cover LED Type 1	SF-09-0001-#-RPM
3	Cover LED Type 2	SF-09-0002-#-RPM
4	Spinner Assembly	SF-02-1001
5	Spinner Thermoformed Frame	SF-05-0004
6	Front Center Ring Cover	SF-05-0005
7	Speakers 4"	ADR-50-9986-00
8	Coin Door Assembly with 2 Upper Mech Holder, 1 Validator Cut-out, Blank Bottom Door	ADR-40-3000-06
9	Ticket Dispenser Door	ADR-40-0540-00
10	Bottom RGB LED Cover	SF-05-0006
	Adrenaline Logo Decal Kit	SF-09-0003
	Spinner Logo Decal Kit	SF-09-0004
	Wheel General Duty Rubber Caster	INV-F25083
	Leg Leveler Mount	INV-62805K-39
	Entropy 2000 Ticket dispenser	ADR-42-1337-00
	Fan 120mm	ADR-FAN-120mm
	Grill 120mm	ADR-GRILLE-120MM
	Ticket Bin with Level Sensor	ADR-42-1015-00
	7-Digits Meter with bracket	ADR-42-08012-072
	Plastic Coin Container	INV-07-1011
	Red LED Low Ticket	ADR-L20691-ND
	Blank Coin Door (Optional)	ADR-0745-20

## Computer & Electronics



Ref	Part Description	Part Number
1	VGA Splitter 1 to 4	INV-VS-814H
2	Audio Amplifier 2X15W	INV-14-0005
3	Computer Intel NUC	ADR-11-1016
4	RGB LED Controller	INV-14-1030
5	Power Supply 130W +5V/15A +12V/4A	ADR-80-0210-00
6	Power Supply +5V/60A	SF-14-0010
7	Outlet Power Bar IEC C13 5-Ports	INV-05-1242
8	Computer Power Supply	-
9	Power Supply 12V /4.16A for Monitor	-
10	Power Supply 12V / 5A	INV-14-0006
11	I/O Board Version 5.01	ADR-04-1001
	Audio Cable 2X Male RCA to Male 3.5mm, 6'	INV-35MM-RCAE-06
	SSD Hard Drive 32GB	INV-11-1017-SF
	USB Restore Flash Drive 8GB	ADR-11-2012-SF
	USB HUB 4-Port	INV-11-1020
	Solenoid 36V + Plastic Nylatron Brake	ADR-96-1040-00 & SF-05-0012
	Solenoid Controller	INV-04-1300
	Magnetic Sensors with Threaded Barrel	ADR-HE597-ND

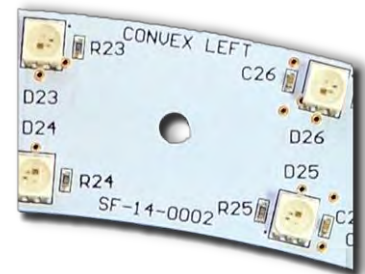
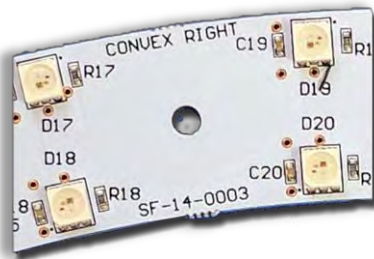
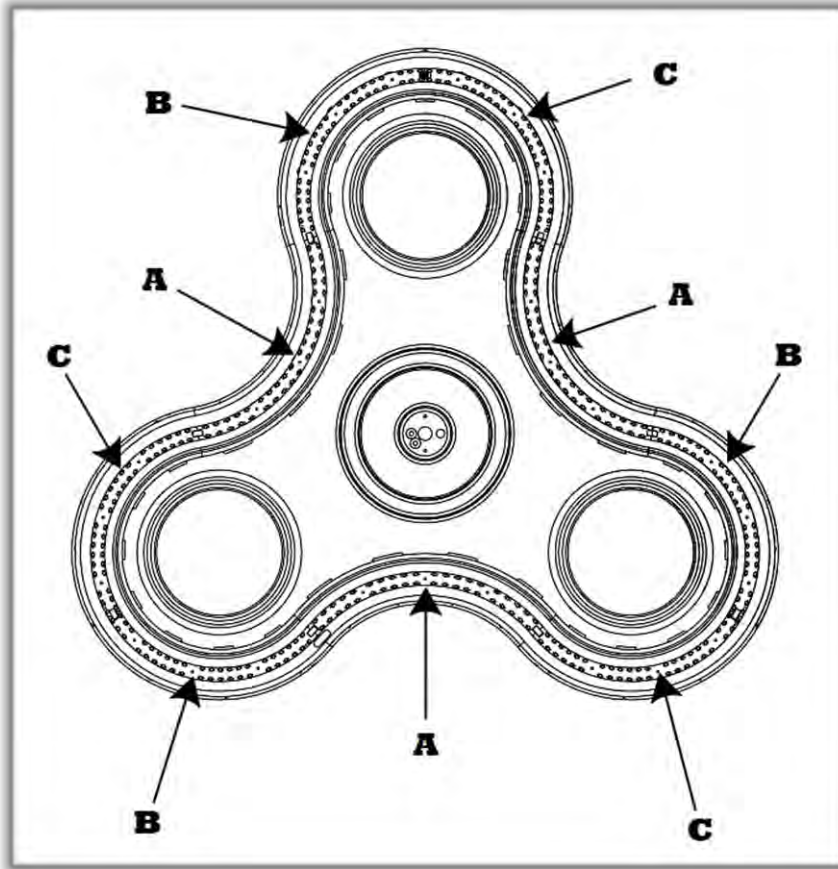


## Header & LEDs



Part Description	Part Number
Thermoformed Ninja Header	SF-09-0001
“Frenzy” RGB LEDs Strip	SF-14-0007
“Ninja” RGB LEDs Strip	SF-14-0008
“Spinner” & “Eyes” White LEDs Strip	SF-14-0009

## Spinner RGB PCB



Ref	Part Description	Part Number
A	"Concave" PCB	SF-14-0001
B	"Convex Left" PCB	SF-14-0002
C	"Convex Right" PCB	SF-14-0003
	Jumper Board	SF-14-0004
	Jumper Board "Power"	SF-14-0005
	Center Ring RGB LEDs Strip	SF-14-0006

## Cabling

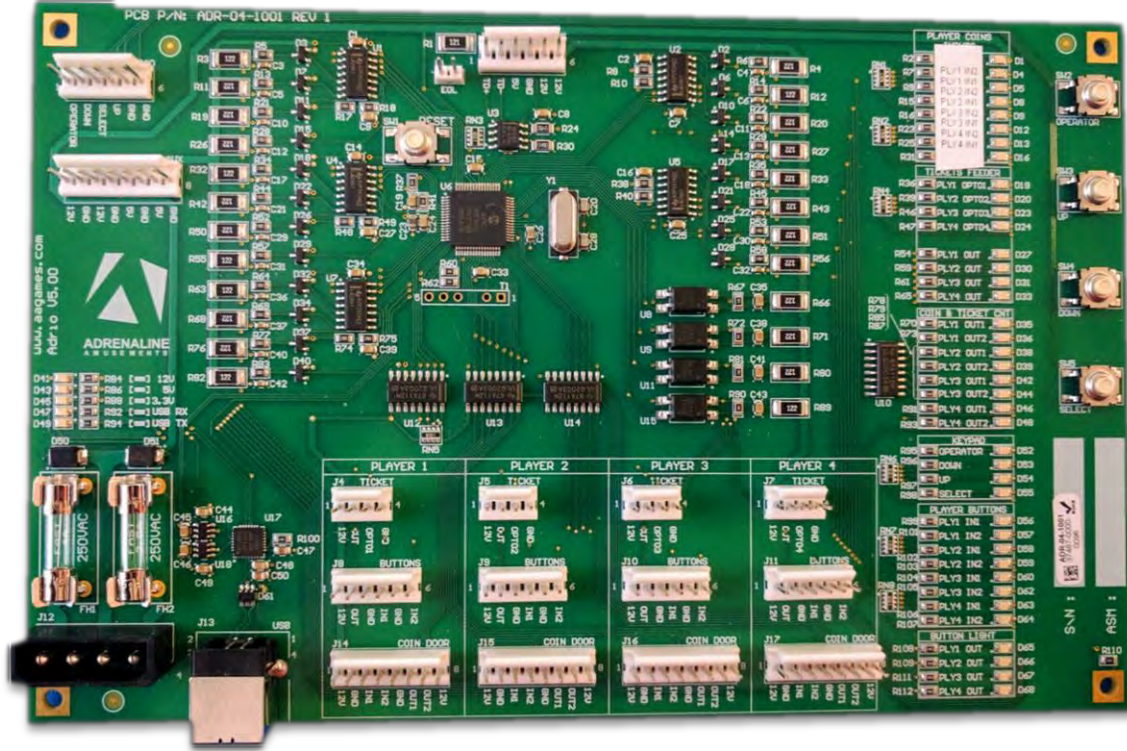
Part Description	Part Number
1' USB "AB" cable	INV-USB-AB1-01BK
Power Splitter Cable IEC-C14 to 2X IEC-C13, 18AWG, 3'	INV-PW-200B-03
Splitter 1-Female To 2-Males 2.1mm for Amplifier & VGA Splitter	TF-05-1223
Power Adapter C14 to 5-15R (Computer PSU Adapter)	INV-PW-AD023
Power Cable IEC-C13 to IEC-C14, 14AWG, 3'	INV-PW-100C-03YL
Power Cord IEC-C13 To IEC-C14, 18AWG, 2'	INV-PW-100-02
Power Cord Wall To Unit, 14AWG, 6'	INV-PW-105C-06
Power Cord IEC-C14 to IEC-C7, 18AWG, 3'	INV-PW-117-03
SVGA Cable Ultra-Thin, Male to Male, 3'	INV-SVGA01-03UT
SVGA Cable Ultra-Thin, Male to Male, 6'	INV-SVGA01-06UT
SVGA Cable, Male to Female, 3'	INV-SVGA3-03
Power Splitter Cable C14 to 2x C13, 2'	INV-PW-200B-02

## Wiring Harness

<b>Part Description</b>	<b>Part Number</b>
Harness from I/O to Solenoid Controller (Inside Large Spinner)	SF-03-0001
Harness from I/O to Solenoid Controller (Inside Cabinet)	SF-03-0002
Harness from RGB LED Controller to Spinner Values LEDs	SF-03-0003
Harness from RGB LED Controller to Bottom Cabinet LEDs	SF-03-0004
Harness for DC Power: LEDs, I/O Board & RGB Controller	SF-03-0005
Harness from RGB Controller to RGB LEDs Header	SF-03-0006
Harness for 12V Header White LEDs & 12V Fan	SF-03-0007
Harness to Control LED inside base	SF-03-0008
Harness Jumper For inside Base LED	SF-03-0009
Harness for Power I/O Board	SF-03-0010
Harness for Coin Acceptor	INV-03-4060
Harness for Ticket Dispenser	INV-03-4070

# Chapter 08 – Diagrams & Schematics

## I/O Board ADR-04-1001



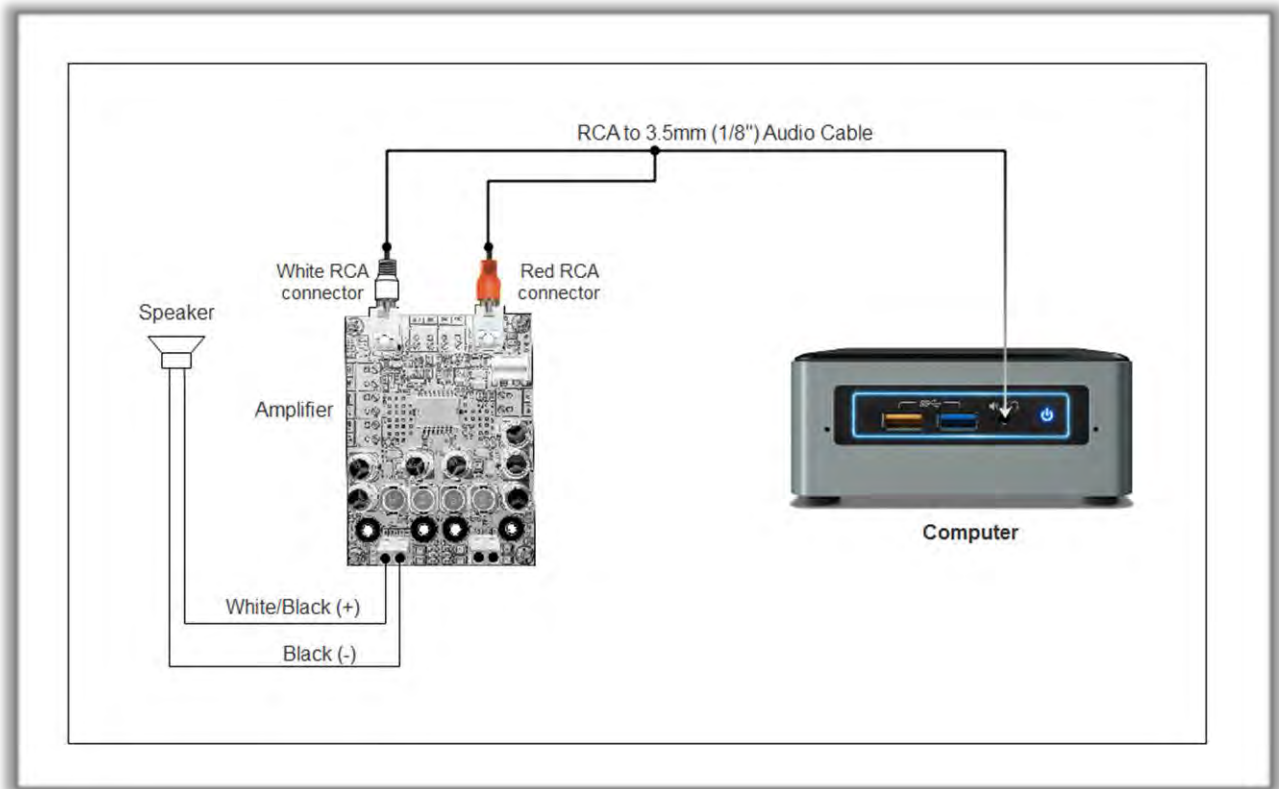
<u>J1</u>	<u>J2</u>	<u>J3</u>	<u>J4</u>
<u>No Use</u>	<u>No Use</u>	<u>Power Aux</u> 1. (Red) +12V 2. (Black) GND 3. (White/Black) +12V 4. (Black) GND 5. No Use 6. No Use 7. No Use 8. No Use	<u>Player Ticket</u> 1. (Red) +12V 2. (White) OUT 3. (Green) OPT01 4. (Black) GND
<u>J5</u>	<u>J6</u>	<u>J7</u>	<u>J8</u>
<u>No Use</u>	<u>No Use</u>	<u>No Use</u>	<u>Player 1 Buttons</u> 1. (Red) +12V 2. (Green) OUT 3. (Orange) GND 4. (Blue) IN1 5. (White) GND 6. (Brown) IN2

Spinner Frenzy Manual V1.0  
 Chapter 08 – Diagrams & Schematics

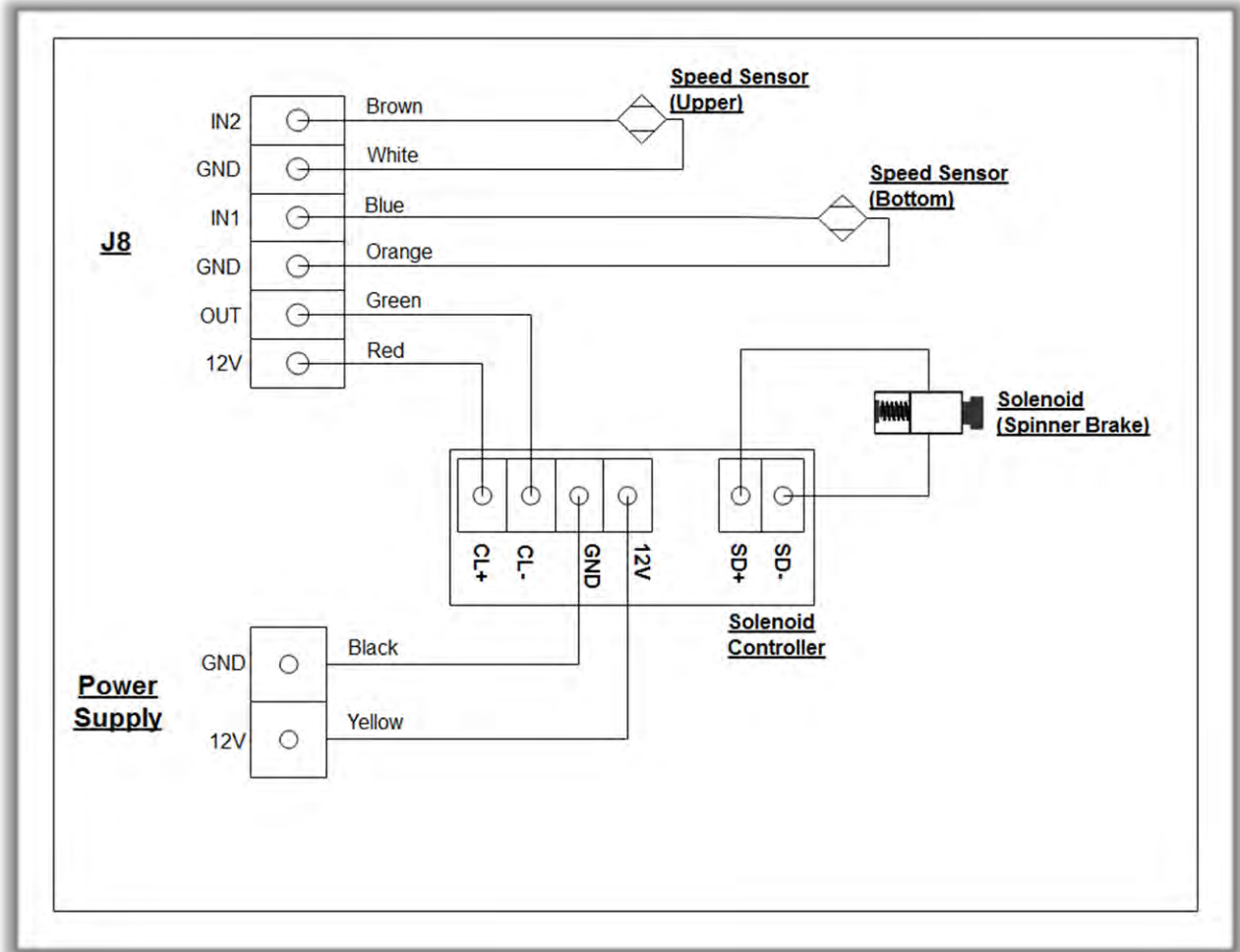
<b><u>J9</u></b>	<b><u>J10</u></b>	<b><u>J11</u></b>	<b><u>J12</u></b>
<u>No Use</u>	<u>No Use</u>	<u>No Use</u>	<u>5V/12V Input DC</u>

<b><u>J13</u></b>	<b><u>J14</u></b>	<b><u>J15</u></b>	<b><u>J16</u></b>
<u>USB To Computer</u>	<u>Coin Door Player</u> 1. (White) +12V 2. (Black) GND 3. (Red) IN1 4. (Yellow) IN2 5. (Blue) GND 6. (Brown) OUT1 7. (Orange) OUT2 8. (Green) +12V	<u>No Use</u>	<u>No Use</u>
<b><u>J17</u></b>			
<u>No Use</u>			

### Speakers Wiring Colors

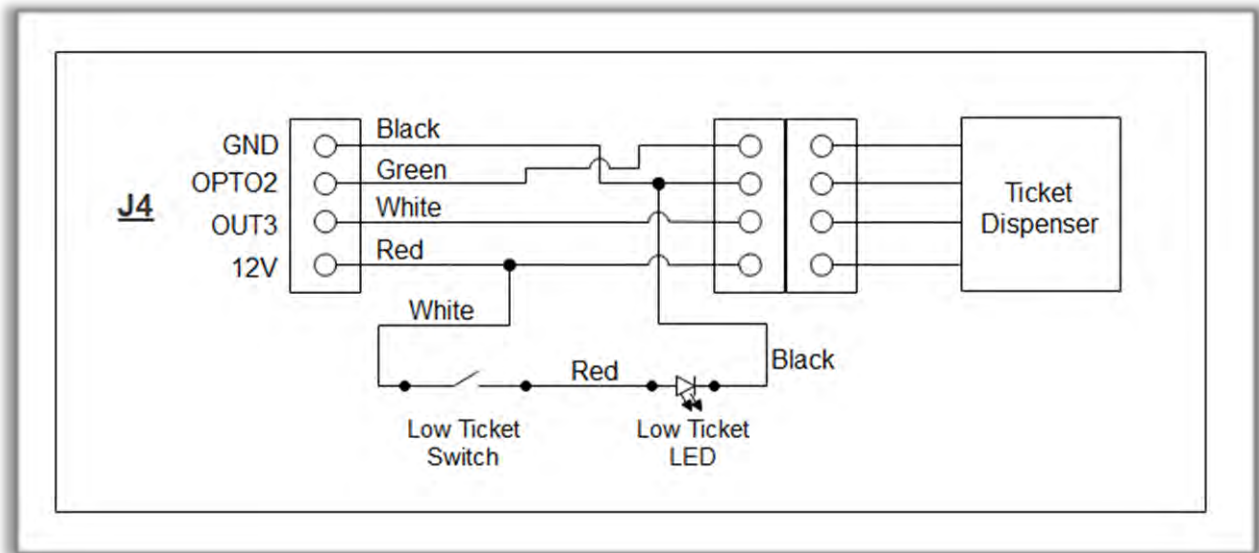
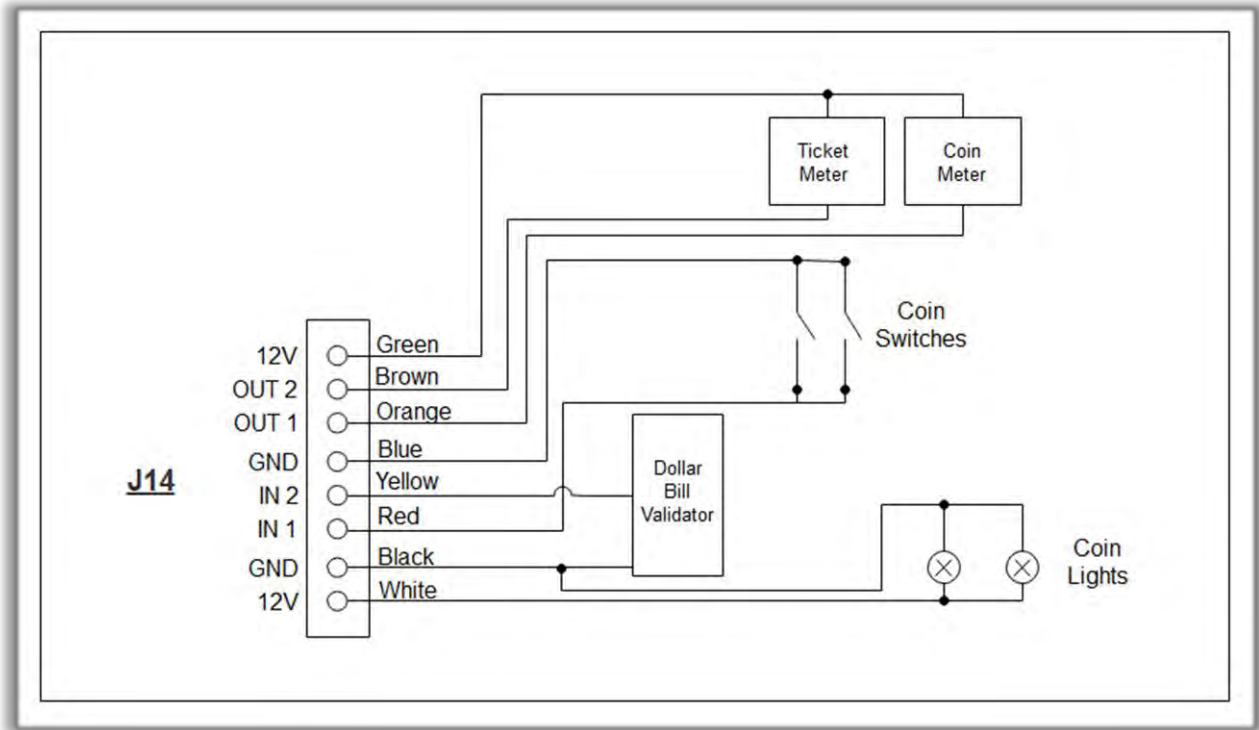


## I/O Board - Spinner Sensors Wiring

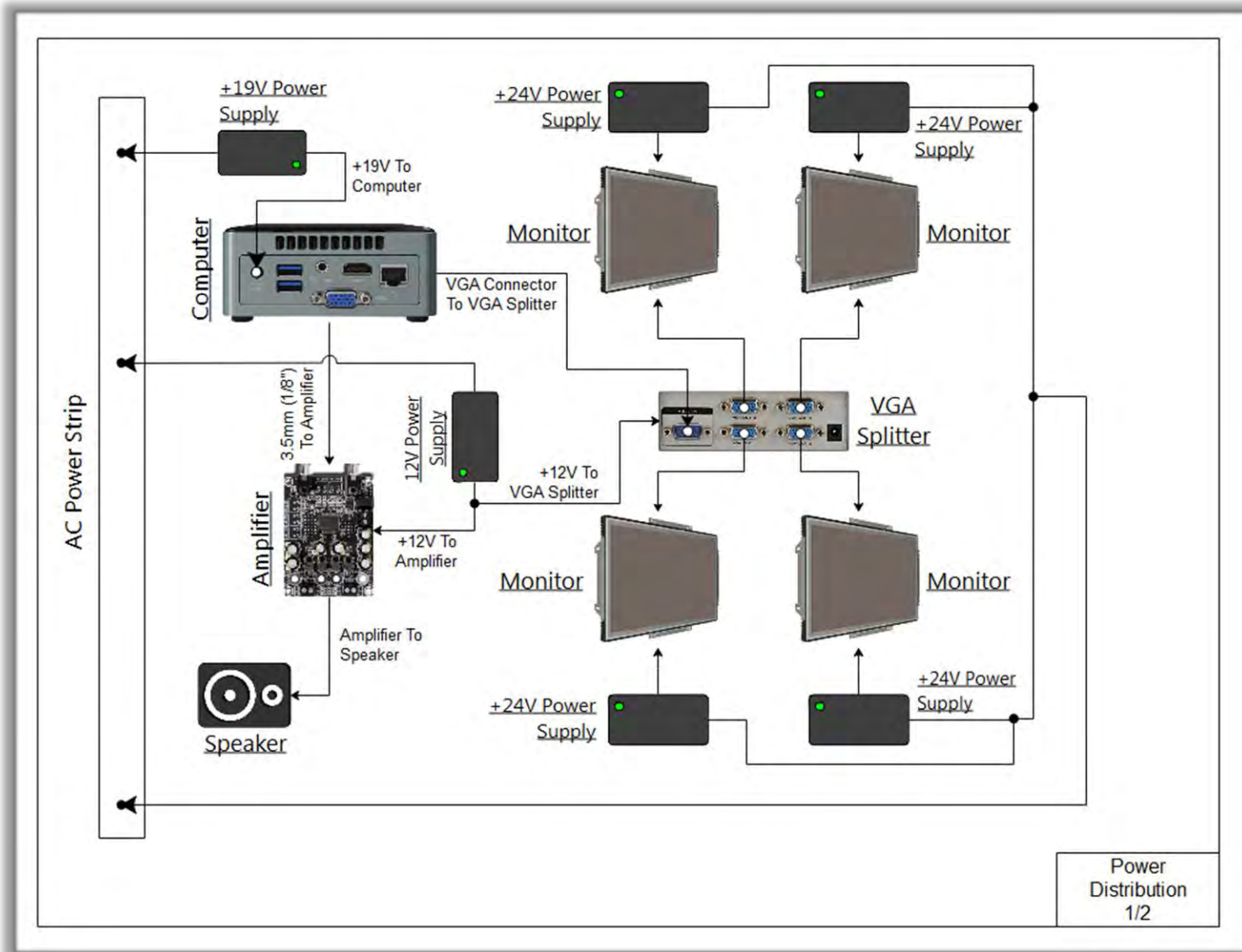




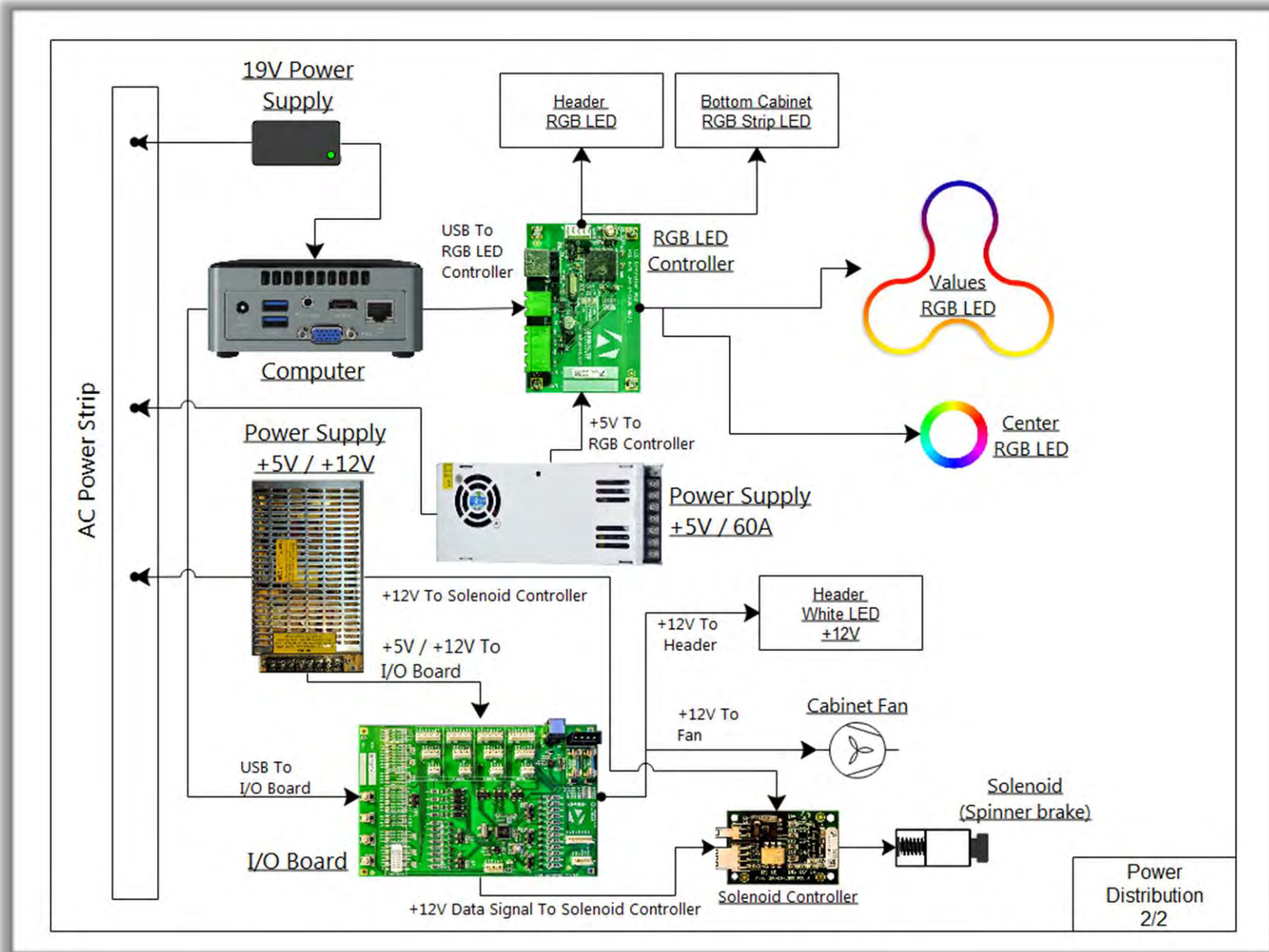
## I/O Board - Coins & Ticket Wiring



## Power Distribution Schematics

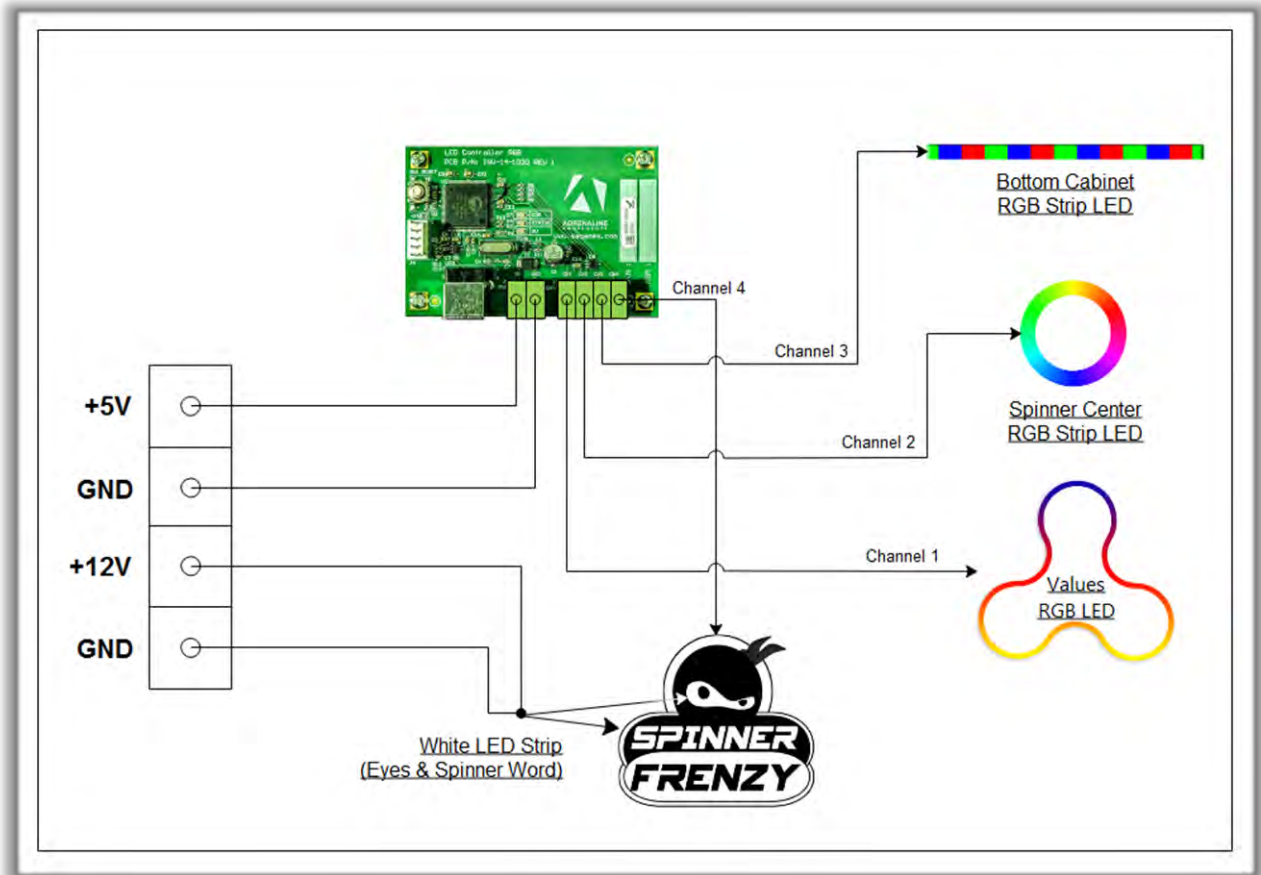


Spinner Frenzy Manual V1.0  
Chapter 08 – Diagrams & Schematics

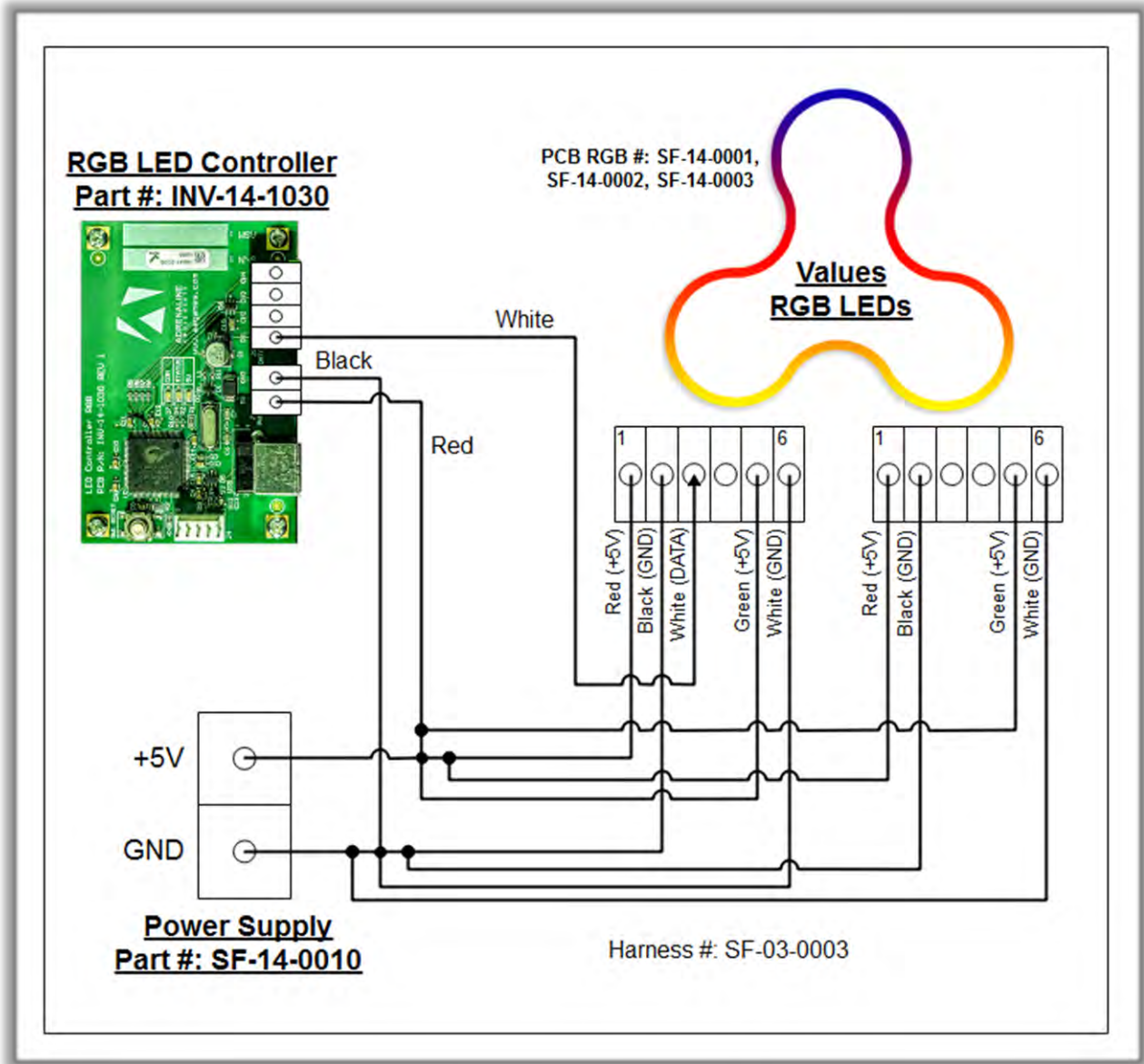


## RGB LED Wiring

### LED Wiring (Global View)

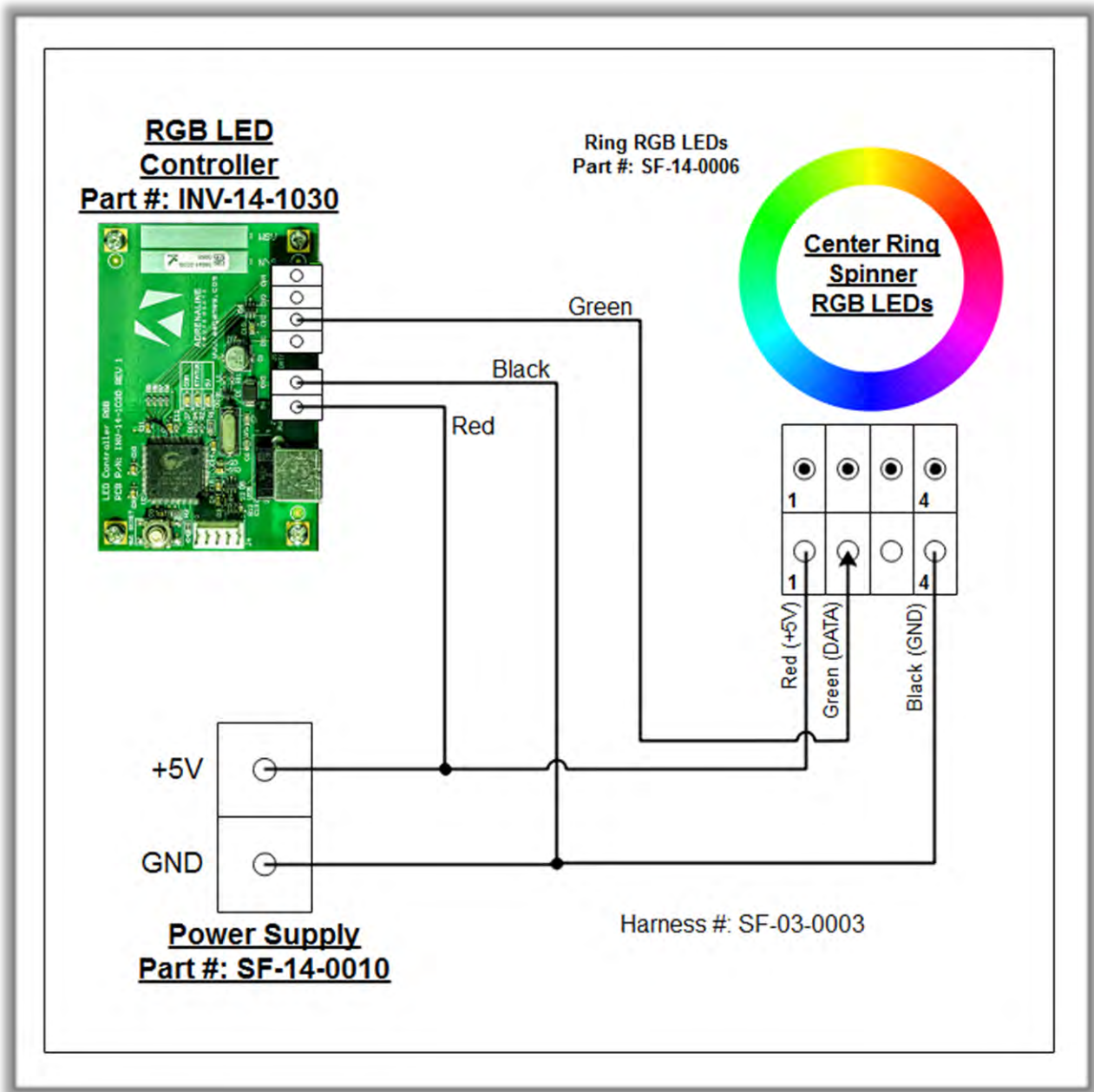


**RGB LED Wiring (Channel 1 View)**

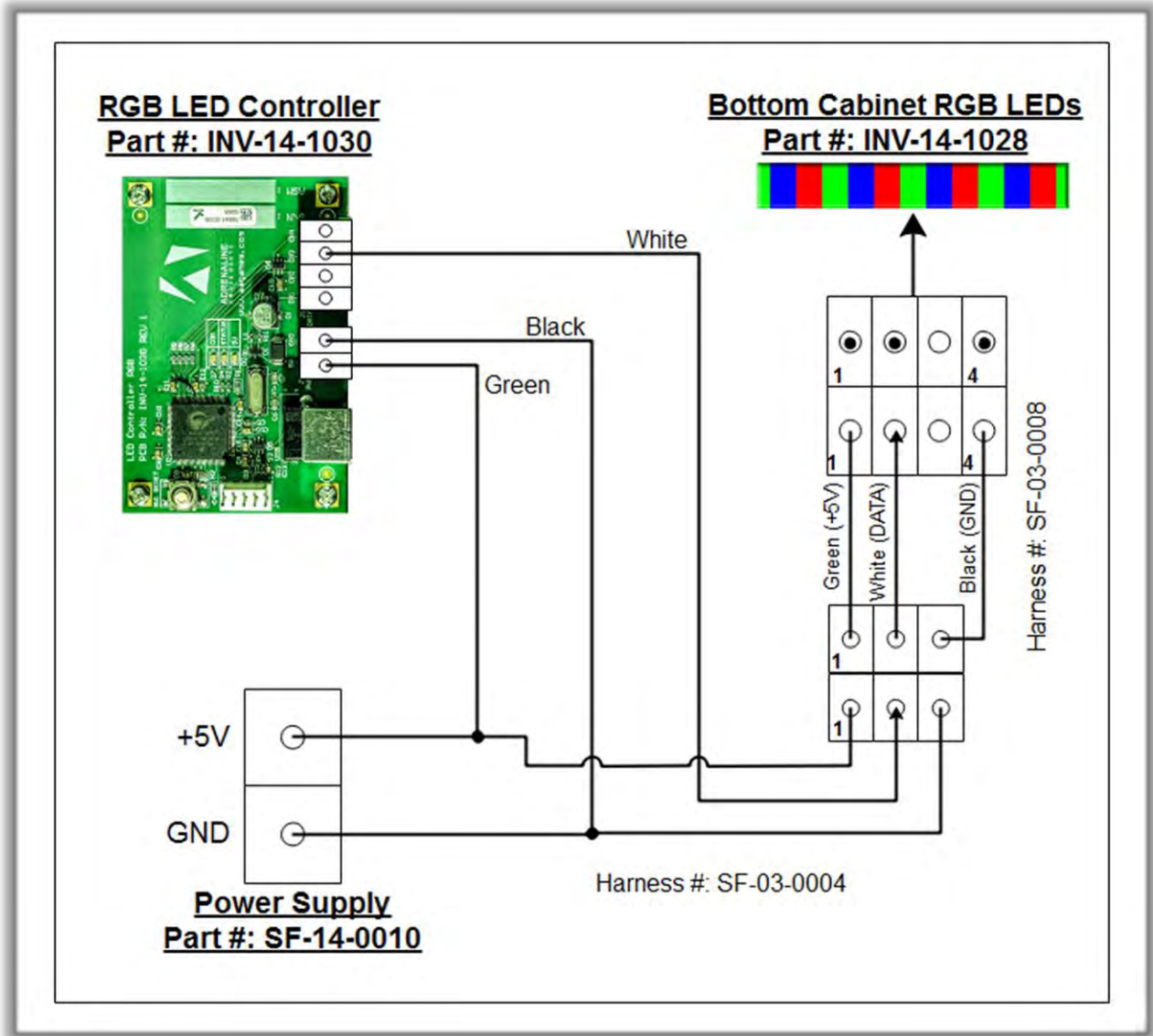


Refer to Page 39 for PCB RGB parts.

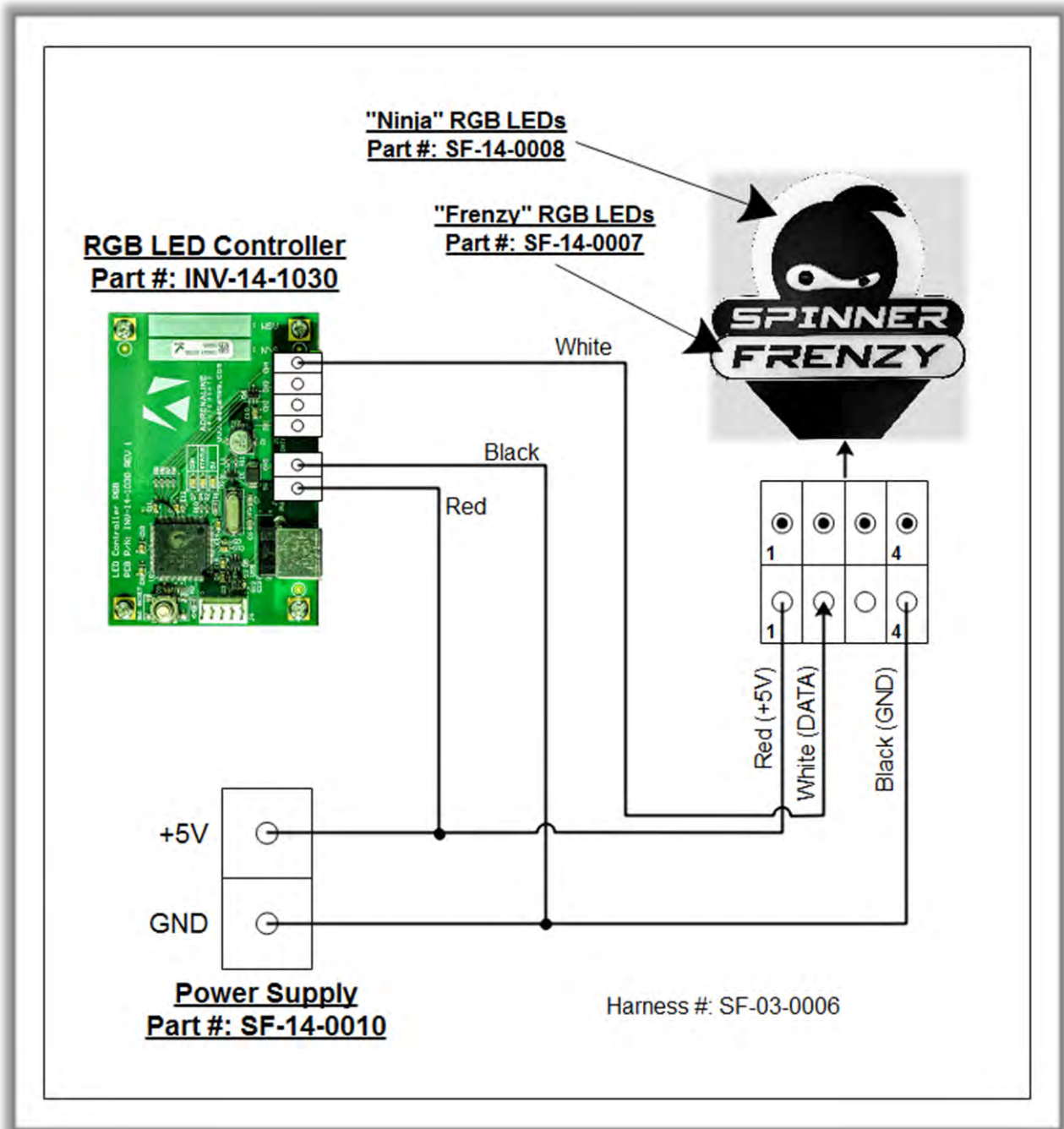
**RGB LED Wiring (Channel 2 View)**



**RGB LED Wiring (Channel 3 View)**



**RGB LED Wiring (Channel 4 View)**





# Chapter 09 – Software Recovery

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If your unit software needs to be restored please follow those instructions.

- Connect a USB keyboard to the motherboard.
- Connect the provided USB Recovery flash disk is in a ***Black*** USB port.
- Power on the unit and press F10 on the keyboard to display the boot menu.
- Choose the *UEFI: USB device ~8GB*

The process takes 25-30minutes and the unit will reboot back in the game at the end. The Wireless credentials will need to be re-entered and Operator settings will be back at the default ones.


# Chapter 10 – Card Reader

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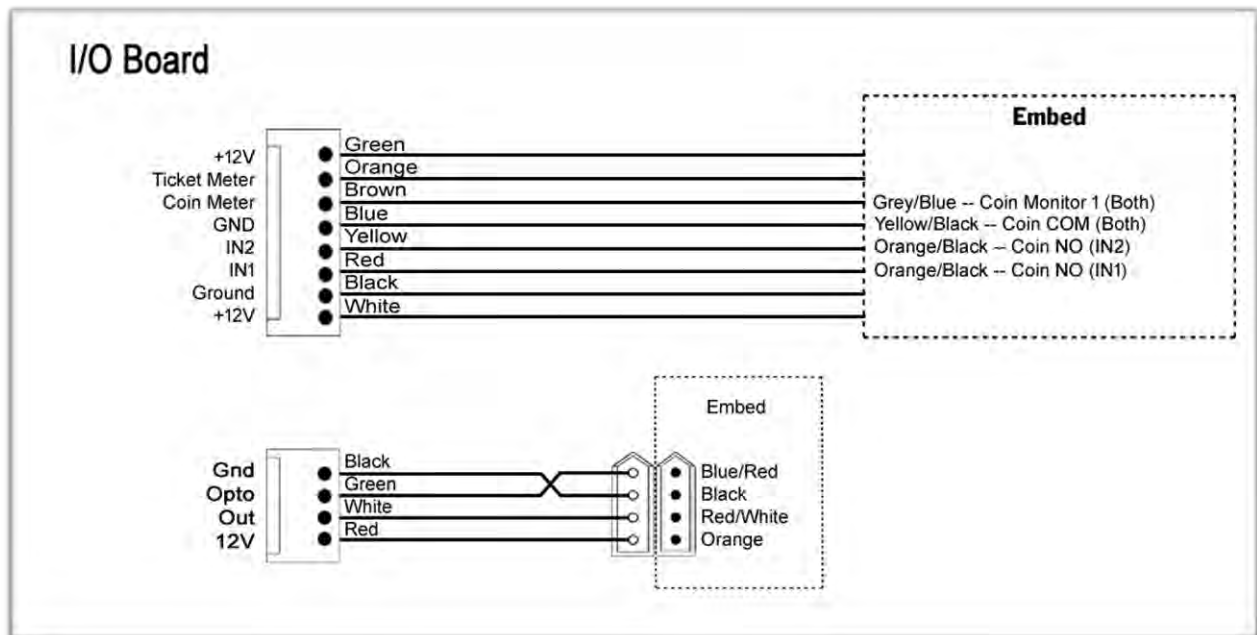
Configure your Operator settings as seen on page 13.

## Embed System

If you are using an Embed system, you need to connect your harnesses to Adrenaline Amusements I/O board & harnesses. You should refer to the Embed instructions manual for wiring pin-out but here's Embed V5 example:



Pin	Wire Color	Signal	I/O	Pin	Wire Color	Signal	I/O
1	Orange	12 VDC	I	2	Orange	12 VDC	I
3	Black	Ground	O	4	Black	Ground	O
5				6			
7	Orange/Black	Coin NO	O	8	Yellow/Black	Coin COM	O
9	Grey/Blue	Coin Monitor 1	I	10	Grey/Black	Coin Monitor 2	I
11	Blue/Red	Game Notch 1	O	12			
13	Blue	Ticket Notch 1	I	14			
15	White	Ticket Drive 1	O	16			
17	White/Red	Game Drive 1	I	18			



The typical Embed settings are *Standard* except:

- Ticket Mech Type: Dumb DC
- Drive Polarity: Positive
- Notch Polarity: Negative
- Game ticket notch width = 10
- Game ticket notch spacing = 15
- Game Drive Threshold = 1.5V
- Notch Pulse = 60ms
- Ticket Space = 240ms
- Drive Debounce = 40ms

# Limited Warranty Policies

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Customers must provide the unit serial number when claiming any warranty request.

Adrenaline Amusements (AAGames) warrants this Arcade unit (Including accessories) against defects in material or workmanship as follows:

This unit has 1 year warranty against defective hardware from date of delivery.

Other than abuse or improper servicing, Adrenaline Amusements covers at no charge the replacement parts including standard shipping.

Customers have 30 days from delivery date to return back the defective equipment at their fees or they will be billed automatically.

**Improper servicing or abuse will VOID existing warranties.**

All warranty request needs to be validate with our technical support department.

After the 1 year warranty, Adrenaline Amusements offers repairs & sales services options. Please contact the technical support department for information.

Adrenaline Amusements  
1150 rue Levis, Suite 302  
Terrebonne, QC  
J6W5S6 Canada  
+1.450.824.1671