

# slither.io™

## Operator's Manual





# Table of Contents

---

<b>Safety</b> .....	5
Operation .....	5
Transporting.....	5
Handling Components .....	5
Disconnect Power .....	5
Grounding .....	5
Electrical Shocks.....	5
Monitor .....	5
Power Cord .....	5
Surge Suppressor .....	5
Water and Other Liquid Sources.....	6
Connectors .....	6
Computer .....	6
Tempered Glass Warning.....	6
Hazard to Epileptics .....	6
Manual .....	6
Specifications .....	6
<b>Product Specifications</b> .....	7
Electrical Power .....	7
Temperature .....	7
Humidity.....	7
Dimensions.....	7
<b>Fuse Replacement Guide</b> .....	7
12V Power Distribution.....	7
<b>Setup</b> .....	8
Unpack Materials .....	8
Cabinet Assembly.....	9
Card Reader Installation and Setup .....	10
Check Electrical Settings .....	16
Startup Game .....	16

# slither.io™

<b>Diagnostic and Adjustments</b> .....	17
Basic Functional Test on Initial Power Up.....	18
Test Menus.....	19
Main Menu.....	19
Diagnostics .....	20
Pricing and Payout Adjustments (Cash).....	21
Pricing and Payout Adjustments (Tokens) .....	22
Pricing and Payout Adjustments (Swipes) .....	23
Game Settings .....	24
System Settings .....	25
Audits .....	26
Resets Menu .....	27
Volume .....	28
Calibration.....	29
Utilities Menu.....	30
System Information.....	31
Choosing the Right Pricing Adjustments for Your Location .....	32
PC Hardware .....	33
HP Elitedesk 705 G3 MT BIOS .....	34
PC Hard Drive Recovery .....	35
<b>Troubleshooting</b> .....	36
<b>Technical Support</b> .....	40
<b>Electrical and Mechanical Illustrations</b> .....	41

## Safety

---

### Operation

Before operating game, read this manual. Failure to properly install and operate this game could result in malfunction or accident. Operate the game in accordance with the manual.

### Transporting

The cabinet is very heavy. Because the monitor is high, the cabinet is also very top-heavy. Use appropriate care when moving or transporting cabinet. It contains fragile glass and electronic components. Avoid rough handling.

### Handling Components

Many components are extremely sensitive to handling, environmental and Electrostatic Discharge (ESD) events—especially the computer. Do not handle it roughly. Before servicing, call your distributor and inquire about the PC warranty. Use proper ESD procedures when servicing. Protect components from harmful environmental conditions, such as extreme temperatures, excessive moisture or other damaging effects.

### Disconnect Power

Always turn the power off and unplug the unit before servicing or making adjustments unless otherwise instructed. Installing or repairing components while power is on can damage the components and void the warranty.

### Grounding

Avoid electrical shock. Do not plug in AC power until you have inspected and properly grounded the unit. Only plug into a grounded, three-wire outlet. Do not use a “cheater” plug or cut off the ground pin on the line cord.

### Electrical Shocks

There is no isolation transformer in the cabinet. Disconnect AC power before servicing. However, be aware that lethal voltages can remain in the electronic components even when AC power is disconnected. Use extreme caution when servicing. Verify that there is a working ground connection. If the unit sustains water damage, cease using it immediately and unplug AC power.

### Monitor

The monitor contains no user serviceable parts. Do not attempt to service the monitor.

### Power Cord

If the power cord is damaged or lost, replace it with an identical cord as supplied by the manufacturer or an authorized service agent.

### Surge Suppressor

It is recommended that you plug your game’s power cord into a surge suppressor to help protect from power surges that may damage sensitive electronic components.

## Water and Other Liquid Sources

Do not install game near sprinkler or other water jet sources. Do not use water jet to clean game. Keep minimum clearance behind game and wall for proper ventilation but also prevent access of liquid from spills and sprays from entering ventilation holes.

## Connectors

When servicing machine, ensure all connectors mate properly. If connectors do not slip in easily, do not force them. Connectors are often keyed and only connect one way. Check for correct orientation.

## Computer

The computer contains sensitive components, including a hard drive. Do not handle it roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Cycle AC power on or off with the cabinet power switch.

A dongle has been inserted into one of the USB ports. This is required for game play.

Do not remove the dongle except for troubleshooting purposes.

## Tempered Glass Warning

When handling the LCD display glass cover take special care and set the glass down softly on a flat surface free of debris. The edge of the glass is sensitive to hard impact. Shattered glass from the monitor can travel long distances and cause bodily injury. Use proper procedures when handling broken materials.

## Hazard to Epileptics

A small portion of the population has an epileptic condition that may cause seizures. Affected persons experience seizure while watching some television pictures or playing certain video games. People who have not had seizures may still have an undetected epileptic condition. If anyone in your family has experienced epilepsy symptoms (seizures or loss of awareness), consult your physical before using video games. While children play video games, a parent should observe. Be alert to the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation or convulsions. If you or your child experiences these symptoms, discontinue use immediately and consult your physician.

## Manual

Keep this manual available and ready for use. If the game fails to function properly, turn off the machine and unplug the AC line cord. Contact your local distributor. You may not reproduce this document or any of its contents without written authorization from Raw Thrills, Inc.

## Specifications

For reasons such as performance, this product's specifications may change without notice. Federal patent, copyright and other intellectual property laws protect the content, devices and design of the game and its equipment.

## Product Specifications

---

### Electrical Power

United States, International and Japan

Operating AC Current: 5/2.5 Amps

Voltage: 120/230 ~ VAC 50/60Hz

### Temperature

50° F to 104° F

(10° C to 40° C)

### Humidity

Must not exceed 95% relative humidity

### Dimensions

Assembled

Height: 107.00" (2.72 meters)

Width: 54.75" (1.39 meters)

Depth: 32.50" (0.83 meters)

## Fuse Replacement Guide

---

NOTE: FOR CONTINUED PROTECTION AGAINST FIRE AND ELECTRICAL DAMAGE, USE ONLY SPECIFIED FUSE TYPE AND VALUE.

### 12V Power Distribution

Please see unit for specified fuse labeling. Abbreviations:

7x	5A 250V	5A, 250VAC Fast Acting 3AG Fuse	Littlefuse 0312005.MXP (or equivalent)
----	---------	---------------------------------	--

## Setup

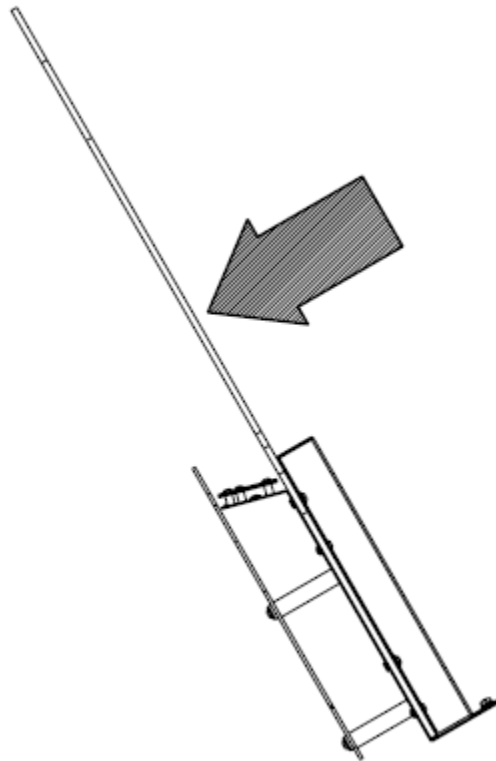
---

### Unpack Materials

1. Place the shipping crates on a flat, stable surface.
2. Cut the banding straps and remove the cardboard lids.
3. Lift off the large cardboard containers surrounding the cabinet assembly and remove any shipping cleats.
4. Remove the coin door key from the coin return slot.
5. Open the top coin door.
6. Locate the keys for the back doors, the cash box door, and the ticket doors.
7. Open the cash box door and remove the cash box.
8. Check for shipping damage to the following:
  - Marquee and monitor
  - Cabinet decals
9. Check the AC line cord for visible signs of damage.

***Pay particular attention to the plug and line cord insulation.***

***Marquee Assembly can tip forward and cause damage. Take care when removing assembly from box and when installing atop cabinet to ensure that the assembly doesn't fall forward. Tighten all screws securely.***

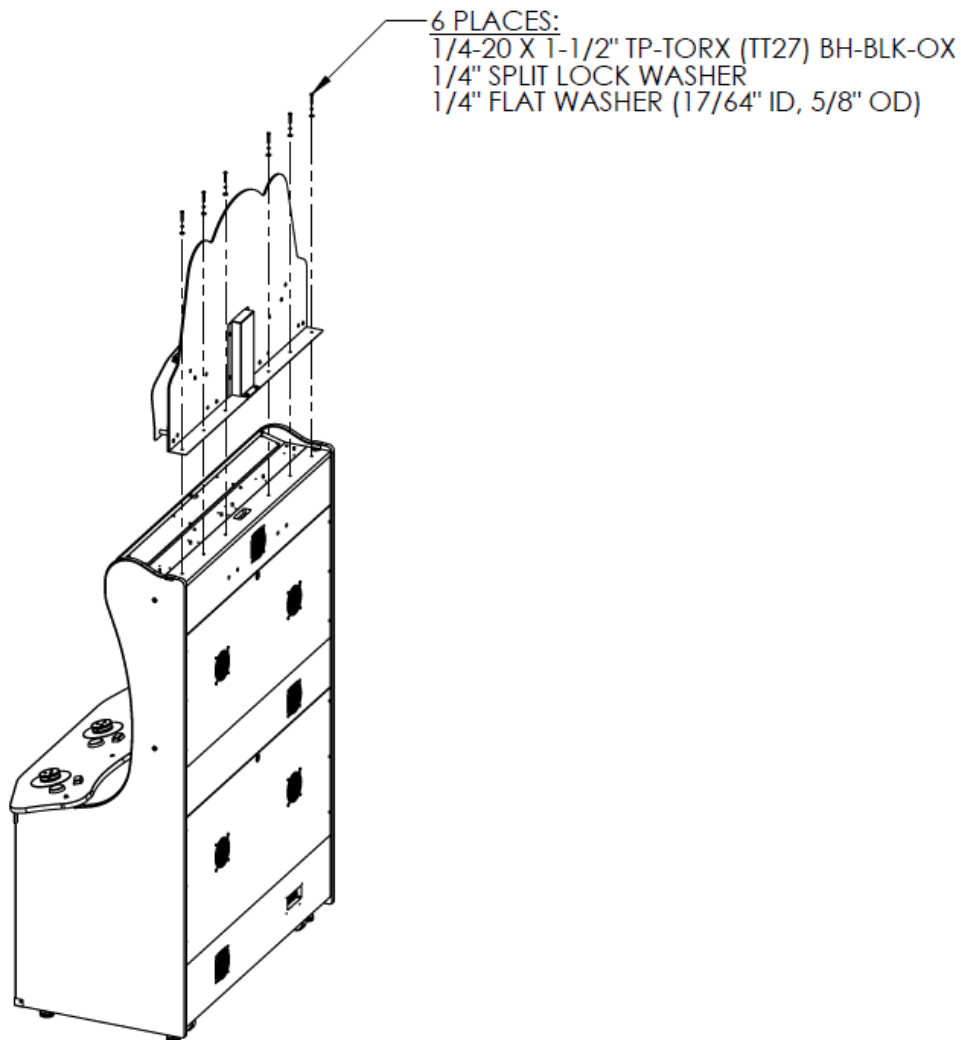




## Cabinet Assembly

**Note:** 2 people are required, and ladders are recommended. Marquee assembly is **top heavy and can tip over if not fully secured!**

1. Place cabinet in desired floor location. Remove upper back door and carefully place such that it will not fall over or be damaged. Set up ladders next to the cabinet for marquee installation.
2. Locate the marquee assembly as well as the following hardware:
  - a. (6) black tamper proof Torx machine screws, ¼ - 20 thread, 1-1/2" long
  - b. (6) ¼" black split lock washers
  - c. (6) ¼" black flat washers
3. Using a T-27 bit, securely mount the marquee assembly atop the cabinet as shown in the assembly setup diagram, avoiding any pinching/crushing of the wire harness which should pass through the access hole. Connect marquee harness to cabinet harness, accessible through upper door.



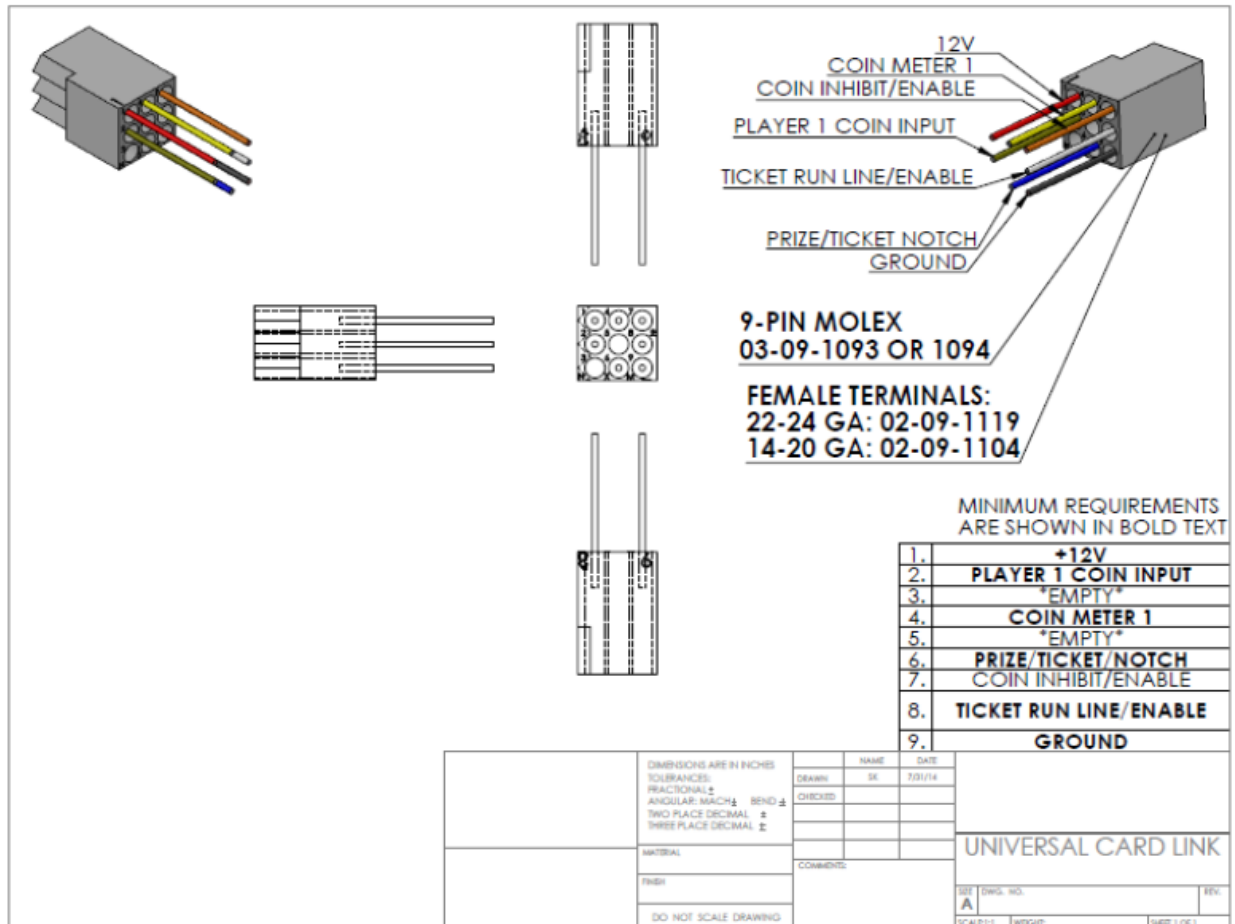
## Card Reader Installation and Setup

Due to the rising popularity of aftermarket debit card systems (i.e. Embed, Intercard, Semnox, etc.) for cashless/coinless operation of amusement machines in addition to E-Ticket payouts on redemption games, this slither.io cabinet is equipped with UCL compatible harnessing to ensure that the installation process is easier and less prone to miswiring.

**PAPER TICKETS NOTE:** If your location utilizes paper tickets, contact your distributor to purchase “Ticket Door Completion Kit” as the game cabinet is not equipped with ticket dispensers or ticket bins in default configuration. Follow instructions on page 12 to install kit contents.

UCL, or Universal Card Link, is a debit card standard established by the American Amusement Machine Association. Visit <https://coin-op.org/standardization/> for the latest UCL standard and manual information.

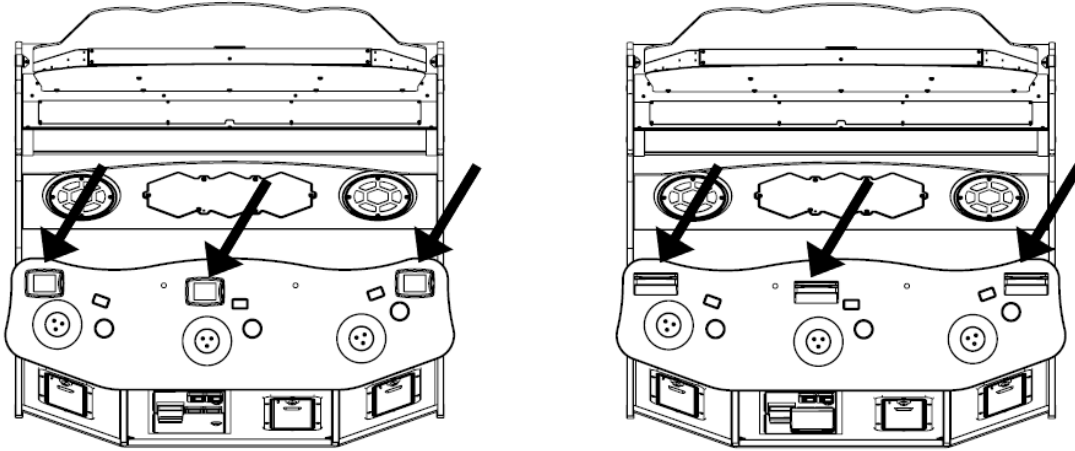
The UCL connections on the game use pins 1, 2, 6, 8, and 9. The other pins are unused. Each UCL connector can supply up to 1A at 12VDC.



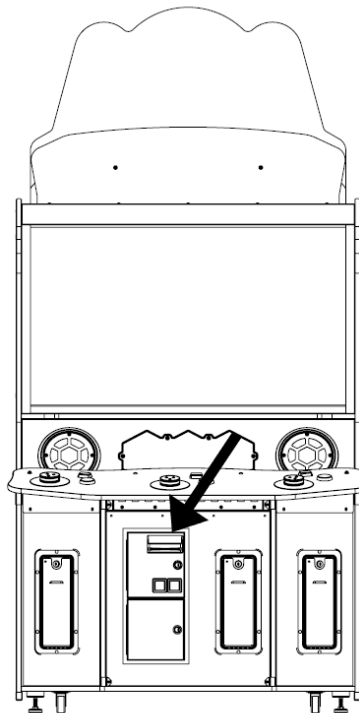
# slither.io™

You can choose to use 1 or 3 card readers in the pricing adjustments section of the test menu. It is recommended to use 3 card readers for best results and player access.

There are (3) supplied UCL connections, each located under the control panel near the player positions. There is enough slack to accommodate mounting (3) card readers on the control panel, as shown below, or on the front panels, as each operator desires.



If only (1) card reader will be used, it is recommended that the card reader be mounted to the coin door as shown below, using Player 2 UCL connector due to its proximity to coin door, although any UCL connector can be used.



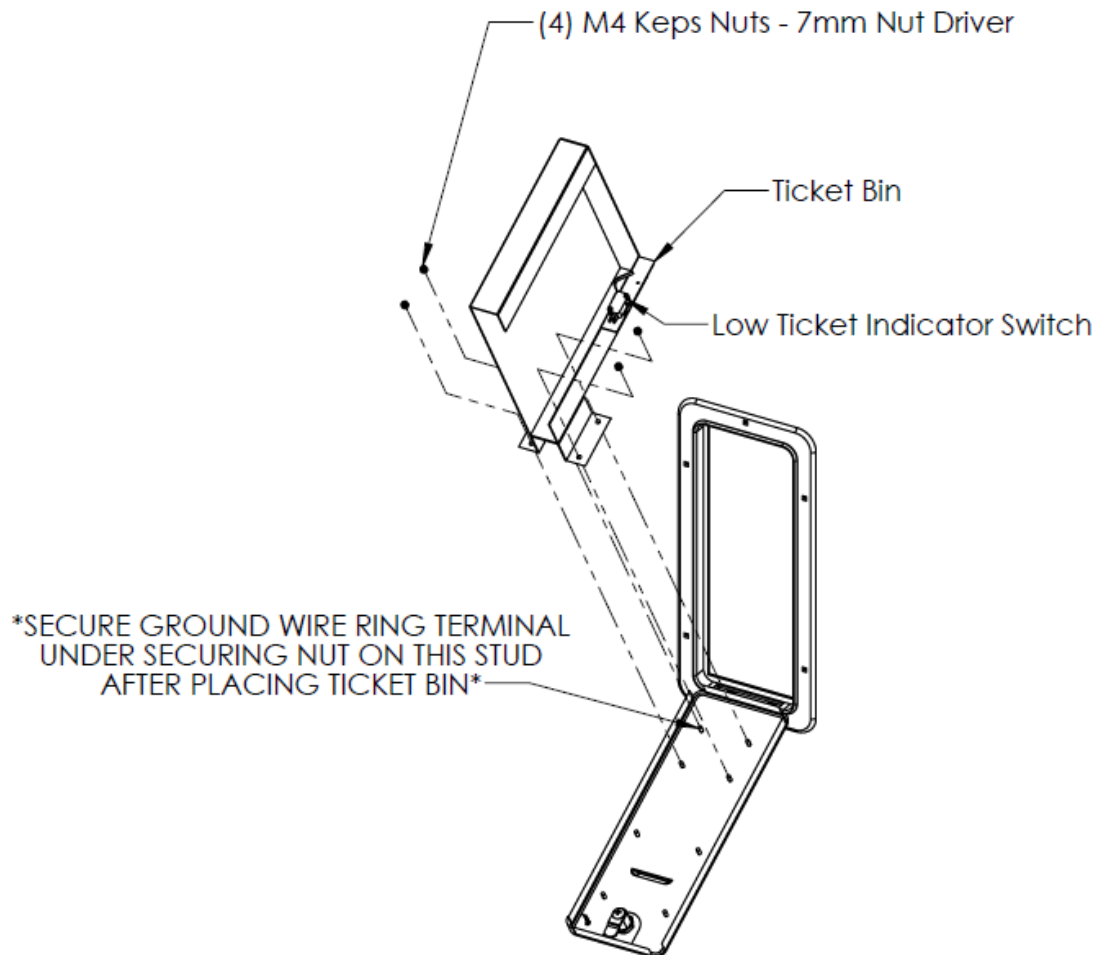
## Ticket Door Completion Kit Installation for Paper Tickets Usage

**NOTE: If your location will use E-Tickets, skip this section.**

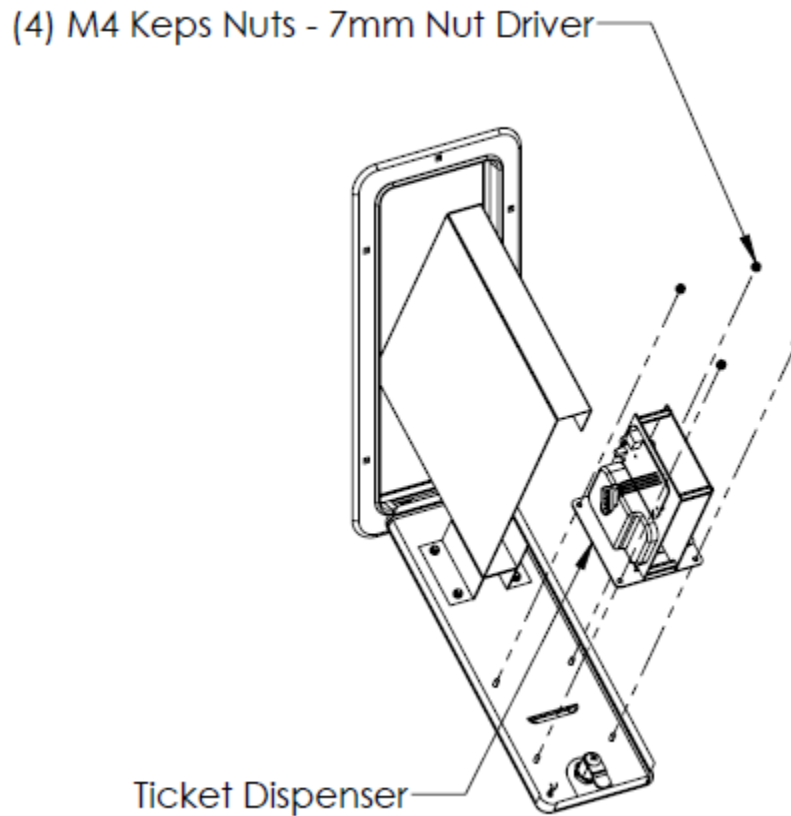
The ticket door completion kit for slither.io contains all additional parts required to support dispensing paper tickets from all 3 player positions on cabinet. After completing installation (including all harness connections), continue with the remainder of setup process, specifically choosing optimal settings for your location.

Locate keys and open all 3 ticket doors, being careful not to let doors slam to the floor.

Locate and secure the ticket bins (low ticket indicator switch attached) on lower studs on inner surface of ticket doors with (4) M4 keps nuts using 7mm nut driver (or wrench). Green ground wire ring terminals from main cabinet harness will need to be removed from each door to mount bin, however they must be re-installed under nut when tightening nuts on bin.



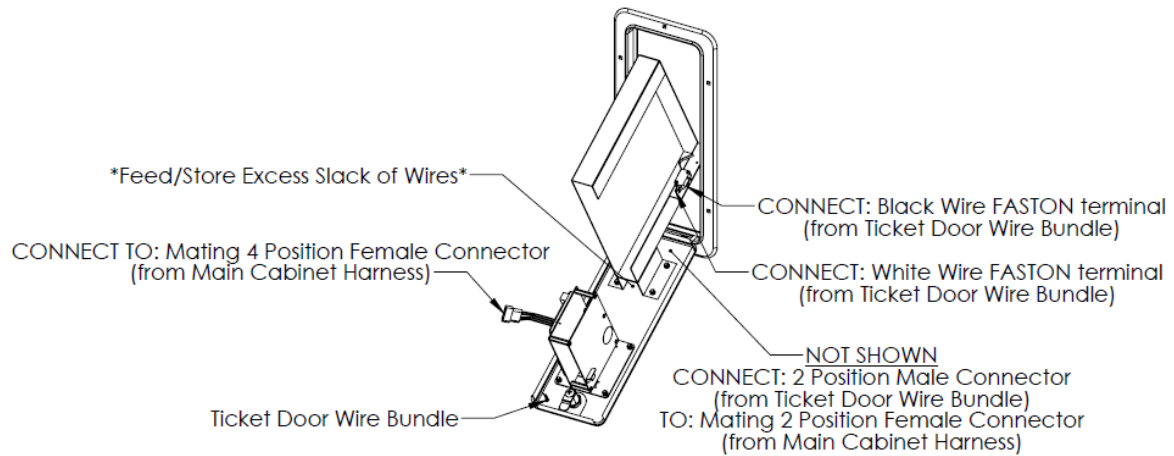
Locate ticket dispensers (boxed in kit) and attach to upper studs on inner surface of ticket doors with (4) M4 keps nuts using 7mm nut driver (or wrench), being sure to not crush dispenser wires or wires from bundles attached to ticket door.



Route wire bundle attached to ticket door through the space between ticket bin mounts, as most of the wires will be tucked into this wireway during operation. From this bundle, locate (2) FASTON terminals and (1) 2 position male connector in this bundle. Locate ticket door related cabinet harness (can be identified by tracing previously mentioned ground wire ring terminals from mounting ticket bin). Locate the following connectors on cabinet harness: (1) 2 position female connector and (1) 4 position female connector.

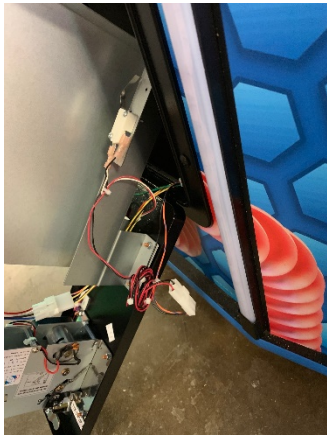
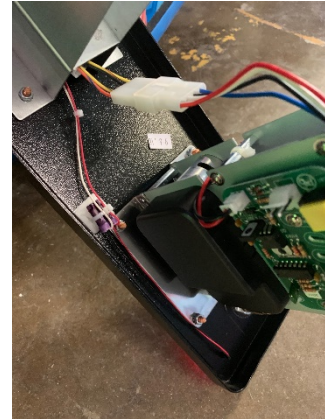
# slither.io™

Feed 4 position female connector from main cabinet harness through wireway and connect to mating 4 position male connector wired to ticket dispenser. Connect mating 2 position connectors from ticket door bundle and main harness. Install FASTON terminals to switch terminals as shown below; take note of WHITE and BLACK wire designations.



# slither.io™

After all connections are made, place adhesive-backed cable tie mount on inner surface of door just below dispenser as shown in photos below. Using wire ties, secure wires to mount such that they will not be damaged or prevent door closing or obstruct operation of dispenser. Excess slack of wires can be conveniently tucked behind ticket bin. Check that doors close properly and continue with setup.



**FOR FULL COLOR PICTURES PLEASE SEE THE DIGITAL VERSION OF THE MANUAL AVAILABLE AT**

**[RAWTHRILLS.COM](http://RAWTHRILLS.COM)**

## Check Electrical Settings

1. Verify the voltage in the nearest AC outlet.
2. Verify the AC outlet ground connection is present and working.

## Startup Game

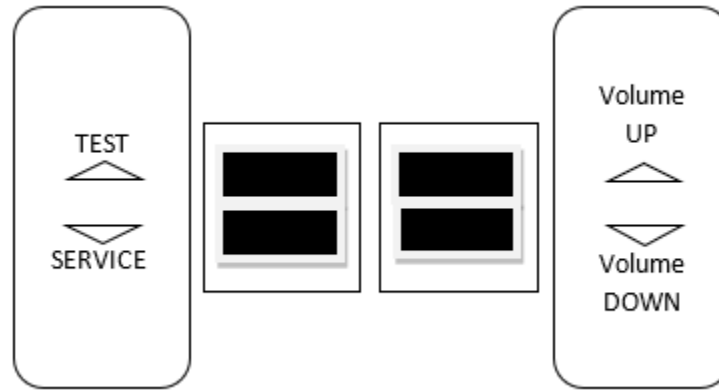
1. Plug the line cord into an AC outlet.
2. Turn the main cabinet power switch on.
3. Verify the game and all components are operating normally. See *Basic Functional Test on Initial Power Up* in the *Diagnostics and Adjustments* section for the recommended procedure.



## Diagnostic and Adjustments

The Service Button Panel has four buttons, three of which can navigate the menu system.

The control panel buttons and joysticks/guns can also advance through test menu screens.



Navigating the Test Menu	
Button	Action
TEST (Not in Test Menu)	Enters Test Menu
TEST (In Test Menu)	Selects Highlighted Option
SERVICE (On Main Menu)	Exits Test Menu
SERVICE/Start Buttons (Not on Main Menu)	Cancels Selection
VOLUME UP/Spinners	Move Up
VOLUME DOWN/Spinners	Move Down
TEST/Boost Buttons	Selects Highlighted Option

An on-screen message acknowledges changes or when you exit a selection without making a change.

## Basic Functional Test on Initial Power Up

---

1. Enter the Input Test and verify all switch inputs are working.
2. Enter the Video Test and verify the monitor is working properly.
3. Enter the Audio Test and verify the audio works and is not distorted.
4. Enter the Cabinet Lights Test and verify that all the lights are working properly.
5. Enter the Meter Test and verify the coin meter is working properly.
6. Enter the Ticket Test and verify the ticket dispensers are working properly.
7. Enter the Watchdog Test and verify the game reboots.
8. Upon a successful reboot, you are ready to adjust pricing, volume and other functions.

## Test Menus

---

### Main Menu

Choose from all available operator settings and menus here. You can use the test menu bracket and volume buttons to navigate. The spinners/boost/start buttons also are available to use for easier navigation through these menus.

#### **MAIN MENU**

**DIAGNOSTICS**

**PRICING AND PAYOUT ADJUSTMENTS**

**GAME SETTINGS**

**SYSTEM SETTINGS**

**AUDITS**

**RESETS**

**VOLUME**

**CALIBRATION**

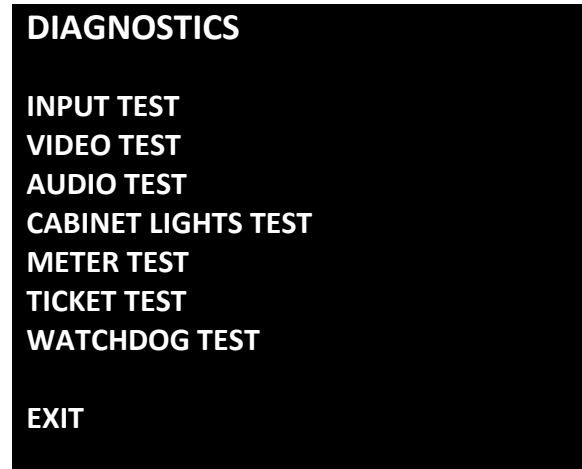
**UTILITIES**

**SYSTEM INFORMATION**

**EXIT**

## Diagnostics

This menu allows all game functions to be verified or diagnosed. You can improve collections by periodically verifying proper game function and operation. This includes periodic Hard Drive checks to verify that software has not been corrupted or reporting an error.



- **Input Test:** Test all the switches on the game
- **Video Test:** Checks color pattern of monitor
- **Audio Test:** Tests audio from speakers
- **Cabinet Lights Test:** Test all cabinet lighting
- **Meter Test:** Tests functionality of “hard meter”
- **Ticket Test:** Tests functionality of ticket mech
- **Watchdog Test:** Tests functionality of watchdog (if working properly, game will reboot)

## Pricing and Payout Adjustments (Cash)

Set pricing and payout adjustments for game operation.

### PRICING AND PAYOUT ADJUSTMENTS

#### (CASH)

CURRENCY INPUT

CURRENCY TYPE

COIN VALUE

COINS TO PLAY

PAYOUT PERCENT

TICKET VALUE

JACKPOT TICKETS

FIXED TICKET MODE

FREE PLAY

MERCY TICKETS

TWO POINT TICKETS

EXPRESS PAYOUT

EXIT

- **Currency Input:** Change the currency input.
- **Currency Type:** Change the currency type.
- **Coin Value:** Change the money value of the coin.
- **Coins to Play:** Adjust the amount of coins to start a game.
- **Payout Percent:** Set targeted payout percentage.
- **Ticket Value:** Set the value of your tickets.
- **Jackpot Tickets:** Set the value of the jackpot award.
- **Fixed Ticket Mode:** Award a fixed amount of tickets per play. No jackpot ticket options available when this mode is active.
- **Free Play:** Turn free play mode on or off.
- **Mercy Tickets:** Set the minimum number of tickets awarded on every play.
- **Two Point Tickets:** Allows a single ticket to be worth 2 points in the game.
- **Express Payouts:** Turn on or off. ON – tickets dispense as they are earned (recommended). OFF – ticket payout is dispensed at the end of the game

## Pricing and Payout Adjustments (Tokens)

Set pricing and payout adjustments for game operation.

### **PRICING AND PAYOUT ADJUSTMENTS**

#### **(TOKEN)**

**CURRENCY INPUT**

**CURRENCY TYPE**

**TOKEN VALUE**

**TOKENS TO PLAY**

**PAYOUT PERCENT**

**TICKET VALUE**

**JACKPOT TICKETS**

**FIXED TICKET MODE**

**FREE PLAY**

**MERCY TICKETS**

**TWO POINT TICKETS**

**EXPRESS PAYOUT**

**EXIT**

- **Currency Input**: Change the currency input.
- **Currency Type**: Change the currency type.
- **Token Value**: Change the money value of the token.
- **Tokens to Play**: Adjust the number of tokens to start a game.
- **Payout Percent**: Set targeted payout percentage.
- **Ticket Value**: Set the value of your tickets.
- **Jackpot Tickets**: Set the value of the jackpot award.
- **Fixed Ticket Mode**: Award a fixed amount of tickets per play. No jackpot ticket options available when this mode is active.
- **Free Play**: Turn free play mode on or off.
- **Mercy Tickets**: Set the minimum number of tickets awarded on every play.
- **Two Point Tickets**: Allows a single ticket to be worth 2 points in the game.
- **Express Payouts**: Turn on or off. ON – tickets dispense as they are earned (recommended). OFF – ticket payout is dispensed at the end of the game.

## Pricing and Payout Adjustments (Swipes)

Set pricing and payout adjustments for game operation.

### **PRICING AND PAYOUT ADJUSTMENTS**

#### **(SWIPES)**

**CURRENCY INPUT**

**CURRENCY TYPE**

**SWIPE VALUE (IMPORTANT SETTINGS)**

**NUMBER OF CARD READERS**

**PAYOUT PERCENT**

**TICKET VALUE**

**JACKPOT TICKETS**

**FIXED TICKET MODE**

**FREE PLAY**

**MERCY TICKETS**

**TWO POINT TICKETS**

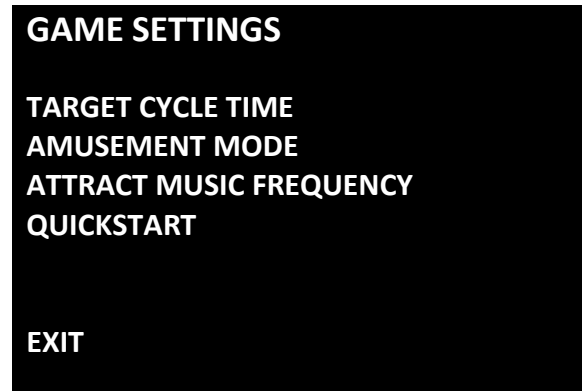
**EXPRESS PAYOUT**

**EXIT**

- **Currency Input**: Change the currency input.
- **Currency Type**: Change the currency type.
- **Swipe Value (IMPORTANT SETTING)**: Money value of the swipe. This important setting impacts payout.
- **Number of Card Readers**: Whether players share a cashbox, or each have their own. (DBV input is disabled when set to 3.)
- **Payout Percent**: Set targeted payout percentage.
- **Ticket Value**: Set the value of your tickets.
- **Jackpot Tickets**: Set the value of the jackpot award.
- **Fixed Ticket Mode**: Award a fixed amount of tickets per play. No jackpot ticket options available when this mode is active.
- **Free Play**: Turn free play mode on or off.
- **Mercy Tickets**: Set the minimum number of tickets awarded on every play.
- **Two Point Tickets**: Allows a single ticket to be worth 2 points in the game.
- **Express Payouts**: Turn on or off. ON – tickets dispense as they are earned (recommended). OFF – ticket payout is dispensed at the end of the game.

## Game Settings

This menu allows for customization of game settings.

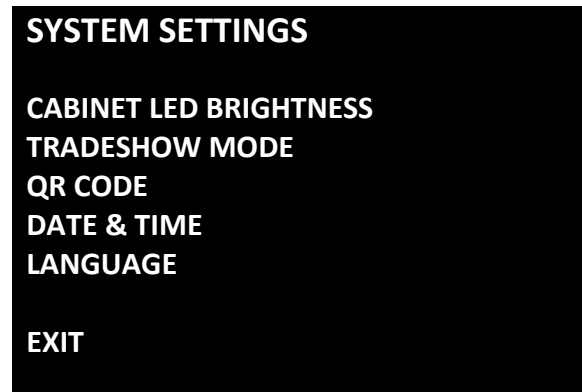


- **Target Cycle Time**: Set your targeted cycle time. Game defaults to 40 seconds which is the recommended setting. (Cycle time is the time it takes from the beginning of a player's credit to the end of the player's credit.
- **Amusement Mode**: Points based mode with no ticket payouts and longer gameplay for non-redemption locations. Audits will be reset.
- **Attract Music Frequency**: Set how frequently the attract music plays (Always, Never, Occasionally).
- **QuickStart**: Set whether game starts when credits are inserted. (Default ON)



## System Settings

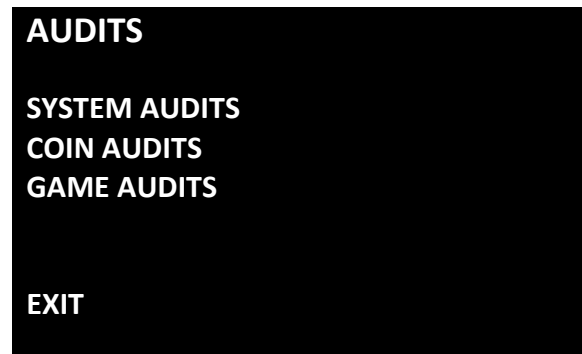
This menu allows for customizations of various system settings.



- **Cabinet LED Brightness:** Adjust the brightness of the cabinet lighting.
- **Tradeshow Mode:** Turn this setting on when operating on a trade show floor, sales floor, or demo floor. Game will default to free play and ticket payout will not pulse in Tradeshow Mode.
- **QR Code:** Turn on/off the QR code highscore sharing feature, set venue and location.
- **Date & Time:** Set date & time.
- **Language:** Set game language (default: English).

## Audits

Audit screens help assess game performance, find intermittent problems, decide whether to adjust game difficulty and help maximize game earnings.



- **System Audits**: Logged information including boots, resets, game times, and more
- **Coin Audits**: Tracks income related information, coin slot usage, dollar bill usage, and more
- **Game Audits**: Tracks the gameplay habits of your customers. Average scores, bonuses, and more.

## Resets Menu

Resets menu allows for resetting of various settings and adjustments.

### RESETS MENU

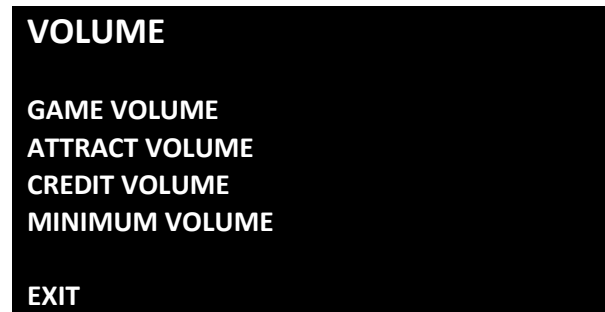
RESET CREDITS  
RESET PLAYER 1 TICKETS  
RESET PLAYER 2 TICKETS  
RESET PLAYER 3 TICKETS  
RESET PRICING ADJUSTMENTS  
RESET GAME AUDITS  
RESET SYSTEM AUDITS  
RESET COIN AUDITS  
RESET ALL AUDITS  
FACTORY RESTORE

EXIT

- **Reset Credits:** Reset credits to zero (0)
- **Reset Player 1 Tickets:** Clears all tickets owed on the game.
- **Reset Player 2 Tickets:** Clears all tickets owed on the game.
- **Reset Player 3 Tickets:** Clears all tickets owed on the game.
- **Reset Pricing Adjustments:** Resets pricing to default settings
- **Reset Game Audits:** Clears the game audits log file
- **Reset System Audits:** Clears the system audits log file
- **Reset Coin Audits:** Clears the coin audits log file
- **Reset All Audits:** Clears the all audits log files
- **Factory Restore:** Resets system to original factory settings and defaults

## Volume

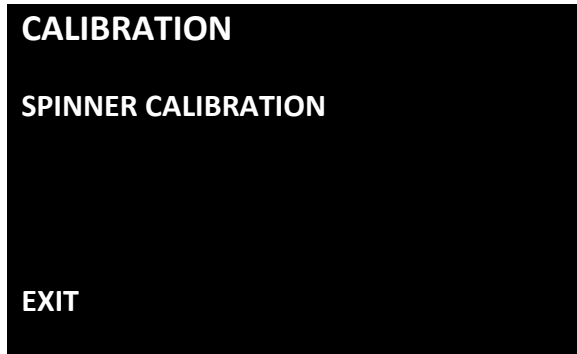
Set volume for all aspects of game.



- **Game Volume**: Adjusts the volume level during gameplay
- **Attract Volume**: Adjusts the volume during the attract mode sequences
- **Credit Volume**: Adjusts the volume level of the credit chime only (Independent setting of game and attract volume)
- **Minimum Volume**: Adjusts the minimum floor the volume can be lowered

## Calibration

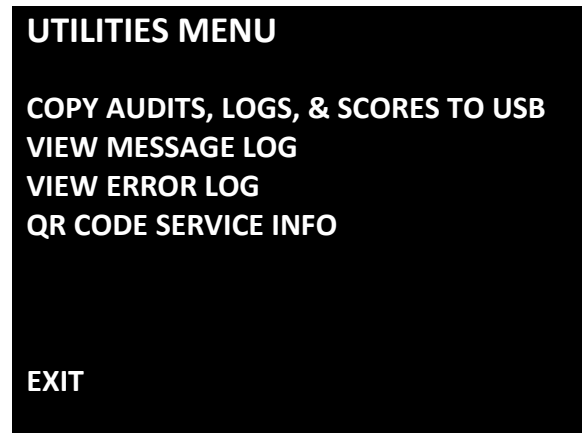
Calibrate spinners.



- **Spinner Calibration:** Calibrate the spinners. (Follow onscreen instructions)

## Utilities Menu

Allows for copying and viewing of audits and system/error logs.



- **Copy Audits, Logs, & Scores to USB**: Allows you to download your audits to an easy to read text file (.TXT) on a USB flash drive
- **View Message Log**: Allows you to view the audits without having to save them to USB
- **View Error Log**: Allows you to view the error log without having to save it to USB
- **QR Code Service Info**: Send diagnostics info to Raw Thrills via cell phone QR scanner.

## System Information

This screen allows you to see various information about the software and hardware, such as:

- Serial Number
- Software Revision
- Build Date
- RIO PCB
- RIO Firmware
- RIO Chip Firmware
- Dongle Version
- Cabinet Type
- Game Template

## Choosing the Right Pricing Adjustments for Your Location

---

### Card Swipe Locations

- Make Sure Your Game is Set to **Swipes Mode**:
  1. Hold the Test Button for 2 seconds to enter the Test Menu.
  2. Select "Pricing and Payout Adjustments" from the menu.
  3. Select "Currency Input" from the menu.
  4. Select "Card Swipes" from the menu.
  5. Exit out of "Currency Input" menu.
  6. While back in "Pricing and Payout Adjustments" menu, set "Swipe Value" to the currency equivalent of your swipe, or the payout will be incorrect. **THIS SETTING IS EXTREMELY IMPORTANT!** (Example: If the card swipe is worth \$1.50 in your card system, set the swipe value to \$1.50 as well).

### Coin Locations

- Make Sure Your **Pricing & Coin Value** are Correct:
  1. Hold the Test Button for 2 seconds to enter the Test Menu.
  2. Select "Pricing and Payout Adjustments" from the menu.
  3. Select "Currency Input" from the menu.
  4. Select "Cash" or "Tokens" from the menu.
  5. Exit out of "Currency Input" menu.
  6. While back in "Pricing and Payout Adjustments" menu
    - a. Select "Coins to Play" and set the desired amount of coins per game.
    - b. After setting the coins per play, set "Coin Value" to the currency equivalent of your coin, or the payout will be incorrect. **THIS SETTING IS EXTREMELY IMPORTANT!** (Example: If your coin is worth \$0.25, set "Coin Value" to \$0.25 as well).



## PC Hardware

---

Your slither.io™ uses a HP Elitedesk 705 G3 MT computer with a GeForce GTX 1050 graphics card. Listed below are the recommended BIOS settings for the computer.

### **NOTE 1**

The computer shipped with the correct BIOS settings. Making changes to the BIOS different from the settings listed below may adversely affect the game's functionality.

### **NOTE 2**

In the event your video card needs to be replaced, any brand of GeForce GTX 1050 will work.



(HP Elitedesk 705 G3 MT)

## HP Elitedesk 705 G3 MT BIOS

---

### To Access BIOS Settings:

With the computer powered off, plug a USB keyboard into an open USB slot. Hold the 'F10' key and turn the computer on. Continue holding the F10 key until the BIOS Setup screen appears.

**Note: All settings not listed should remain their default values.**

### Advanced

- Boot Options
  - After Power Loss ..... [POWER ON]
  - UEFI Boot Order: ..... [DISABLE]
  - Legacy Boot Order (defaults):
    - USB
    - SATA CD
    - STATO
    - NETWORK BOOT
- Built-in Device Options
  - Integrated Video: ..... [DISABLE]

**Note:** After exiting BIOS settings screen, power cycle the cabinet by using the cabinet's main power switch.

## PC Hard Drive Recovery

---

Symptoms requiring PC hard drive recovery include

- File Test reports bad or missing files.
- Game fails to finish loading during startup.
- After resetting the AC power, an error is reported.
- Erratic Game or Attract Mode.
- The following screen:

**WARNING!**

**CRC File Missing! Reinstall Software!**

**File Damaged! Reinstall Software!**

**File Missing! Reinstall Software!**

The only way to repair corrupt files is to reinstall the software as described below:

### COMPUTER

The computer contains sensitive components. Do not handle roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Do **not** use the PC on/off switch. Turn AC power on or off with the cabinet power switch.

Steps to Re-install the software:

(NO DVD Restoration. USB Thumb Drive is used on the *HP Elitedesk 705 G3 MT*)

1. With game and PC on, verify that the RIO board has power. If not, see Troubleshooting.
2. Open the coin door.
3. Insert the recovery USB thumb drive (included in your game) into the USB port on the Test button bracket inside the coin door.
4. Turn cabinet power switch to OFF. Wait 30 seconds.
5. Turn cabinet power switch to ON.
6. Select the *slither.io* restore version from the menu and follow on screen instructions.
7. If recovery does not begin, check to ensure USB Drive is inserted correctly and is not damaged.
8. Initial software loading may take several minutes. Check progress periodically.  
*Do not interrupt power or reset the game during recovery.*
9. When software has been loaded, a message indicates that restore is complete. When instructed to remove USB Drive, wait 15 seconds to remove the drive from the PC.
10. Turn cabinet power switch off and then turn the cabinet on again. Your game will now be restored.

# Troubleshooting

**Warning: Review the Safety section before making any adjustments to the game.**

Problem	Possible Cause	Solution
<b>Game will not power up.</b>	Game not plugged in.	Plug game into AC outlet.
	Game not turned on.	Turn on main power switch.
	Game fuse is blown.	Check and replace fuse. See Specification section for fuse values.
	No power to receptacle.	Test AC outlet and plug game into powered outlet.
	PC BIOS set incorrectly.	See BIOS Settings section.
	Flash Drive Installer is left connected to PC.	Disconnect Flash Drive Installer and power cycle the game.
<b>Spinners/Buttons do not work.</b>	Faulty micro switch.	Replace the micro switch on the joystick/button and re-test. Verify that the wires are connected to the correct spades on the micro switch.
	Faulty wiring.	Disconnect the cabinet from AC power. Verify that all wires are firmly connected to each joystick/button and the PCB. Verify that no wires are frayed or improperly shorting to ground. Verify that wires are connected to the correct spades on the micro switches.
	Faulty PCB.	Ensure all connections to PCB are secure. Replace PCB if faulty.

Problem	Possible Cause	Solution
<b>Neither buttons nor audio work.</b>	PCB connected to faulty USB port (boot message may indicate not detected)	To test a USB port, turn off the game, disconnect the device from the port, and then connect the game dongle to the port. Reboot the game. A No Dongle message indicates the port is bad. If the game starts, the port is working. After the test, reconnect all devices to the correct USB ports and reboot.
<b>No sound or bad sound.</b>	Bad connection.	Check connection to speakers.
	Volume set too low.	Use VOL UP button on Test panel to raise volume
	Faulty wiring.	Verify all wires are firmly connected to the speakers, PCB, and green computer audio port. Verify that each wire is connected to the correct port and no wires are frayed or improperly shorting to ground.
	Blown speakers.	Remove the grill and inspect each speaker for visible damage. Run the Sound Test from System Tests in the Operator Menu to verify each speaker is working.
	Reversed wires.	A weak or low muffled sound is a sign of reversed speaker wires. Check for reversed wires on each speaker.
	Faulty PCB.	To verify audio is working at the computer, connect stereo headphones to the green computer audio port.

Problem	Possible Cause	Solution
<b>Constant low audio hum.</b>	Faulty power supply.	Check external DC supply and the PC supply.
	Open ground.	Check all ground wires in cabinet. Ensure AC wall outlet is properly grounded
<b>Game does not load.</b>	PC hard drive failure.	Recover hard drive. See Flash Installer Document or contact your distributor for the latest software revision.
<b>PC Drive test reports “bad” or “missing” files.</b>		
<b>Game fails to finish loading.</b>		
<b>After resetting, game still reports an error.</b>		
<b>Erratic game mode or attract mode.</b>		
<b>WARNING!</b> <b>Data files Corrupted.</b> <b>(Game Operation May Become Unstable.)</b> <b>Use “Test” Switch to Enter Test Mode and Run “File Test.”</b>		
<b>Game Resets</b>	Bad file.	Run Flash Installer.
<b>No Video</b>	PC not turned on.	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity.
	Video cable not secure.	Check and secure DVI or HDMI connector to Monitor. Check and secure DVI or HDMI connector to PC.
<b>Coin meter does not click during test.</b>	No pulse to meter.	Check wiring from meter to PCB board.
	Faulty meter.	Replace coin meter.
	Blown fuse(s) on PCB	Replace 12vdc 5A fuse(s) on PCB.

Problem	Possible Cause	Solution
<b>Dongle Not Present</b>	Dongle missing or disconnected.	Find dongle cable and reseal in USB port.
	Faulty USB port.	Insert dongle cable in different USB port.
<b>Improper number of credits given when coins or bills are inserted.</b>	Incorrect setting in Pricing Adjustments.	Adjust pricing settings.
	Faulty wiring.	Disconnect cabinet from AC power. Verify wires are firmly connected to coin mech and bill validator and ground wires are properly connected. Verify no wires are frayed or shorting to ground.
	Faulty coin mech.	Verify coin mech is not jammed. Ensure coin mech is properly aligned and latched to coin door.
<b>Exits Test Mode every 3 seconds.</b>	Test button stuck in ON position.	Slide or toggle button off after Test Menu appears
<b>Connect RIO Board or RIO Board Missing.</b>	USB cable disconnected.	Check USB connection from PC to RIO board.
	No Power to RIO board.	Check for proper voltage (+5V, +12V) at RIO P1 connector.

## Technical Support

---

For an authorized distributor near you, check the Raw Thrills website at [www.rawthrills.com](http://www.rawthrills.com)

### **Betson's Raw Thrills Technical Support Hotline**

Phone: 1-800-753-2513

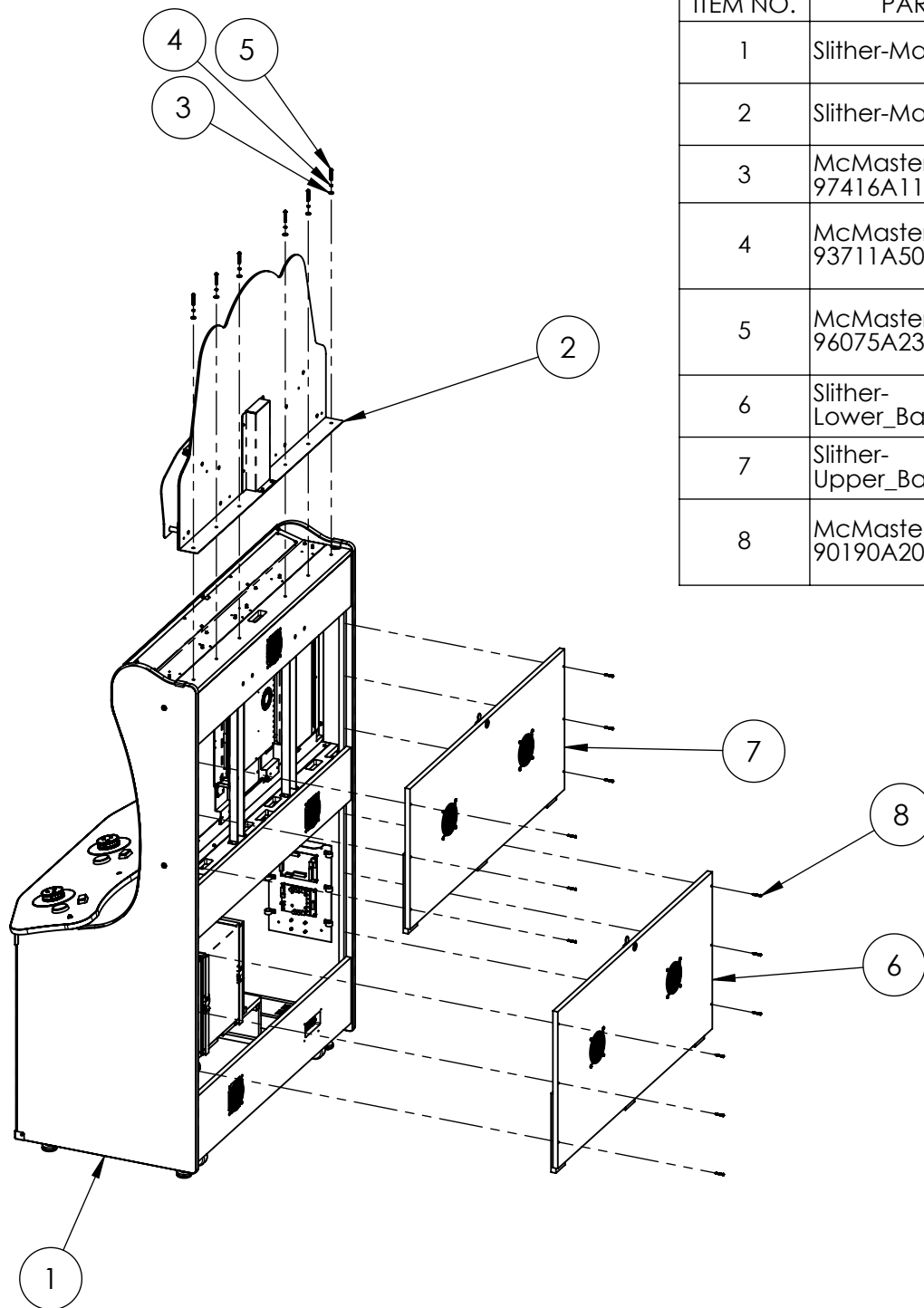
FAX: 1-201-438-5019

Email: [rtsupport@betson.com](mailto:rtsupport@betson.com)



## Electrical and Mechanical Illustrations

---



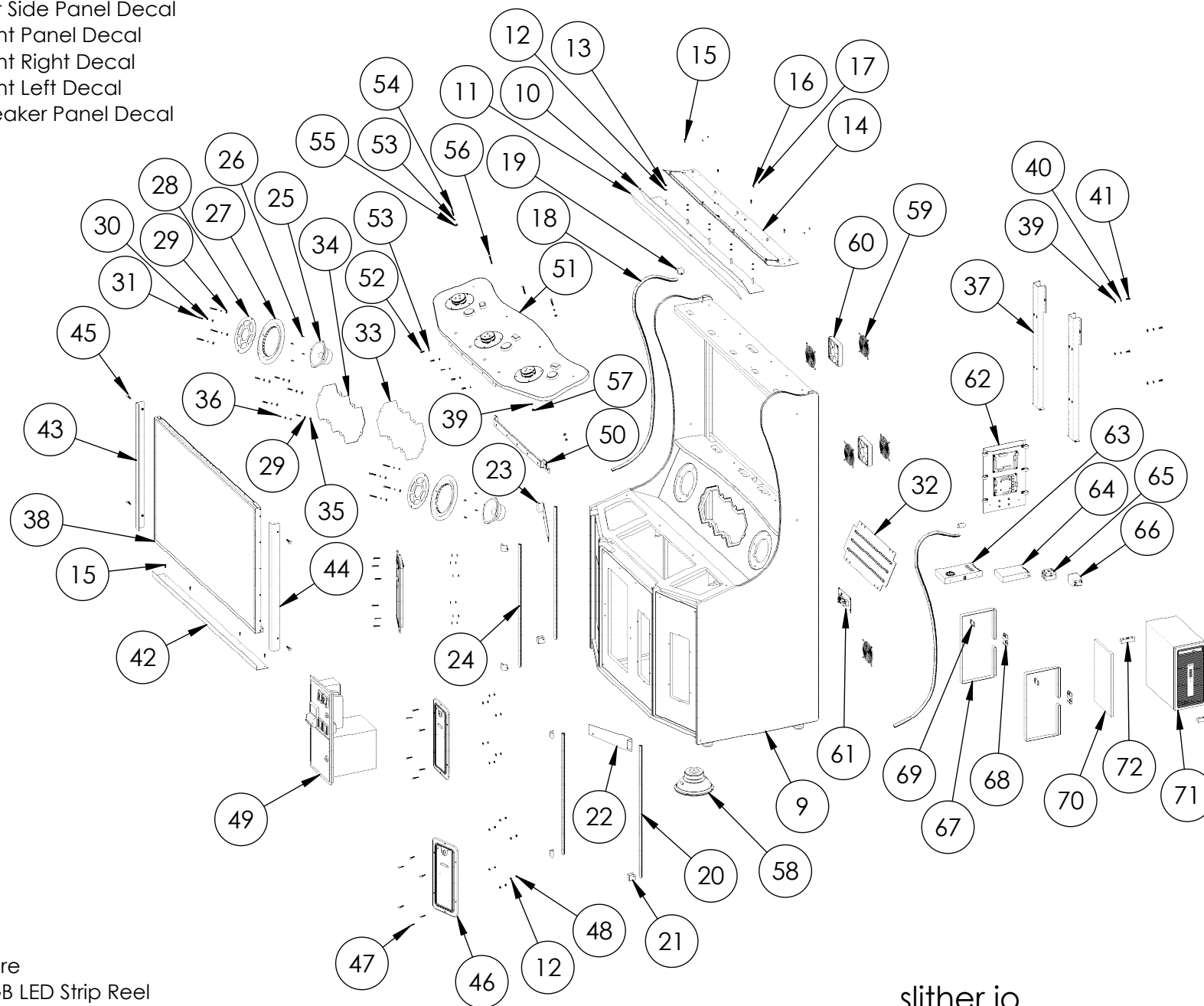
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Slither-Main_Assy_55	Main Cabinet Assembly	1
2	Slither-Marquee_Assy	Marquee Assembly	1
3	McMaster-Carr - 97416A119	Black-Oxide Steel SAE Flat Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	6
4	McMaster-Carr - 93711A500	Black-Oxide 18-8 Stainless Steel Split Lock Washer for 1/4" Socket Head Screws, 0.26" ID, 0.363" OD	6
5	McMaster-Carr - 96075A231	Black-Oxide Alloy Steel Tamper-Resistant Torx Rounded Head Screws, 1/4"-20 Thread Size, 1-1/2" Long	6
6	Slither-Lower_Back_Door_Assy	Lower Back Door Assembly	1
7	Slither-Upper_Back_Door_Assy	Upper Back Door Assembly	1
8	McMaster-Carr - 90190A201	Phillips Rounded Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 1-1/4" Long	12

slither.io  
Game Assembly (55")



# CABINET DECALS:

- > 606-01544-01 - Right Side Panel Decal
- > 606-01545-01 - Left Side Panel Decal
- > 606-01546-01 - Front Panel Decal
- > 606-01547-01 - Front Right Decal
- > 606-01548-01 - Front Left Decal
- > 606-01550-01 - Speaker Panel Decal



## NOT SHOWN:

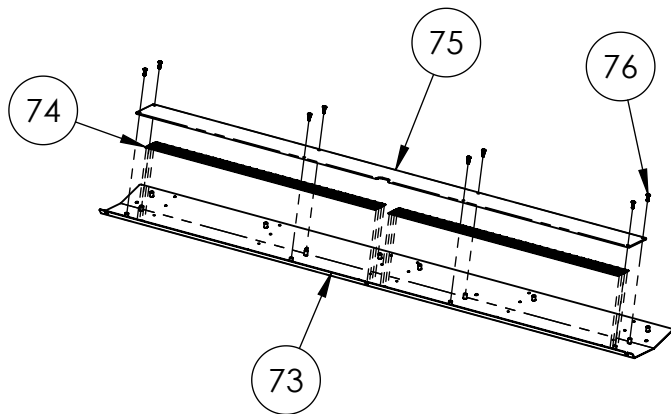
- > Selective Hardware
- > 500-00131-01 - RGB LED Strip Reel
  - 2X 70CM / 42 LEDs (installed in #24)
  - 2X 75CM / 45 LEDs (installed in #20)
  - 2X 140CM / 84 LEDs (installed in #18)

slither.io  
Main Cabinet Assembly  
(BOM on next page)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
9	601-00852-01	Slither.io Cabinet	1
10	600-02055-01	Marquee Front Bracket	1
11	606-01617-01	Marquee Front Decal	1
12	McMaster-Carr - 90126A514	Zinc-Plated Steel SAE Washer for Number 10 Screw Size, 0.219" ID, 0.5" OD	23
13	McMaster-Carr - 90675A195	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-32 Thread Size	5
14	Slither-Marquee_LED_Light_Assy	Marquee Uplighting LED Sub-Assembly	1
15	McMaster-Carr - 90054A196	Flanged Hex Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 5/8" Long	8
16	McMaster-Carr - 90126A512	Zinc-Plated Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD	3
17	McMaster-Carr - 90675A009	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 8-32 Thread Size, 11/32" Wide	3
18	603-00718-01 (55.625in)	LED T-Molding Extrusion - 55.625"	2
19	600-01942-01	LED T-Molding Clip	6
20	603-00718-01 (29.75in)	LED T-Molding Extrusion - 29.75"	2
21	600-02039-01	LED T-Molding Corner Clip	2
22	600-02037-01	LED T-Molding Angled Plate Right	1
23	600-02038-01	LED T-Molding Angled Plate Left	1
24	603-00718-01 (27.5in)	LED T-Molding Extrusion - 27.5"	2
25	2-1-10-00-00-000	5.25" Speaker, 8 Ohm, Full Range (Goldwood)	2
26	McMaster-Carr - 90935A194	Phillips Rounded Head Screws for Sheet Metal, Black-Oxide Steel, Number 8 Size, 1/2" Long	8
27	Slither-Speaker_Bezel_Sub-Assy	Speaker Bezel Sub-Assembly	2
28	600-02362-01	Speaker Grill	2
29	McMaster-Carr - 97416A115	Black-Oxide Steel SAE Washer for Number 10 Screw Size, 0.219" ID, 0.5" OD	14
30	McMaster-Carr - 93711A400	Black-Oxide 18-8 Stainless Steel Split Lock Washer for Number 10 Socket Head Screws, 0.2" ID, 0.294" OD	8
31	McMaster-Carr - 96075A203	Alloy Steel Tamper-Resistant Button Head Torx Screws, 10-32 Thread, 1-1/2" Long	8
32	Slither-Mini_Marquee_Backlight_Assy	Mini Marquee LED Sub-Assembly	1
33	606-01543-01	Mini Marquee Translite	1
34	600-02354-01	Mini Marquee Lens PETG	1
35	McMaster-Carr - 90133A025	Oil-Resistant Neoprene Rubber Sealing Washer for Number 12 Screw Size, 0.195" ID, 0.562" OD	6
36	McMaster-Carr - 96075A195	Alloy Steel Tamper-Resistant Button Head Torx Screws, 10-32 Thread, 1" Long	6
37	600-01482-01	LCD Mounting Strut	2
38	809-00012-01	55" Open Frame LCD (with glass)	1
39	McMaster-Carr - 90126A029	Zinc-Plated Steel SAE Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	6

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
40	McMaster-Carr - 91102A750	Zinc-Plated Steel Split Lock Washer for 1/4" Screw Size, 0.26" ID, 0.487" OD	4
41	McMaster-Carr - 91280A326	Medium-Strength Class 8.8 Steel Hex Head Screw, Zinc-Plated, M6 x 1 mm Thread, 16 mm Long	4
42	600-02091-01	Bottom Monitor Bracket	1
43	600-02092-01	Left Monitor Frame Bracket	1
44	600-02093-01	Right Monitor Frame Bracket	1
45	Stafast - BB142035UHD BO	Black Oxide Type BB Partial Threaded Steel Bolt, Hex Drive, 1/4"-20 Thread Size, 1-3/8" Long	4
46	800-00071-01	Single Door Ticket Assembly (NO DISPENSER OR BIN)	3
47	McMaster-Carr - 93548A117	Zinc-Plated Steel Square-Neck Carriage Bolt, Low-Strength, 10-24 Thread Size, 1-1/4" Long, PAINT BLACK	18
48	McMaster-Carr - 90675A011	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-24 Thread Size	18
49	800-00005-01	Mid-Width Coin Door Assembly (Suzo-Happ)	1
50	600-02143-01	Hinge Mount Bracket	1
51	Slither-CP_Assy	Control Panel Sub-Assembly	1
52	McMaster-Carr - 96075A219	Black-Oxide Alloy Steel Tamper-Resistant Torx Rounded Head Screws, 1/4"-20 Thread Size, 3/4" Long	5
53	McMaster-Carr - 93711A500	Black-Oxide 18-8 Stainless Steel Split Lock Washer for 1/4" Socket Head Screws, 0.26" ID, 0.363" OD	7
54	McMaster-Carr - 96075A231	Black-Oxide Alloy Steel Tamper-Resistant Torx Rounded Head Screws, 1/4"-20 Thread Size, 1-1/2" Long	2
55	McMaster-Carr - 97416A119	Black-Oxide Steel SAE Flat Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	2
56	McMaster-Carr - 90185A550	Grade 5 Steel Square-Neck Carriage Bolt, Medium-Strength, 1/4"-20 Thread Size, 2" Long, PAINT BLACK	2
57	McMaster-Carr - 90675A029	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 1/4"-20 Thread Size	2
58	2-1-18-00-00-000	8" Woofer, 4 Ohm, Poly-Mica Cone (Goldwood)	1
59	800-00001-00	120mm Wire Fan Guard	5
60	820-00001-00	Cooling Fan (120mm x 120mm x 25mm): 12VDC, 120CFM	2
61	AC_Plate_Assy	AC Power Plate Sub-Assembly	1
62	Slither-RIO2_Assy	RIO2 Assembly w/ Mounting Plate	1
63	500-00193-01	RSP-320-12: 320W, 12V PFC Dual Voltage Power Supply	1
64	330-00004-01	LRS-150F-12: 150W, 12V Dual Voltage Power Supply	1
65	800-00040-01	6210AXXSZS-DC3 / 6210DSX-1: Solid State Relay	1
66	442-00001-01	Power Line Filter (Corcom 6MV1)	1
67	McMaster-Carr - 87425K76 (56in)	Nylon Fabric Strip, Black, 1" Wide, .08" Thick, 56" Long	2
68	McMaster-Carr - 29705T86	Plastic Buckle, Black, Squeeze-Release, NO-Sew for 1" Webbing	2
69	600-00891-01	Securing Nylon Strap Plate	2
70	Partec - 7-195	PC Foam Pad	1
71	850-00025-01	HP 705 G3 MT (310-00002-01: GT 1030 Video Card)	1
72	601-00580-01	PC Wood Cleat	2

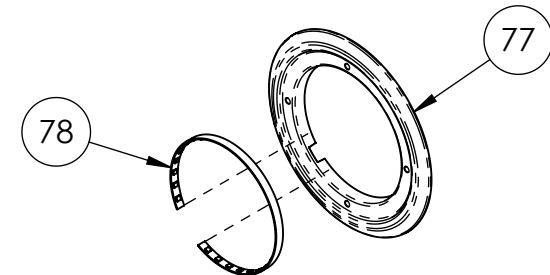


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
73	600-02144-01	Marquee LED Bracket	1
74	500-00162-01 (55 CM)	White Flexible LED Tape, w/ FOAM	8
75	600-02057-01	Marquee Front Light Lens PETG	1
76	McMaster-Carr - 91249A194	Black-Oxide 18-8 Stainless Steel Pan Head Phillips Screws, 8-32 Thread, 1/2" Long	8

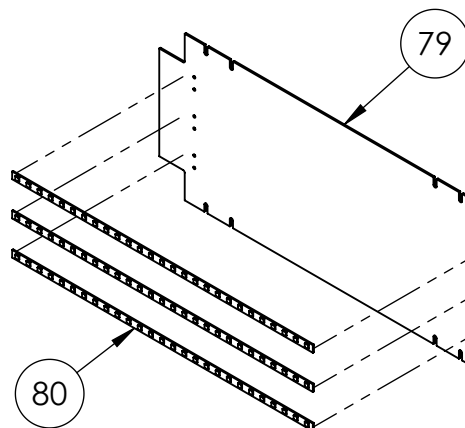
slither.io  
Marquee Uplighting LED Sub-Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
77	603-00954-01	Speaker Bezel	1
78	500-00189-01 (45 CM)	Blue Flexible LED Tape, w/ FOAM	1



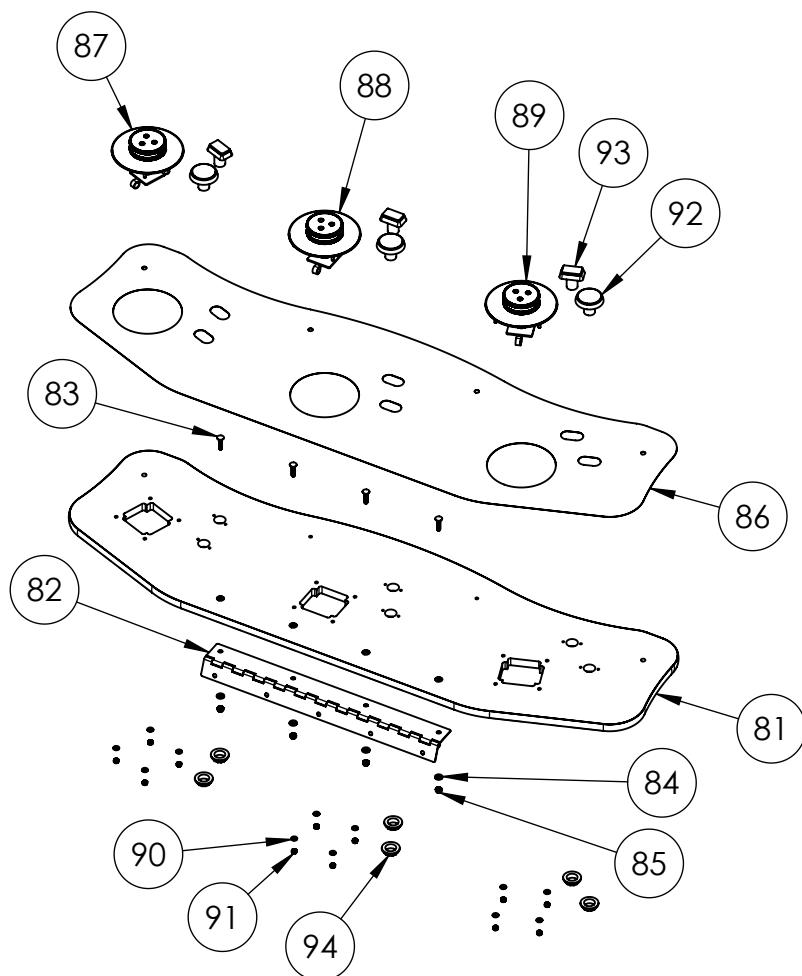
slither.io  
Speaker Bezel Sub-Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
79	600-02042-01	Mini Marquee LED Panel	1
80	500-00162-01 (45 CM)	White Flexible LED Tape, w/ FOAM	3

slither.io  
Mini Marquee LED Sub-Assembly

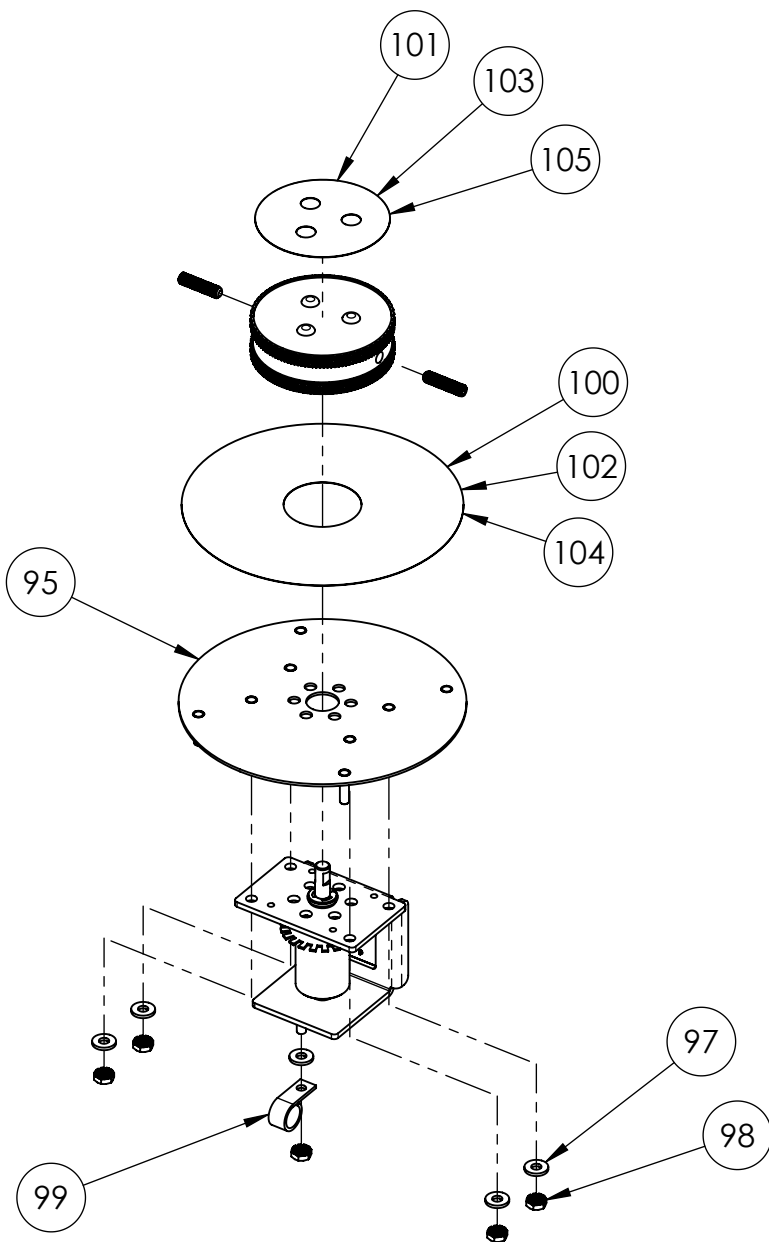




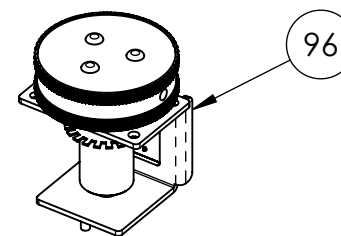
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
81	601-00843-01	Control Panel	1
82	600-02145-01	Control Panel Access Hinge	1
83	Partec - 31-CB250-03-005	Flat Head Carriage Bolt, 1/4"-20 Thread Size, 1-1/4" Length	4
84	McMaster-Carr - 90126A029	Zinc-Plated Steel SAE Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	4
85	McMaster-Carr - 90675A029	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 1/4"-20 Thread Size	4
86	606-01536-01	Control Panel Decal	1
87	Slither-Spinner_Assy_P1	P1 Spinner Sub-Assembly	1
88	Slither-Spinner_Assy_P2	P2 Spinner Sub-Assembly	1
89	Slither-Spinner_Assy_P3	P3 Spinner Sub-Assembly	1
90	McMaster-Carr - 97416A115	Black-Oxide Steel SAE Washer for Number 10 Screw Size, 0.219" ID, 0.5" OD	12
91	McMaster-Carr - 90631A411	Low-Strength Steel Nylon-Insert Locknut, Zinc-Plated, 10-32 Thread Size, 3/8" Wide, 15/64" High	12
92	702-00101-01	Large Round Green IPB (.187 Gold MS, 6V White LED) w/ "BOOST!" legend	3
93	702-00102-01	Large Rectangular White IPB (.187 Gold MS, 6V White LED) w/ "START!" legend	3
94	Screw-in Ring Nut	included with IPBs	6

slither.io  
Control Panel Sub-Assembly





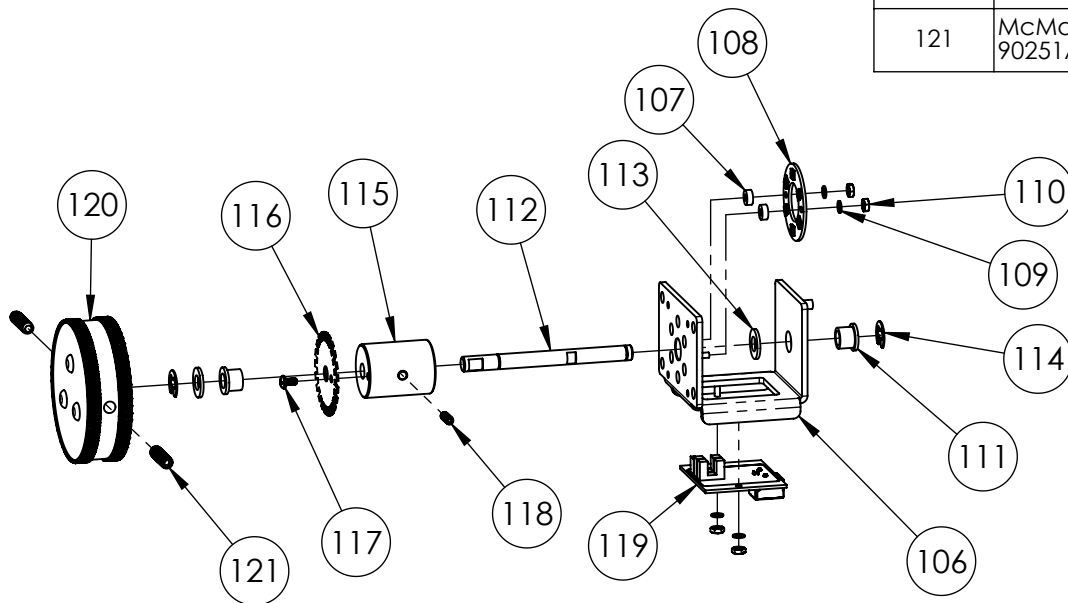
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
95	600-02289-01	Spinner Plate	1
96	800-00070-01	Spinner Assembly	1
97	McMaster-Carr - 90126A514	Zinc-Plated Steel SAE Washer for Number 10 Screw Size, 0.219" ID, 0.5" OD	5
98	McMaster-Carr - 90675A195	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-32 Thread Size	5
99	AEH - 04-12-500	Wire Harness Clip (for 1/2" Bundle Diameter)	1
<b>P1 Decals - YELLOW</b>			
100	606-01537-01	P1 Spinner Plate Decal	1
101	606-01540-01	P1 Spinner Top Decal	1
<b>P2 Decals - BLUE</b>			
102	606-01538-01	P2 Spinner Plate Decal	1
103	606-01541-01	P2 Spinner Top Decal	1
<b>P3 Decals - RED</b>			
104	606-01539-01	P3 Spinner Plate Decal	1
105	606-01542-01	P3 Spinner Top Decal	1



slither.io  
 Spinner Sub-Assembly  
 (unique decals for P1 & P2 & P3)

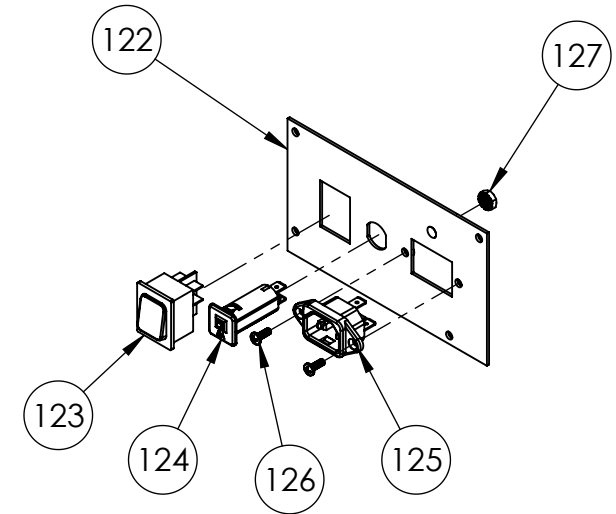


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
106	600-02320-01	Main Bushing Bracket	1
107	McMaster-Carr - 94639A330	Off-White Nylon Unthreaded Spacer, 5/16" OD, 1/8" Long, for Number 6 Screw Size	2
108	500-00242-01	LED Spinner PCB	1
109	McMaster-Carr - 98019A309	18-8 Stainless Steel Mil. Spec. Washer, Passivated, Number 4 Screw Size, MS/NASM 15795-803	4
110	McMaster-Carr - 90480A005	Low-Strength Steel Hex Nut, Zinc-Plated, 4-40 Thread Size	4
111	McMaster-Carr - 6338K453	Oil-Embedded Flanged Sleeve Bearing for 5/16" Shaft Diameter and 7/16" Housing ID, 3/8" Long	2
112	600-02324-01	Spinner Shaft	1
113	McMaster-Carr - 5906K563	Oil-Embedded Thrust Bearing, 5/16" Inside Diameter, 5/8" OD, 1/16" Thickness	2
114	McMaster-Carr - 99620A615	Heavy Duty Side-Mount External Retaining Rings for 5/16" OD, Black-Phosphate 1060-1090 Spring Steel	2
115	600-02323-01	Spinner Weight	1
116	600-02322-01	Opto Disc	1
117	McMaster-Carr - 91249A144	Black-Oxide 18-8 Stainless Steel Pan Head Phillips Screws, 6-32 Thread, 1/4" Long	1
118	McMaster-Carr - 92311A194	18-8 Stainless Steel Cup-Point Set Screw, 8-32 Thread, 1/2" Long	1
119	500-00241-01	USB Spinner PCB	1
120	608-00235-01	Spinner Knob Assembly	1
121	McMaster-Carr - 90251A541	Thread-Locking Cup-Point Set Screws, 18-8 Stainless Steel, 1/4"-20 Thread, 1" Long	2

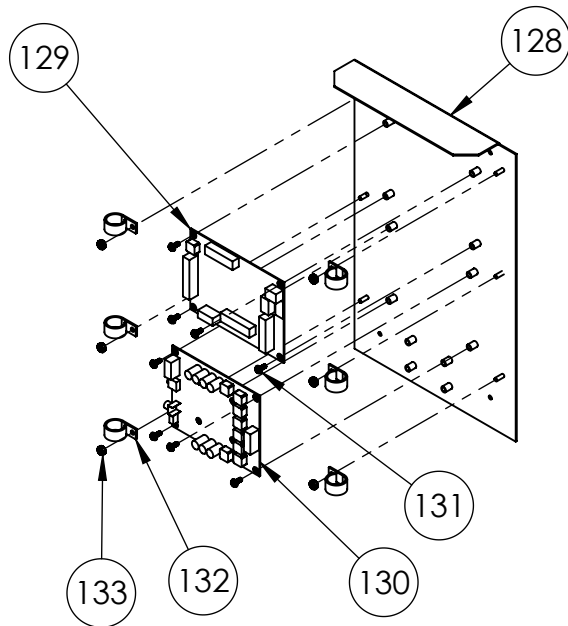




ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
122	600-01681-01	AC Electronics Plate	1
123	Marquardt - 1832.3312	Rocker Switch (DPST): 250VAC, 16A	1
124	Schurter - T9-611P-6A	Thermal Circuit Breaker: 240VAC, 6A, Snap-in, Fuseholder, 1 Pole	1
125	Qualtek - 703W-00/08	AC Receptacle: 250V, 15A	1
126	McMaster-Carr - 90272A146	Steel Phillips Rounded Head Screws, 6-32 Thread Size, 3/8" Long	2
127	McMaster-Carr - 90675A195	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-32 Thread Size	1



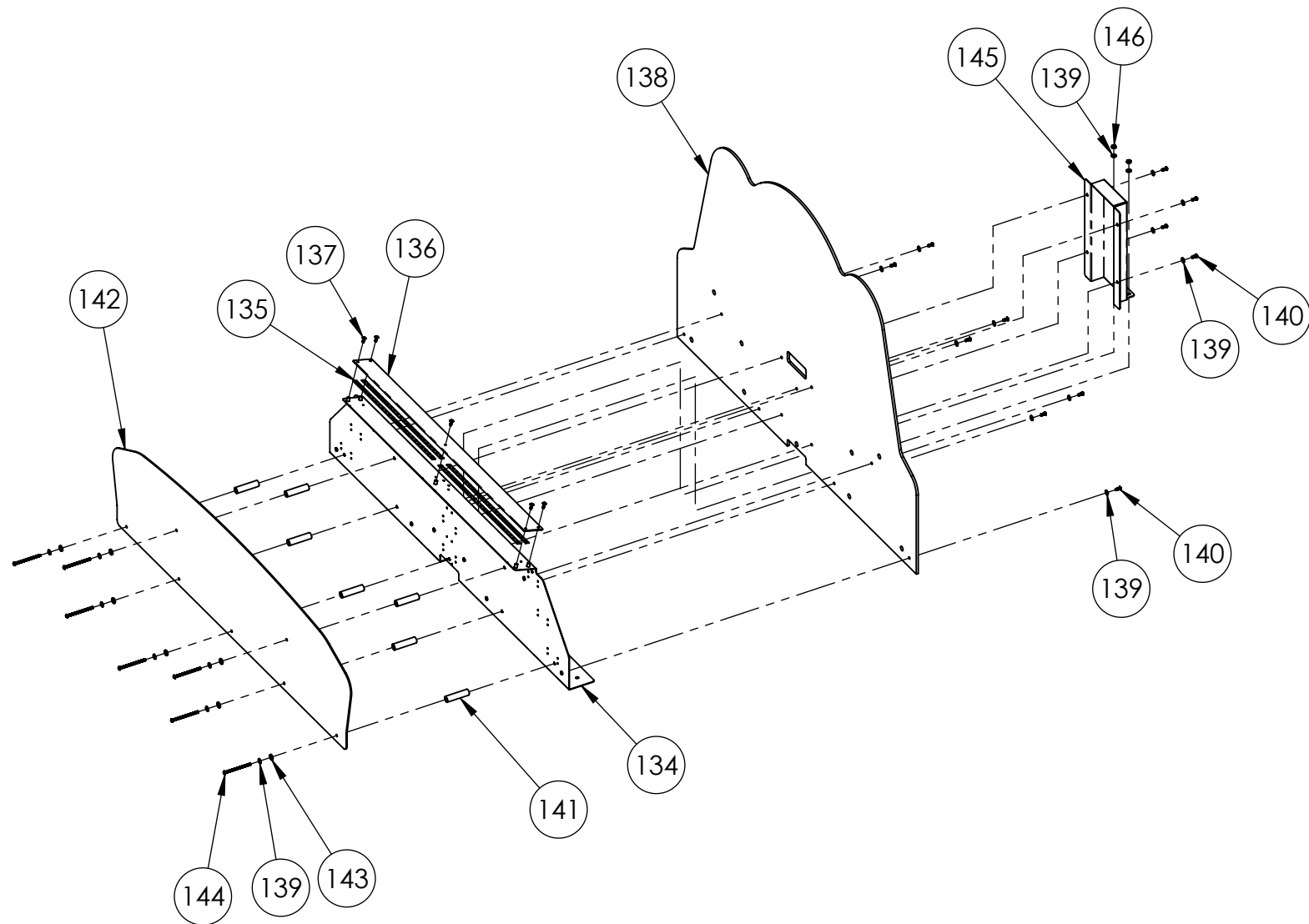
## slither.io AC Power Plate Sub-Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
128	600-02049-01	RIO2 Mounting Plate	1
129	500-00199-05	RIO2 PCB	1
130	500-00212-03	RIO2 Audio Amplifier PCB	1
131	McMaster-Carr - 90316A192	Stainless Steel Flanged Hex Head Screws with Slotted Drive, 8-32 Thread Size, 3/8" Long	8
132	AEH - 04-12-750	Wire Harness Clip (for 3/4" Bundle Diameter)	6
133	McMaster-Carr - 90675A009	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 8-32 Thread Size, 1 1/32" Wide	6

## slither.io RIO2 Assembly w/ Mounting Plate

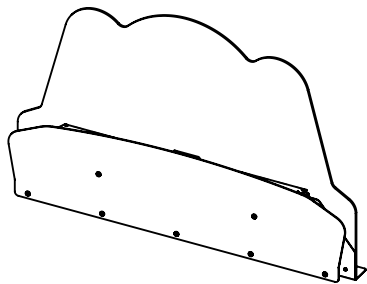




slither.io  
Marquee Assembly  
(BOM on next page)



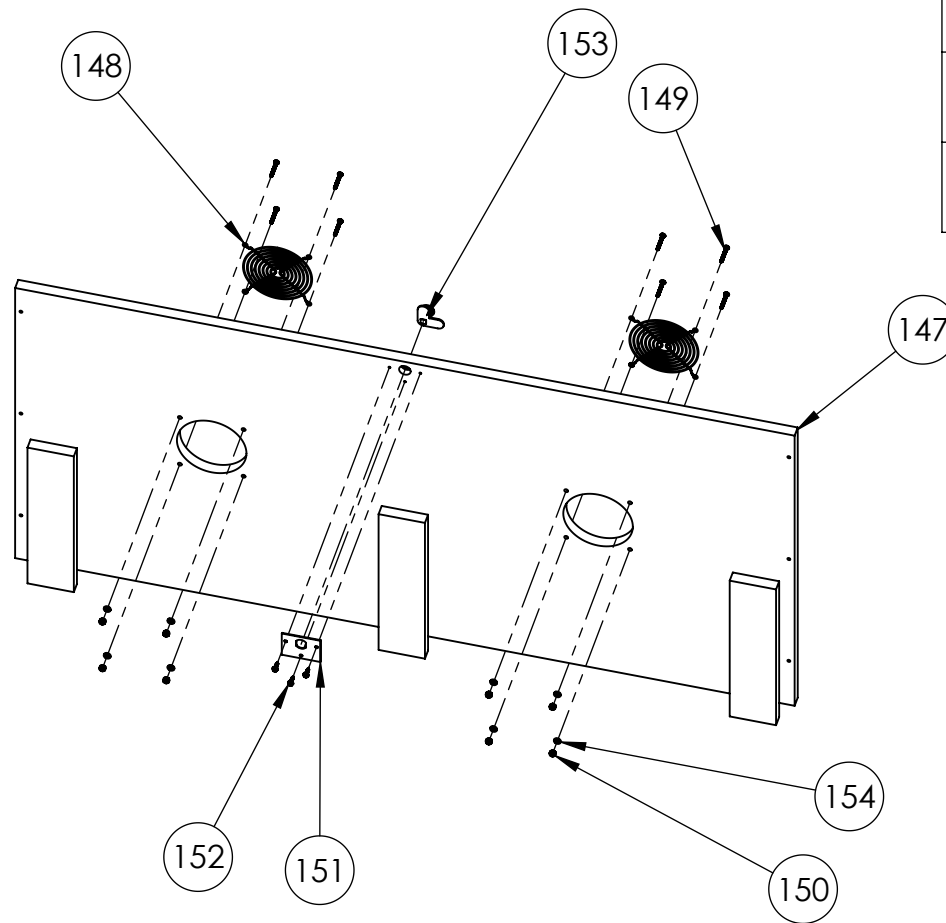
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
134	600-02363-01	Marquee Mounting Bracket	1
135	500-00162-01 (40 CM)	White Flexible LED Tape, w/ FOAM	4
136	600-02414-01	Marquee Upper Light Lens PETG	1
137	McMaster-Carr - 94779A580	18-8 Stainless Steel Extra-Wide Truss Head Phillips Screws, Black-Oxide, 8-32 Thread Size, 1/2" Long	5
138	606-01615-01	Printed Marquee Backboard	1
139	McMaster-Carr - 97416A115	Black-Oxide Steel SAE Washer for Number 10 Screw Size, 0.219" ID, 0.5" OD	20
140	McMaster-Carr - 96075A187	Alloy Steel Tamper-Resistant Button Head Torx Screws, 10-32 Thread, 1/2" Long	11
141	McMaster-Carr - 94639A611	Nylon Unthreaded Spacer, 5/8" OD, 2-1/2" Length, for Number 10 Screw Size	7
142	606-01616-01	Printed Marquee Logo Panel	1
143	McMaster-Carr - 90133A025	Oil-Resistant Neoprene Rubber Sealing Washer for Number 12 Screw Size, 0.195" ID, 0.562" OD	7
144	McMaster-Carr - 91255A030	Button Head Hex Drive Screw, Black-Oxide Alloy Steel, 10-32 Thread, 3" Long	7
145	600-02364-01	Marquee Harness Bracket	1
146	McMaster-Carr - 90675A195	Steel Locknut with External-Tooth Lock Washer, Zinc-Plated, 10-32 Thread Size	2



slither.io  
Marquee Assembly BOM



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
147	601-00808-01	Lower Back Door	1
148	800-00001-00	120mm Wire Fan Guard	2
149	McMaster-Carr - 90272A201	Steel Phillips Rounded Head Screws, 8-32 Thread Size, 1-1/4" Long	8
150	McMaster-Carr - 90631A009	Low-Strength Steel Nylon-Insert Locknut, Zinc-Plated, 8-32 Thread Size	8
151	600-00043-01	Lock Retainer Plate	1
152	McMaster-Carr - 90054A196	Flanged Hex Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 5/8" Long	3
153	150-00001-00	Standard Door Lock Assembly (for 3/4" Panels)	1
154	McMaster-Carr - 90126A512	Zinc-Plated Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD	8



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
155	601-00809-01	Upper Back Door	1
156	800-00001-00	120mm Wire Fan Guard	2
157	McMaster-Carr - 90272A201	Steel Phillips Rounded Head Screws, 8-32 Thread Size, 1-1/4" Long	8
158	McMaster-Carr - 90631A009	Low-Strength Steel Nylon-Insert Locknut, Zinc-Plated, 8-32 Thread Size	8
159	600-00043-01	Lock Retainer Plate	1
160	McMaster-Carr - 90054A196	Flanged Hex Head Screws for Sheet Metal, Zinc-Plated Steel, Number 8 Size, 5/8" Long	3
161	150-00001-00	Standard Door Lock Assembly (for 3/4" Panels)	1
162	McMaster-Carr - 90126A512	Zinc-Plated Steel SAE Washer for Number 8 Screw Size, 0.188" ID, 0.438" OD	8

