



NFS

Heat Takedown

MOTION

NFSM-75-100X

(X can be 1 to 9)



ADRENALINE
aagames.com

Operation & Service Manual

*** Read this manual before use**

General Remark

If you encounter any difficulties or if you need support on how to update and/ or install your Hot Wheels King of the Road product, we invite you to contact your local distributor or reach us at techsupport@aagmes.com or by calling our support line +1-450-824-1671



Adrenaline Amusements Team

Adrenaline Amusements
2273 Antonio-Hérault street
Terrebonne, QC
Canada
J6X 4R3

Table of Contents

Contents:

General Remark	2
Table of Contents	3
Chapter 01 - Preface	4
Chapter 02 - Game Features	6
Chapter 03 – Unit Features	7
Chapter 04 – Unit Installation	9
Chapter 05 – Operator Menu	19
Chapter 06 - Parts	24
Chapter 07 – Diagrams & Schematics	43
Chapter 08 – Software Recovery	59
Chapter 09 – Card Reader	60
Chapter 10 – Troubleshooting	61
Limited Warranty Policies	69

Chapter 01 - Preface

Please read this page before preparing your NFS Heat Takedown 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



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.



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.

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).

Electrical Power

This game cabinet is shipped configured as either 120V or 230V and is not user switchable. Do not attempt to change the voltage switches on the power supplies to change the required voltage.

International	
Voltage	Operating
220 AC 50 Hz	Entry #1: 4Amps Entry #2: 5Amps

Warning: Before obtaining access to terminals, all supply circuits must be disconnected.

United States/Canada	
Voltage	Operating
120V AC 60 Hz	Entry #1: 8Amps Entry #2: 10Amps

Chapter 02 - Game Features

Are you fast enough to scape the cops? Do you have the skills to take the wheels and drift?
Push the Nitrous and takedown your enemies on the streets and become the king of Palm City.

How to Play

- Use the steering wheel to drive the racetracks.
- Use the pedals to accelerate and drift.
- Collide with other players and the cops to take them down!
- Collect and push the nitrous to escape and win the race.

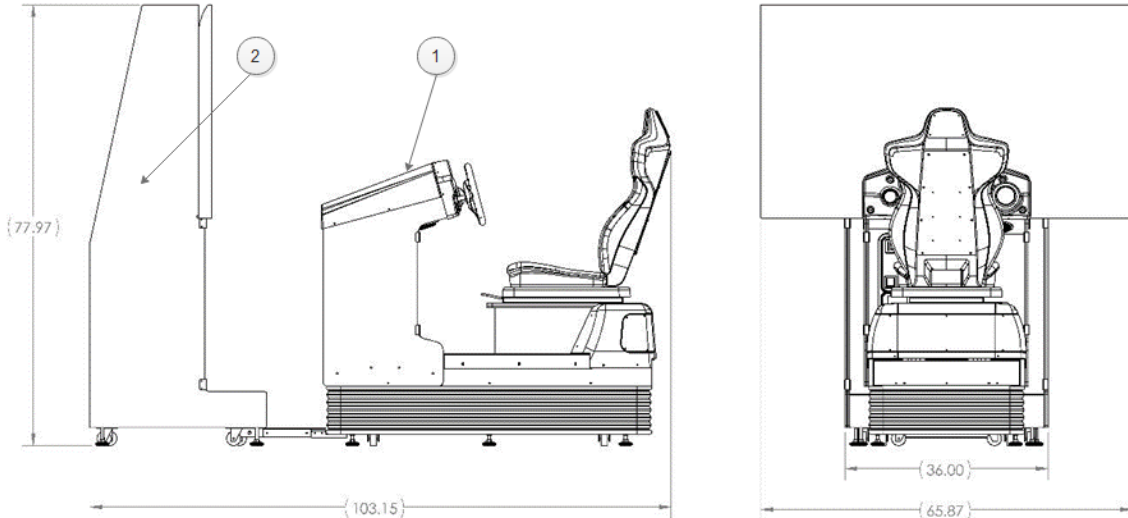


Chapter 03 – Unit Features

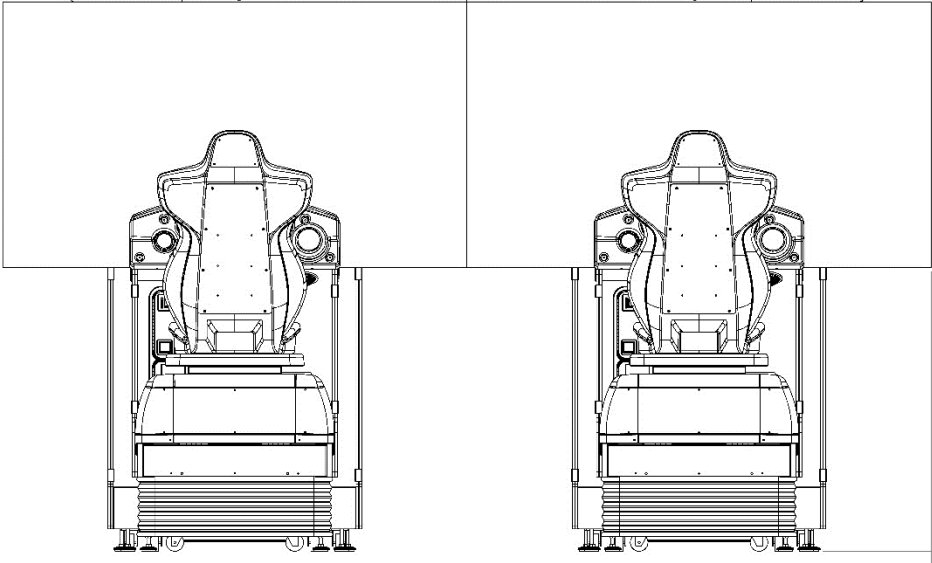
Hardware Features

- 1 to 2 Players Game
- Steering wheels & accelerator pedals for each player
- 75 inches LCD Screen

Cabinet Facts – 1 player version

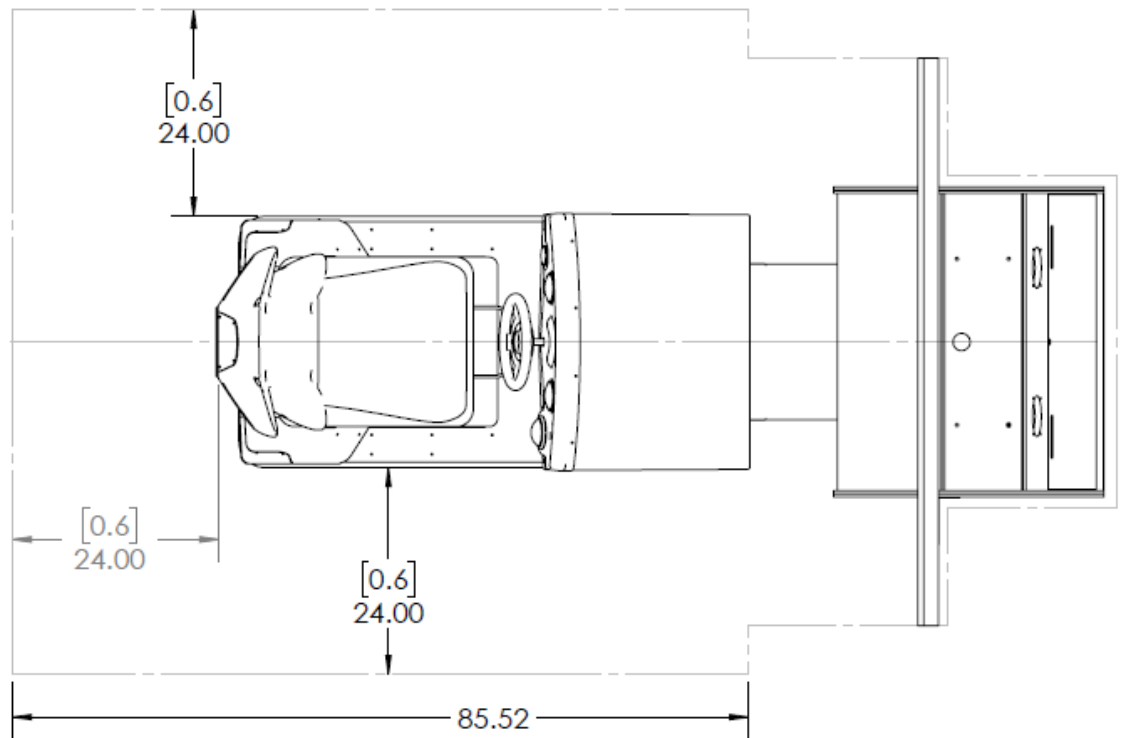
Cabinet Dimensions			
			Height = 77.97" [1980.52 mm]
Depth = 103.15" [2620 mm]		Width = 65.87" [1673.2 mm]	
Shipping Dimensions			
1	Width = 75"	Depth = 45" Weight = 600 lbs	Height = 60"
2	Width = 35"	Depth = 42" Weight = 200 lbs	Height = 84"

Cabinet Facts – 2 players assembly

Cabinet Dimensions	
	Height = 91.35" [2633 mm]
Depth = 103.15" [2620 mm]	Width = 161.27" [3346.43 mm]

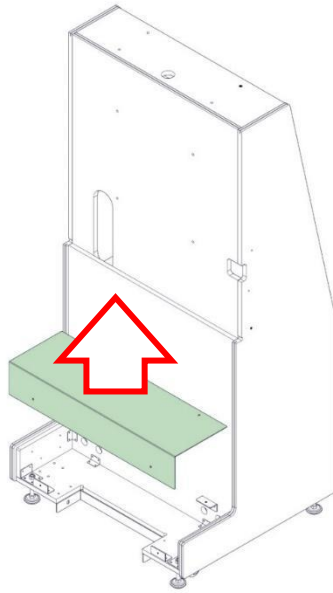
Chapter 04 – Unit Installation

RECOMMENDED SAFETY CLEARANCE AREA

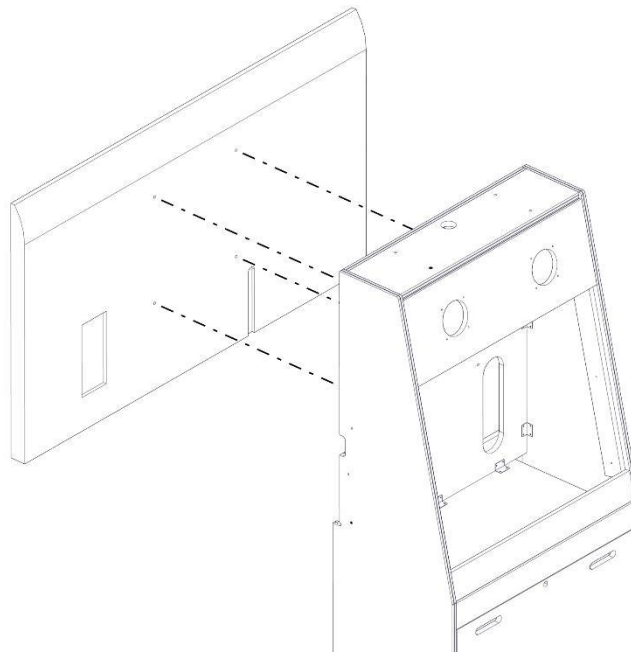


How to assemble your *NFS* Heat Takedown - Motion

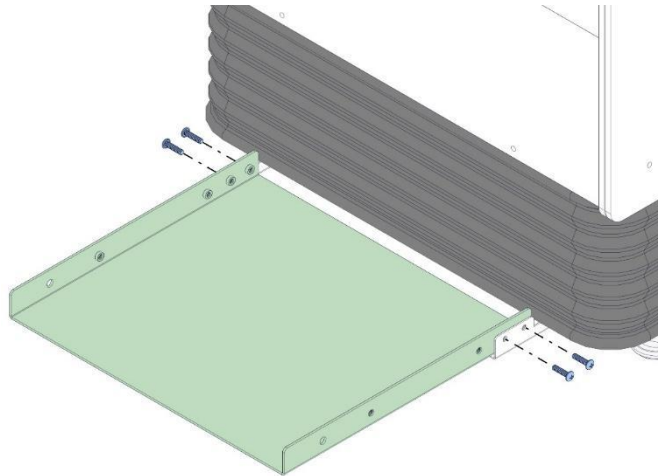
- 1) Start by removing the base cover. Unscrew the 4 black screws and lift up the cover, keep the screws for step 6.



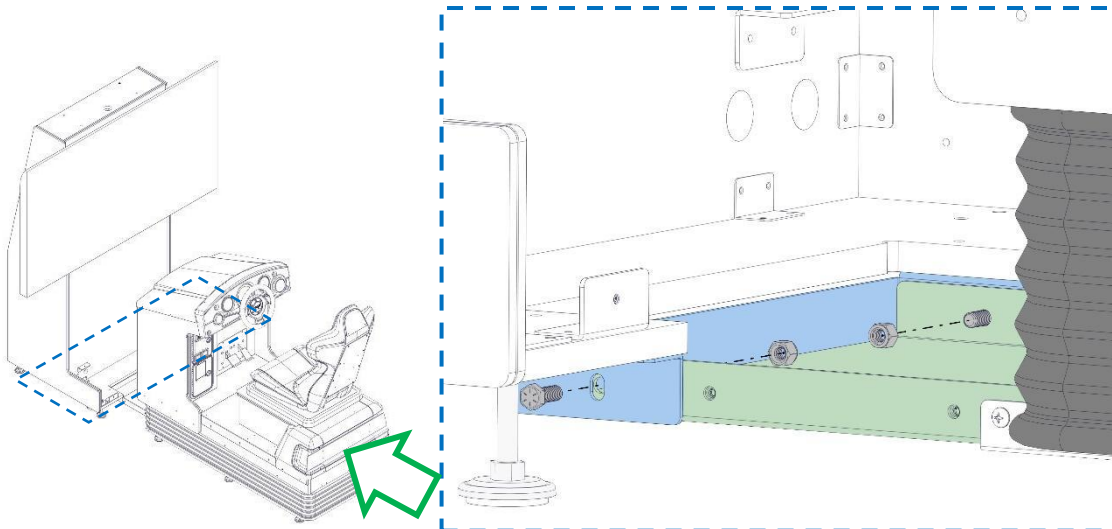
- 2) Open the upper back door and install the screen using the MS-PP-ZS-M8X45MM bolts and the FW-Z-3/8-1 washers. Is strongly recommended to be two technicians for this step.



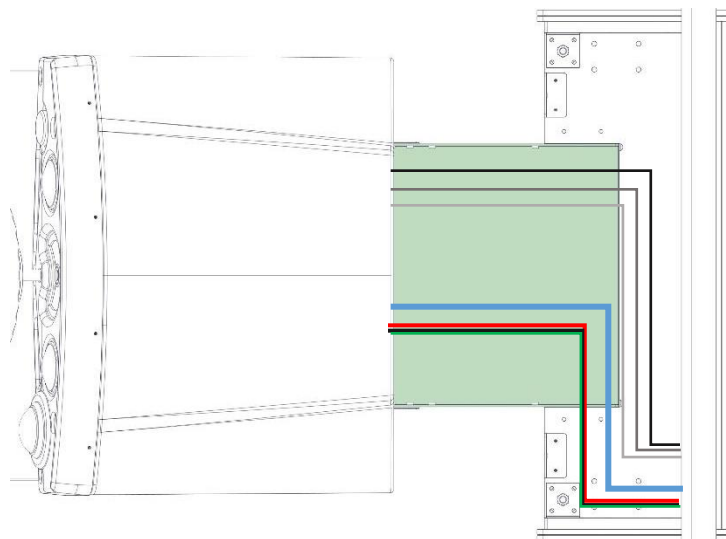
- 3) Install the wire cover base to the seat module using four BS-HRO-BS-1/4-20x1 screws.



- 4)** Place the seat module in front the screen and install it using the HS-HH-ZS-3/8-16X1 bolts and the NN-ZS-3/8-16 Nylon-locknuts.

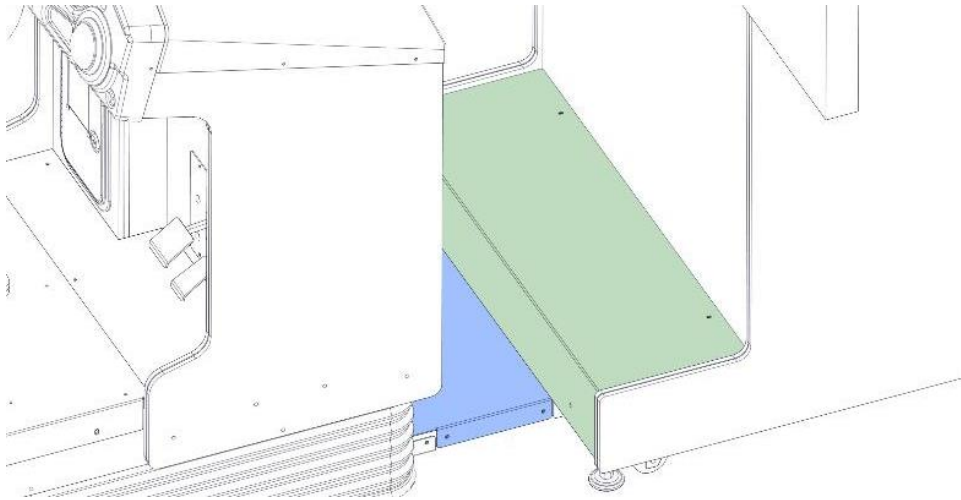


- 5)** Connect the cables and the air tube from the seat module to the screen module.

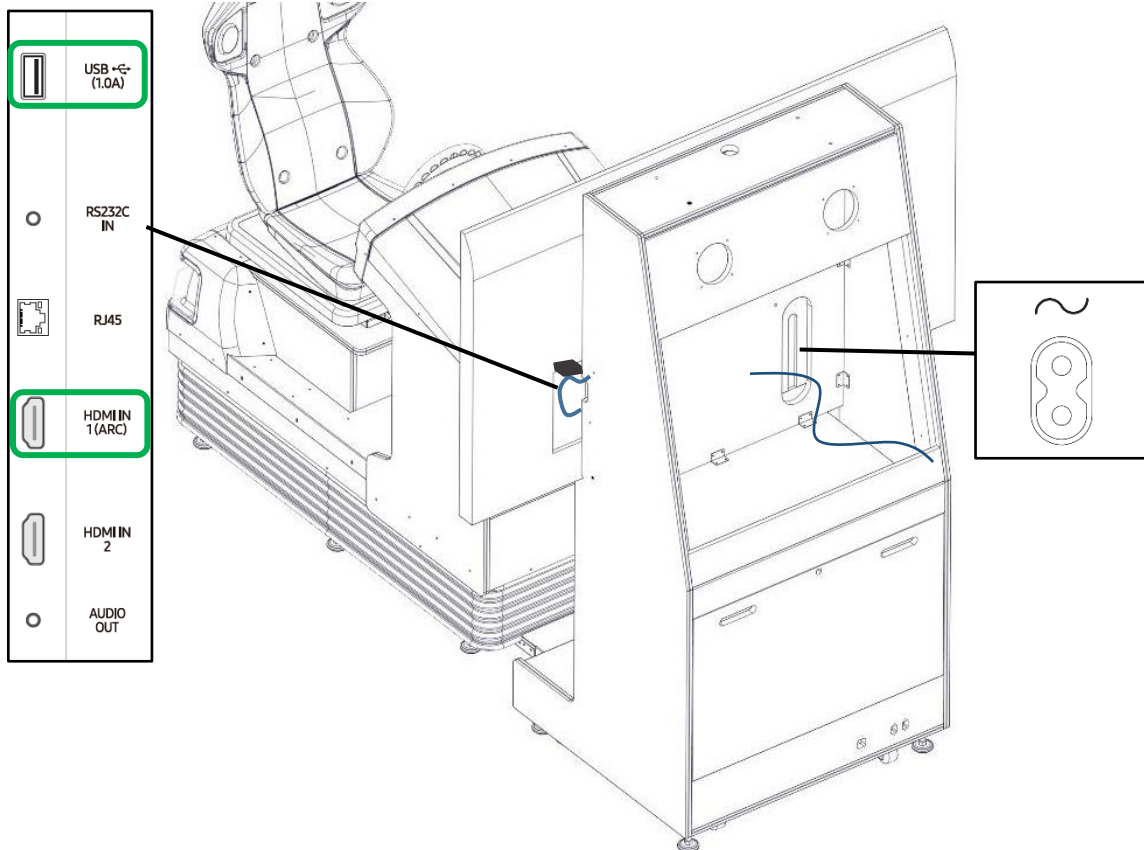


- USB Cable
- LED's power source
- I/O board cable
- Power cable
- AIR Tube

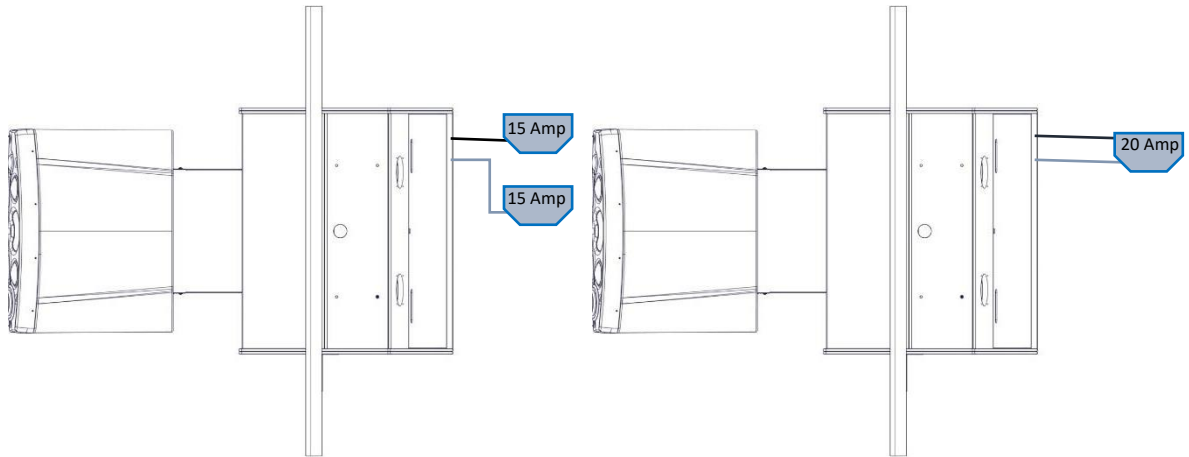
- 6) Install the wire cover using four BS-HRO-BS-1/4-20x1 screws and the base cover using the screws from step 1.



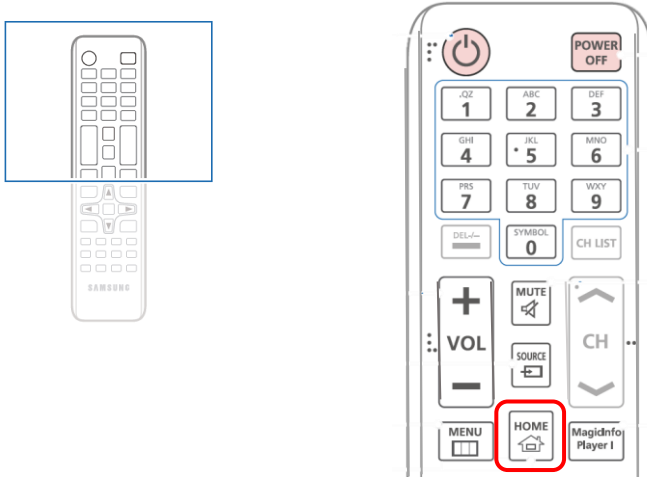
- 7) Go to the back of the machine and install the TV's power and the HDMI cable and plug in the USB Key NFSM Monitor Setting.



- 1) Plug the arcade into the power source. It's important to connect the air compressor to a separate power intel without being on the same 15 Amp breaker.

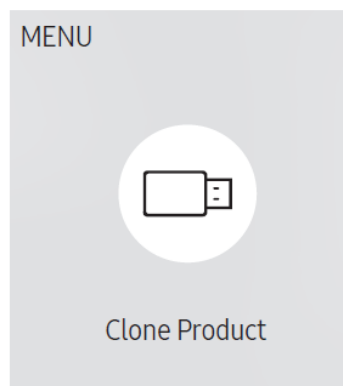


- 2) Power on the TV and press "HOME" on the remote control.

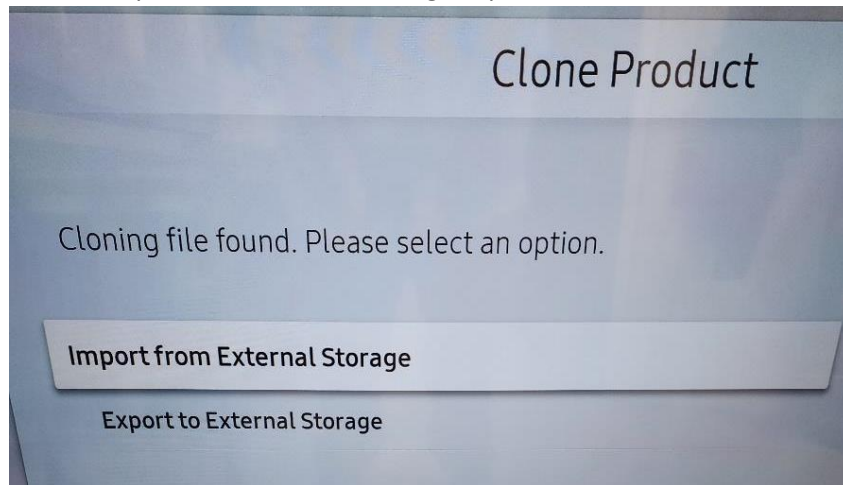


- 3) Select the Clone Product menu.

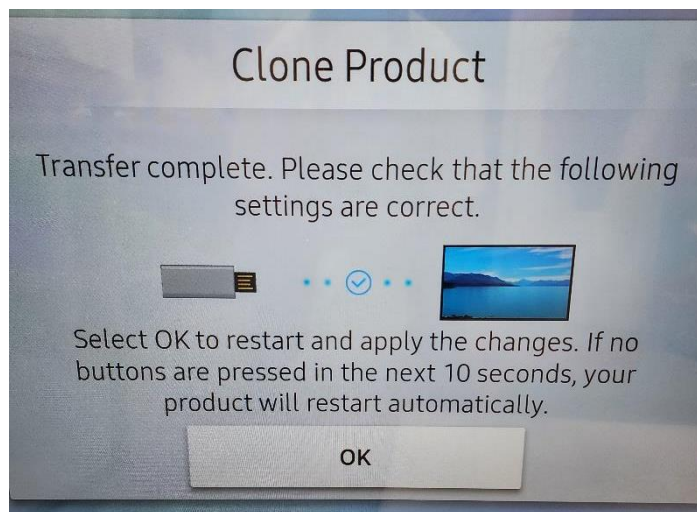
HOME → Clone Product → ENTER



- 1) Then select the “Import from External Storage” option.

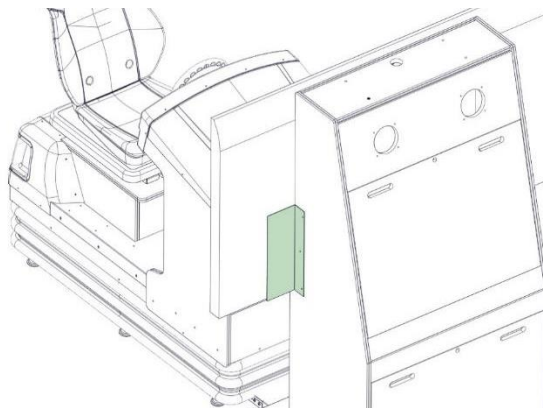


- 2) The settings transfer is done once you see this message on the screen. Select OK to restart and apply the changes. If no buttons are pressed in the next 10 seconds, your product will restart automatically.



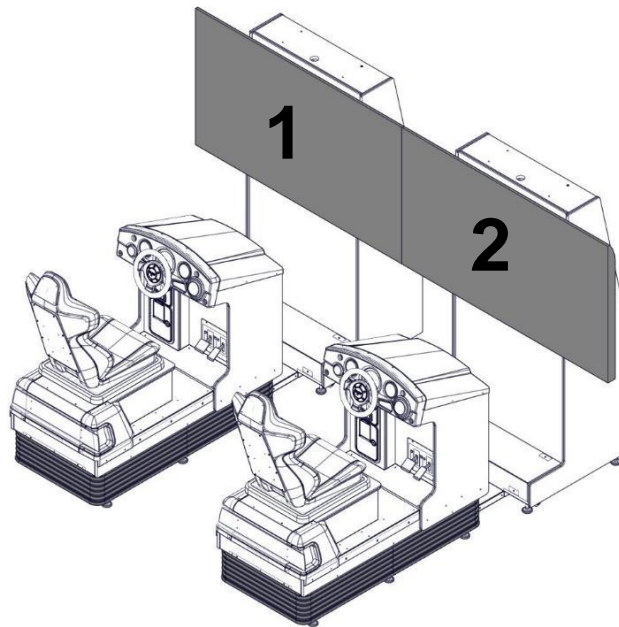
If you have any question about the Clone Product procedure, go to the page 54 on your tv manual.

- 3) Remove the USB from the tv and install the tv's plate using the three **MS-PRO-BS-8-32X3/4** screws.

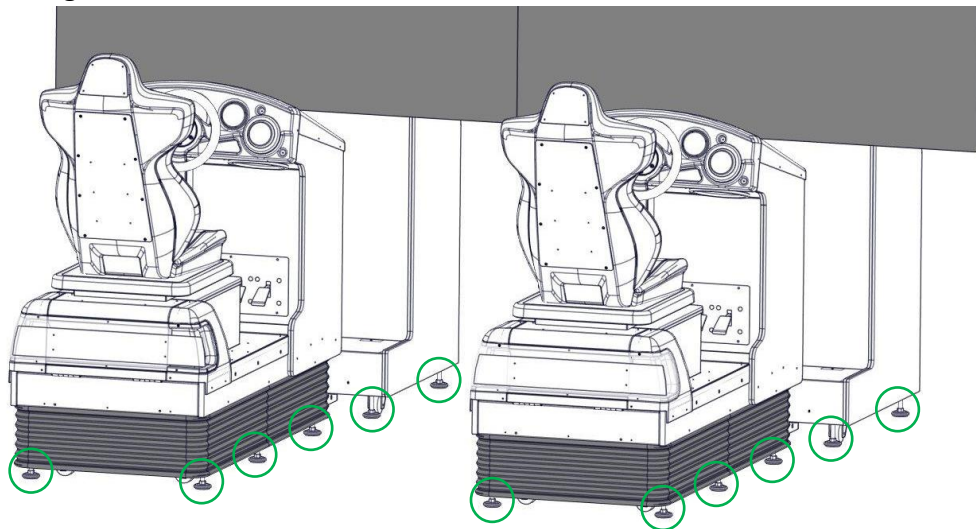


How to assemble and connect two *NFS Heat Takedown - Motion*

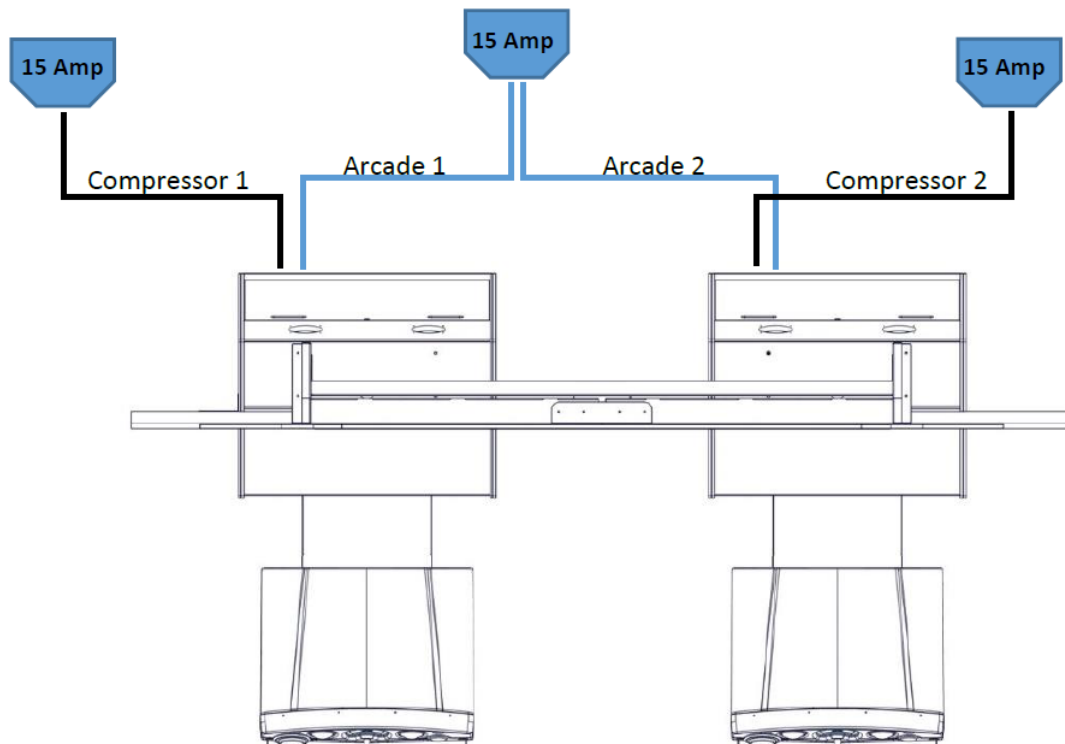
- 1) Place the machines beside each one. The first arcade to the left will be the player #1.



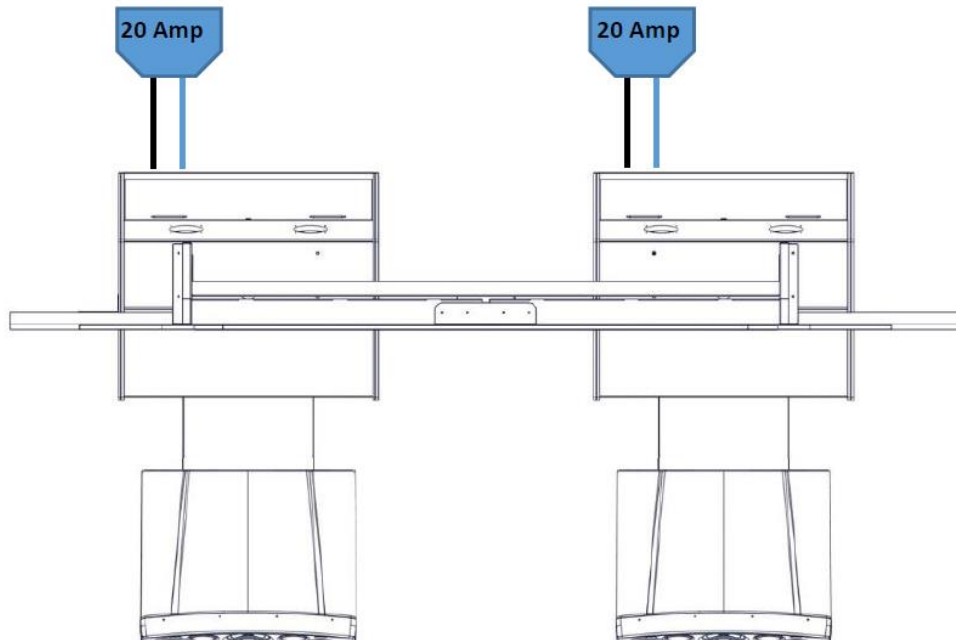
- 2) When you are pleased by the arrangement of the machines, secure them by fixing all the leveling mounts of each arcade.



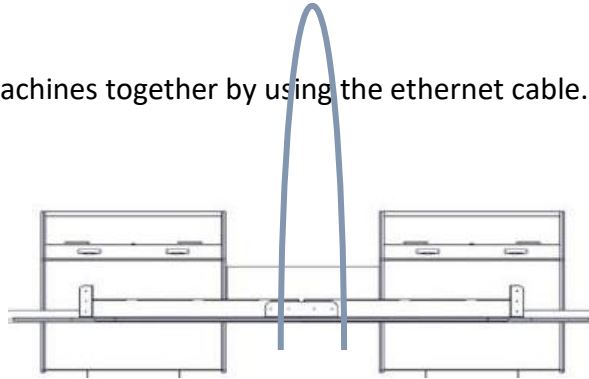
2 Arcades at 110V with 15 Amp inlets:



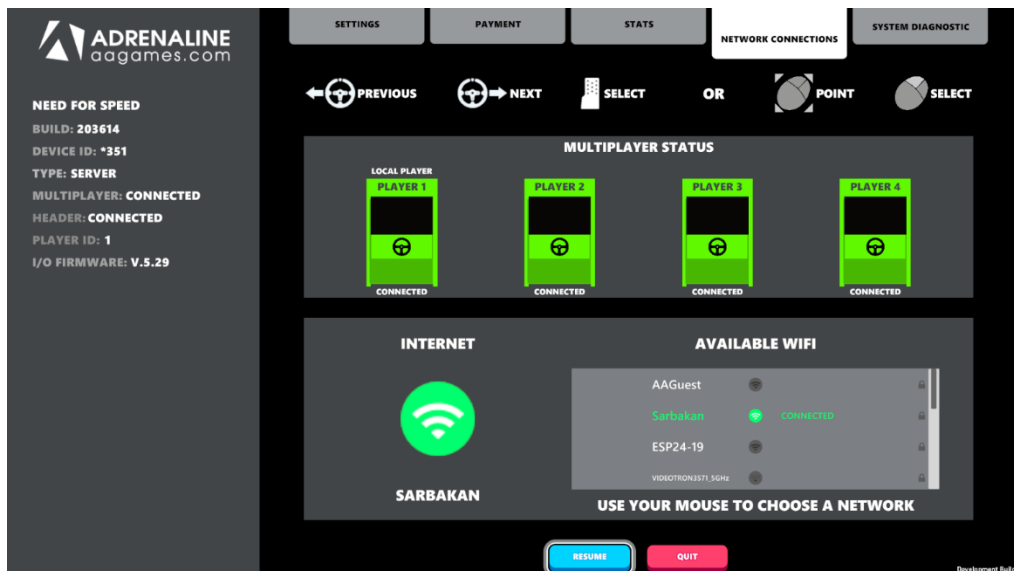
2 Arcades at 110V with 20 Amp inlets:



- 3) Connect the two machines together by using the ethernet cable.



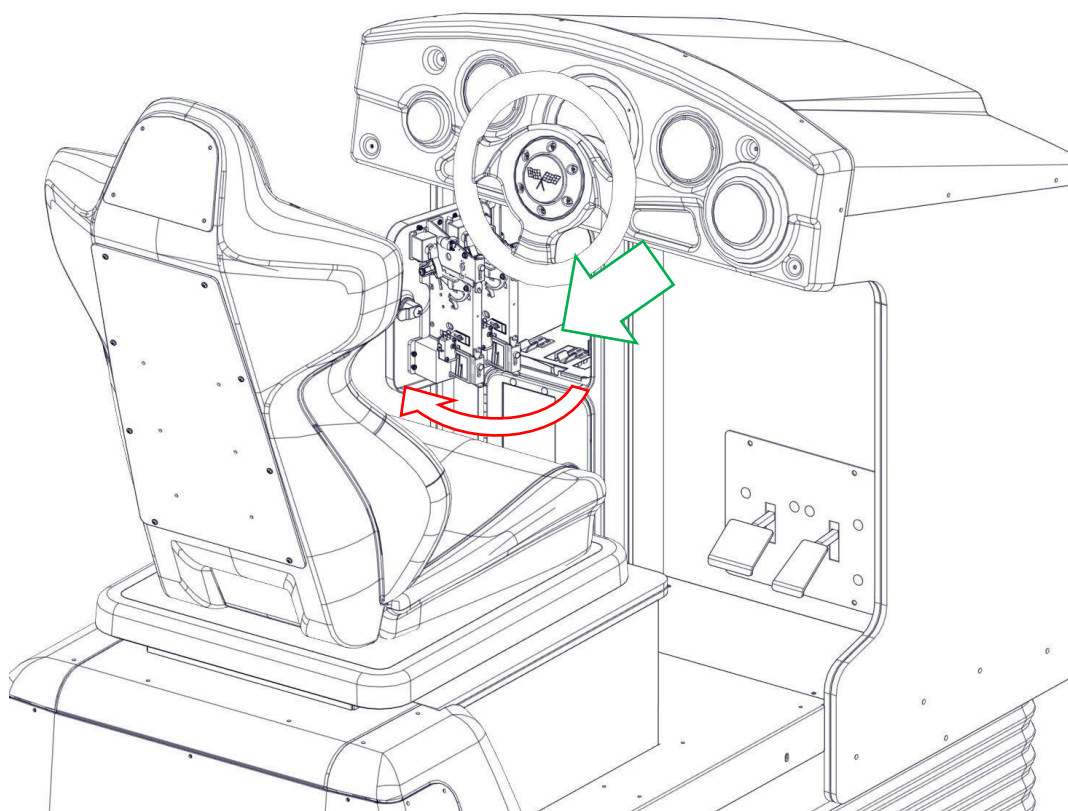
- 4) Use the operator menu to change the ID of each machine. To access the operator menu, push the white button which is inside the coin door of each machine.



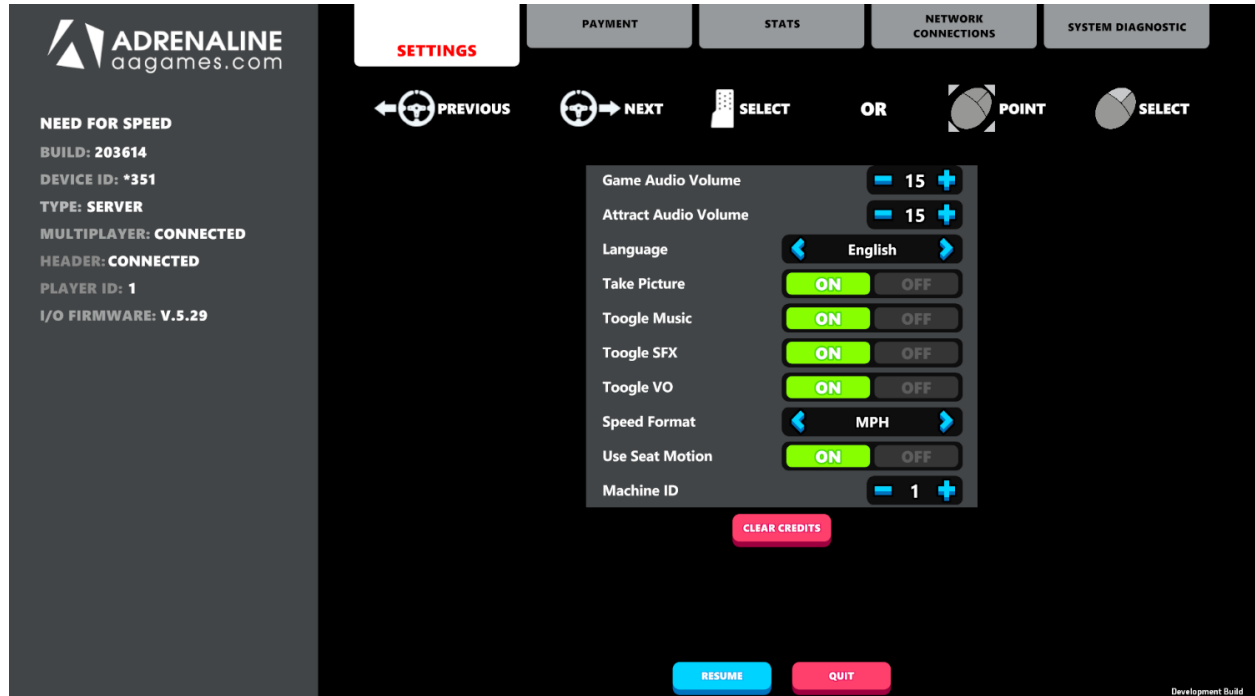
Chapter 05 – Operator Menu

Operator Menu

Access the Operator Menu by pressing the white operator menu button behind the coin door.

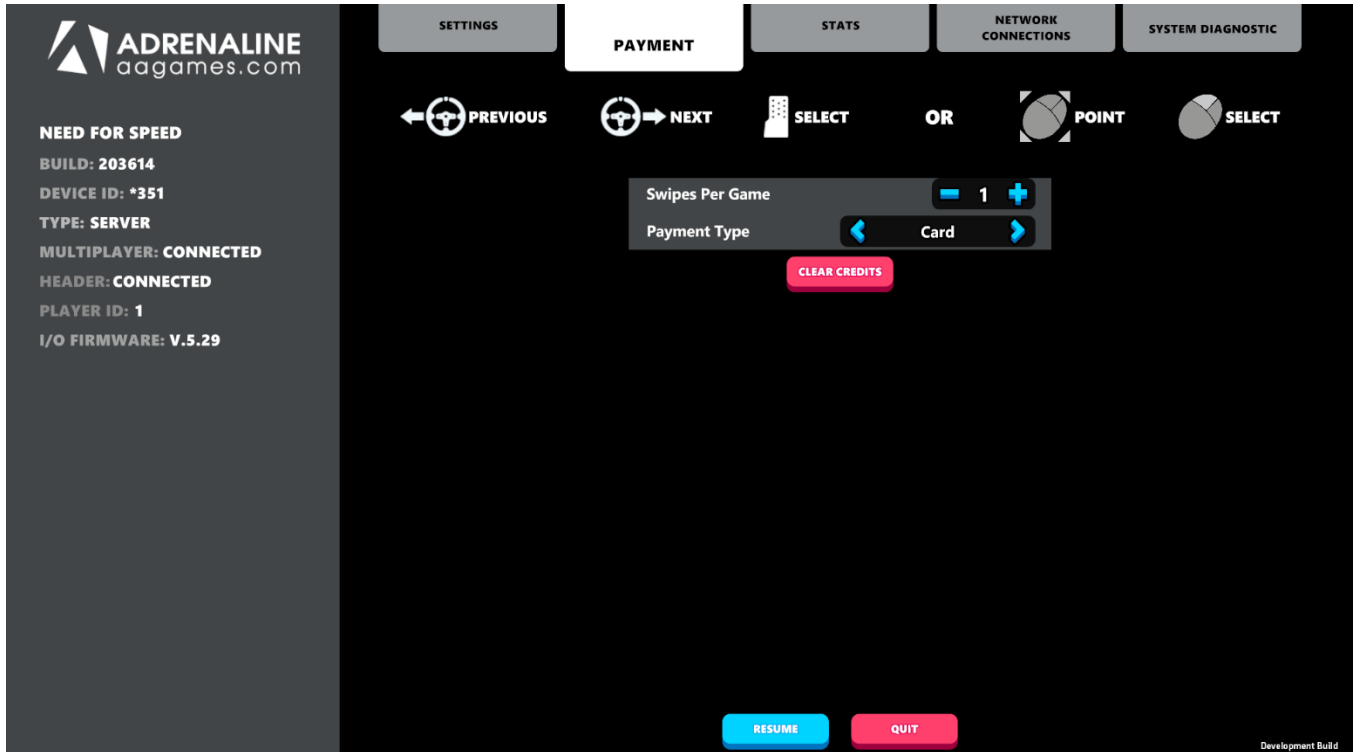


Settings



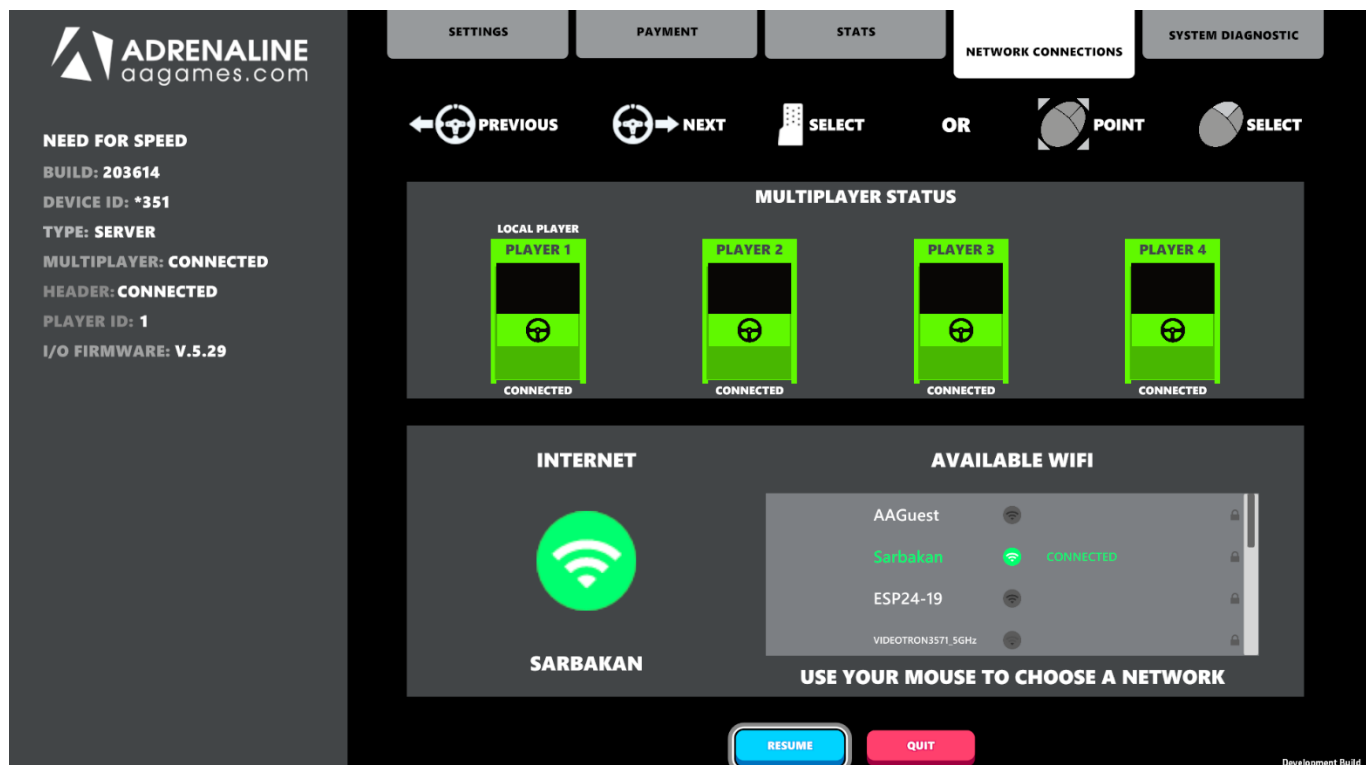
<u>Operator Menu</u>	<u>Values</u>	<u>What It Does</u>
Game Audio Volume	1-20	Adjusts the in-game audio volume. "0" will mute the game.
Attract Audio Volume	0-20	Adjusts the volume of the voice attract loop. "0" will mute
Language	English/Français	Switches the game and the menu's language
Take Picture	On / Off	Takes pictures of each player at the start of the game
Toggle Music	On / Off	Toggles in-Game Music On or Off
Toggle SFX	On / Off	Toggles in-Game Sound Effects On or Off
Toggle VO	On / Off	Toggles in-Game Voices On or Off
Speed Format	MPH / KPH	Toggles speed indicator from MPH to KPH
Use Seat Motion	On / Off	On Motion cabinets to toggle motion Off
Machine ID	1-4	Sets the Machine ID, Set games 1-4 (left to right)
Payment Type	Credit / Card	Changes the credit type. "Credits" = Coins and "Card" = Card Reader. This will change the in-game text accordingly.
Clear Credits		Resets the Inserted credits to 0 if more than 40 credits are entered.
Resume Game		Exits the Operator Menu and returns to the game.
Quit Game		Exits the game and returns to the Windows desktop.

Payments



<u>Operator Menu</u>	<u>Values</u>	<u>What It Does</u>
Credit per Game	1-20	Set Price per Play
Payment Type	Credit / Card	Changes the credit type. "Credits" = Coins and "Card" = Card Reader. This will change the in-game text accordingly.
Clear Credits		Resets the Inserted credits to 0 if more than 40 credits are entered.
Resume Game		Exits the Operator Menu and returns to the game.
Quit Game		Exits the game and returns to the Windows desktop.

Network Connections



The left menu

The left menu is a quick status overview of the state of the cabinet.

BUILD	This is the version number of the game software
DEVICE ID	The unique ID of your machine
TYPE	This will tell you if this machine is the server or a client
MULTIPLAYER	If the cabinet is connected or not to other games.
HEADER	If the computer sees a header connected to its video cable
PLAYER ID	The position of the cabinet. Cabinet 1 must be the completely at the left of the setup and cabinet 4 at the right end. Each game must have a different ID.
I/O FIRMWARE	The firmware version of the I/O board

Network connections sections

The game is using a local wired network for Multiplayer play. It is strongly recommended to connect each game to your local Wi-Fi internet access. This will enable the game to download updates automatically.

Multiplayer status

The upper part of this screen will indicate the status of your cabinets.

Red cabinet indicates that this cabinet is not plugged to the rest of the network via the network switch and green indicates that everything is fine.

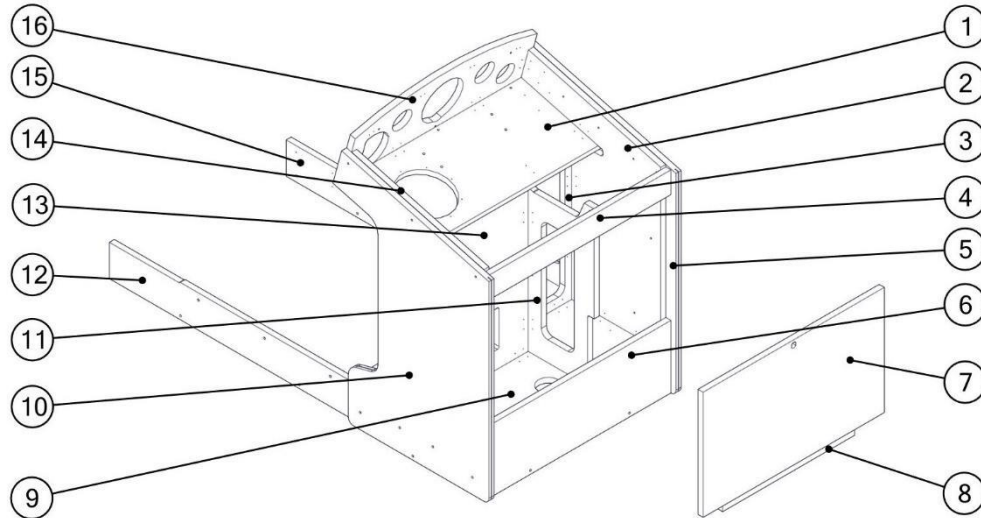
Available wi-fi

The lower part of the screen will allow you to connect to an available WIFI network.

The network must be password protected. You move to the network you want to connect to, press the pedal, then enter the network's password. The icon below the "Internet" label will tell you if you are connected or not to the WIFI network and the signal strength.

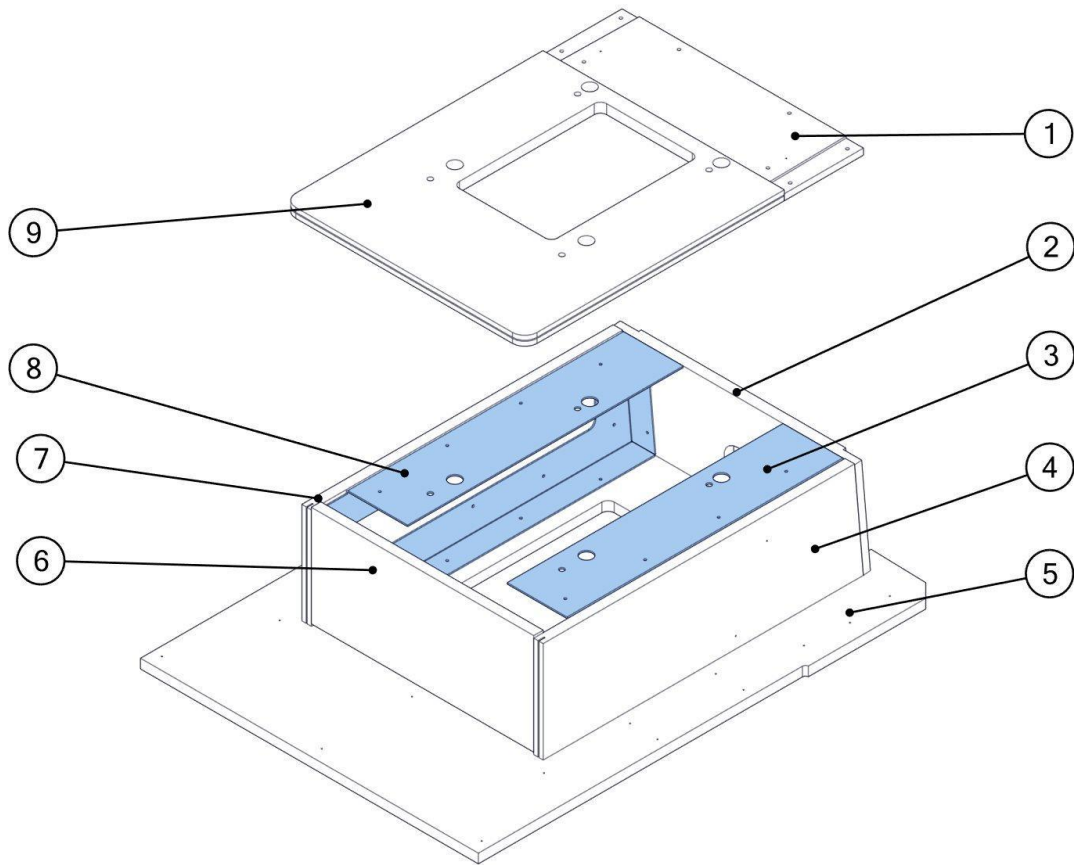
Chapter 06 - Parts

Motion cabinet



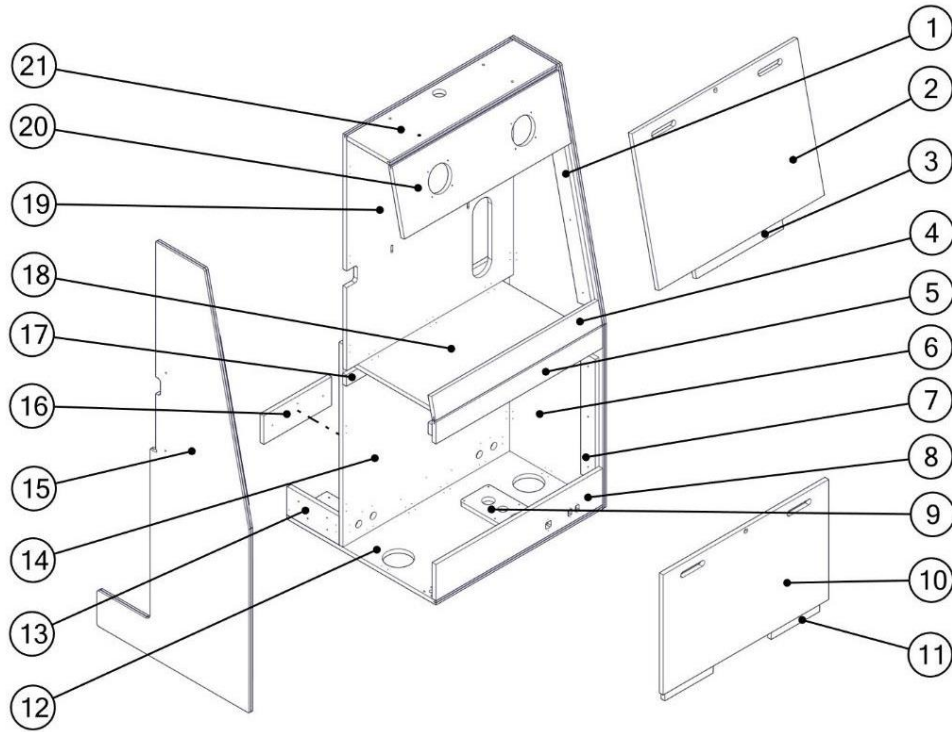
Ref	Part Description	Part #	QTY
1	Speaker Mounting Panel Melamine Dash & Coin Cabinet	NFSM-02-0031-15	1
2	Printed Plywood Left Sides Dash & Coin Cabinet	NFSM-02-0031-11	1
3	Cash Cover Mounting Panel Melamine Dash & Coin Cabinet	NFSM-02-0031-06	1
4	Right Side Printed Melamine Dash & Coin Cabinet	NFSM-02-0031-10	1
5	Left Side Printed Melamine Dash & Coin Cabinet	NFSM-02-0031-03	1
6	Back Bottom Melamine Dash & Coin Cabinet	NFSM-02-0031-08	1
7	Back Cover Melamine Dash & Coin Cabinet	NFSM-02-0031-09	1
8	Back Cover Stoper Melamine Dash & Coin Cabinet	NFSM-02-0031-14	1
9	Plywood Floor Dash & Coin Cabinet	NFSM-02-0031-01	1
10	Right Side Printed Melamine Dash & Coin Cabinet	NFSM-02-0031-04	1
11	Cash Cover Side Panel Melamine Dash & Coin Cabinet	NFSM-02-0031-13	1
12	Printed Plywood Right Sides Dash & Coin Cabinet	NFSM-02-0031-16	1
13	Pedal Panel Melamine Dash & Coin Cabinet	NFSM-02-0031-05	1
14	Right Side-Lining Melamine Dash & Coin Cabinet	NFSM-02-0031-12	1
15	Printed Plywood Left Sides Dash & Coin Cabinet	NFSM-02-0031-02	1
16	Dash Mounting Panel Melamine Dash & Coin Cabinet	NFSM-02-0031-07	1

Seat Cabinet



Ref	Part Description	Part #	QTY
1	Top Back Melamine Seat Cabinet	NFSM-02-0032-08	1
2	Back Melamine Seat Cabinet	NFSM-02-0032-04	1
3	Left Seat Reinforcement	NFSM-01-0029	1
4	Printed Melamine Left Side Seat Cabinet	NFSM-02-0032-02	1
5	Plywood Floor Seat Cabinet	NFSM-02-0032-01	1
6	Front Melamine Seat Cabinet	NFSM-02-0032-05	1
7	Printed Melamine Right Side Seat Cabinet	NFSM-02-0032-03	1
8	Right Seat Reinforcement	NFSM-01-0028	1
9	Top Melamine Seat Cabinet	NFSM-02-0032-06	1

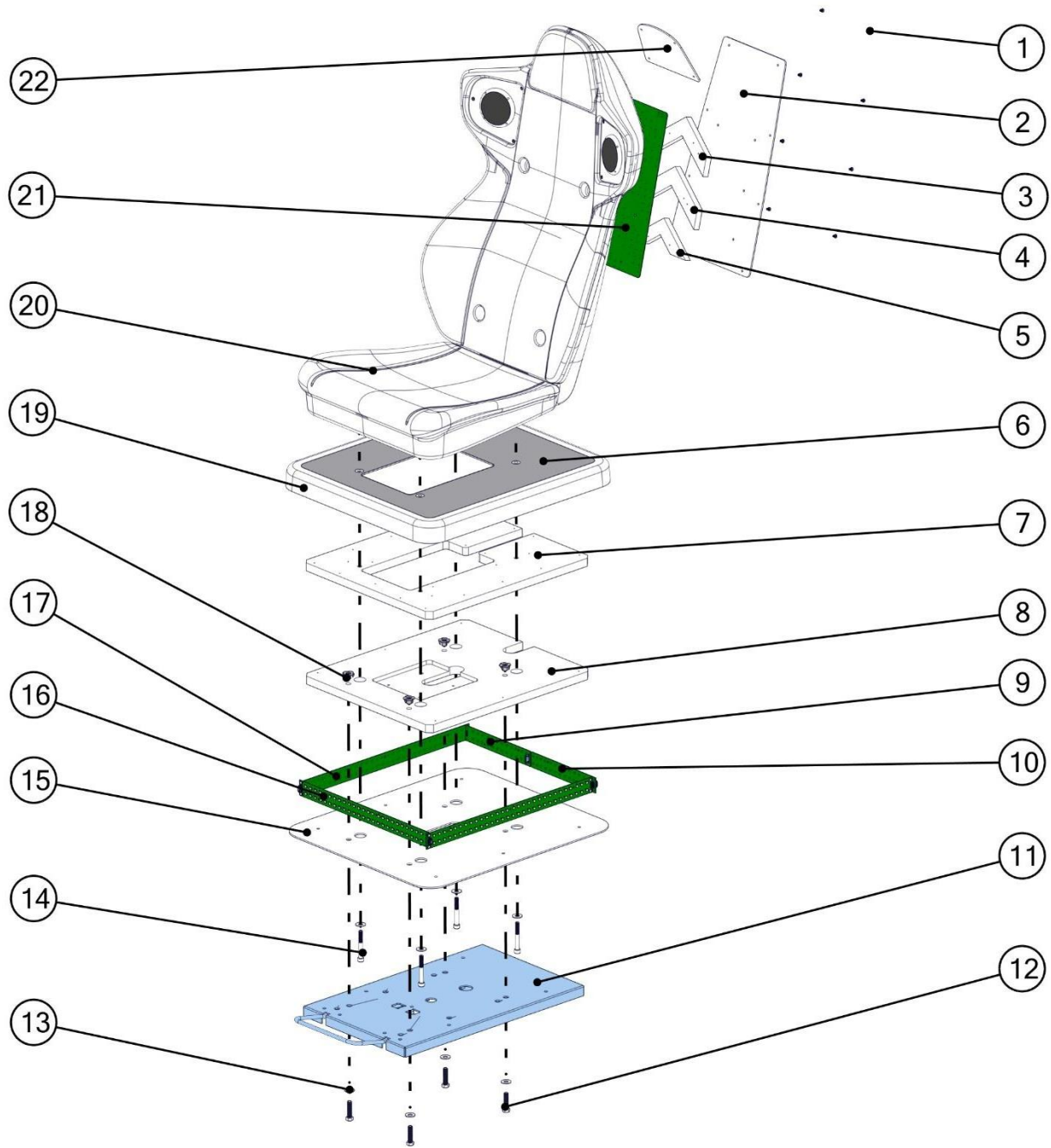
Screen Cabinet



Ref	Part Description	Part #	QTY
1	Upper Cover Stopper Screen Melamine Cabinet	NFSM-02-0003-13	2
2	Upper Cover Screen Melamine Cabinet	NFSM-02-0003-10	1
3	Upper Cover Support Screen Melamine Cabinet	NFSM-02-0003-12	1
4	Upper Middle Back Screen Melamine Cabinet	NFSM-02-0003-9	1
5	Lower Middle Back Screen Melamine Cabinet	NFSM-02-0003-8	1
6	Left Side Screen Melamine Cabinet	NFSM-02-0003-2	1
7	Lower Cover Stopper Screen Melamine Cabinet	NFSM-02-0003-15	2
8	Back EMI Mounting Screen Melamine Cabinet	NFSM-02-0003-6	1
9	Multi Compressor Base	NFSM-02-0012	1
10	Lower Back Cover Screen Melamine Cabinet	NFSM-02-0003-7	1
11	Lower Cover Support Screen Melamine Cabinet	NFSM-02-0003-14	2
12	Screen Cabinet Plywood Floor	NFSM-02-0003-1	1
13	Cover Support Screen Melamine Cabinet	NFSM-02-0003-4	2
14	Printed Melamine Screen Cabinet Front Panel	NFSM-02-0003-5	1
15	Right Side Screen Melamine Cabinet	NFSM-02-0003-17	1
16	Cover Stopper NFSM	NFSM-02-0003-20	1
17	Electronic Shelf Support Screen Melamine Cabinet	NFSM-02-0003-18	2
18	Inside Electronic Shelf Screen Melamine Cabinet	NFSM-02-0003-16	1
19	Back Screen for Screen Melamine Cabinet	NFSM-02-0003-19	1
20	Screen Melamine Cabinet Fans Holder	NFSM-02-0003-11	1

21	Screen Melamine Top Cabinet	NFSM-02-0003-3	1
----	-----------------------------	----------------	---

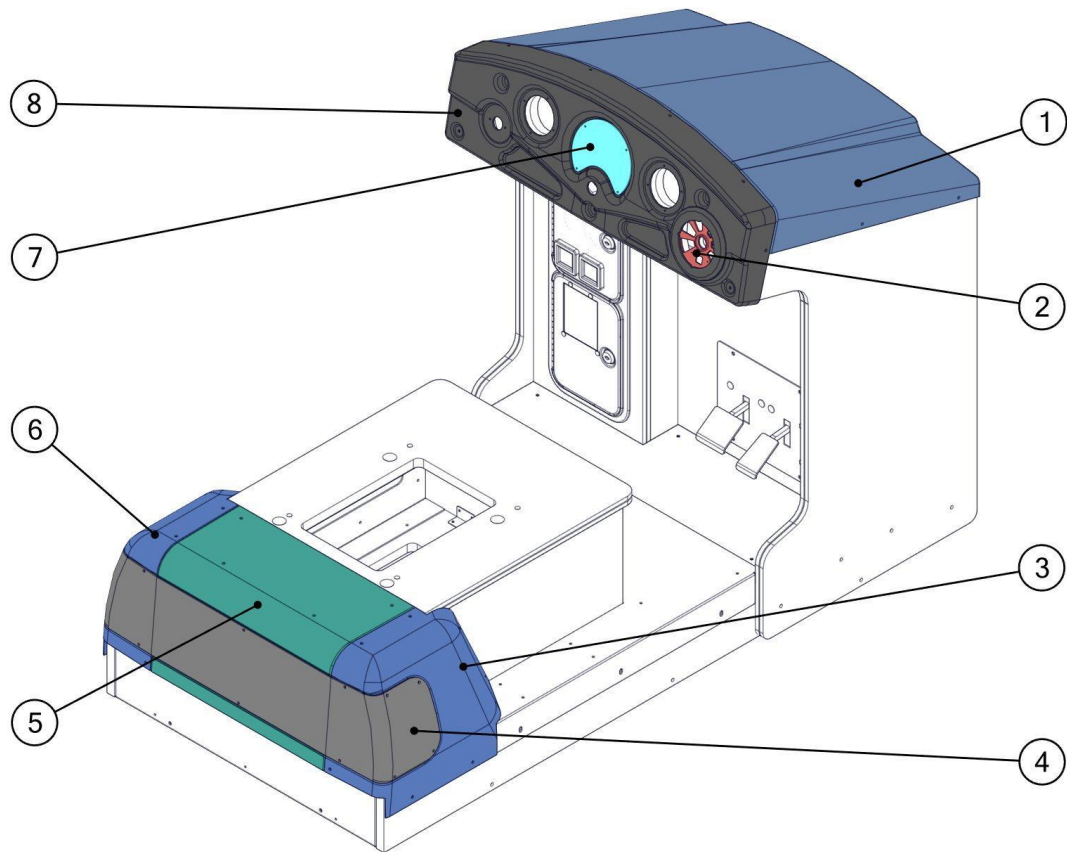
Seat assembly



Ref	Part Description	Part #	QTY
1	Rounded Head Screw, Phillips, Black M4-0.7X6MM	MS-PRO-BS-M4-0.7X6MM	8
2	Back Seat Led Cover	NFSM-07-0017	1
3	Back Upper Arrow LED Shim	NFSM-02-0006-01	1

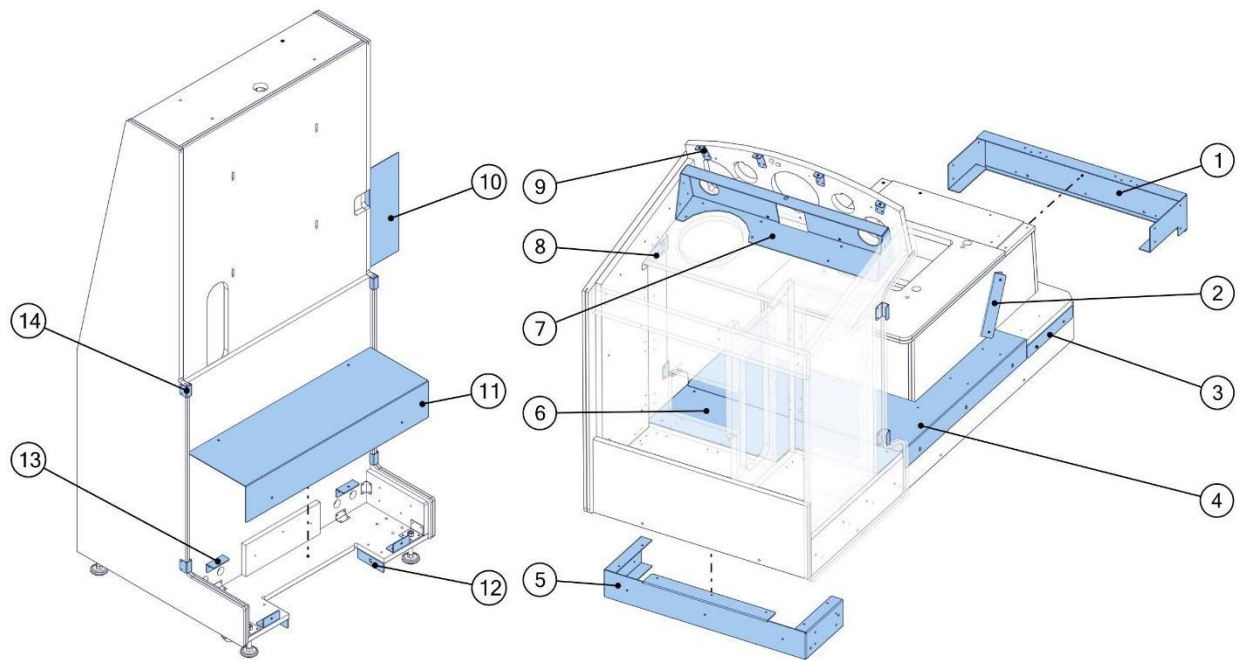
4	Back Middle Arrow LED Shim	NFSM-02-0006-02	1
5	Back Bottom Arrow LED Shim	NFSM-02-0006-03	1
6	Seat Sticker Cover	NFSM-09-0002	1
7	Top Seat Base	NFSM-02-0002-01	1
8	Bottom Seat Base	NFSM-02-0002-02	1
9	Back Seat RGB Strip Start, NFS	AAG-14-0021	1
10	Back Seat RGB Strip End	AAG-14-0020	1
11	Seat Slider	AAG-01-0007	1
12	Hex Head Screw, Yellow Zinc, 3/8-16x3/4"	HS-HH-YS-3/8-16x3/4	4
13	Flat Washer, 3/8", USS, Zinc, 1" OD	FW-Z-3/8-1	8
14	Socket Head Screw, Black-Oxide, Steel, M8-1.25x65MM	MS-HSO-BS-M8x65MM	4
15	Seat LED Bottom Cover	NFSM-07-0010	1
16	Front Seat RGB Strip, NFS	AAG-14-0019	1
17	Side Seat RGB Strip, NFS	AAG-14-0018	2
18	Tee Nuts, Zinc Plated, 3/8"-16, 0.501" Installed Length	TN-Z-3/8-16	4
19	Seat LED Cover	NFSM-07-0009	1
20	Black Mold Seat	AAG-07-0008	1
21	Back seat Arrow, NFS	AAG-14-0022	1
22	Seat Back Top Plate	NFSM-07-0018	1

Plastic Parts



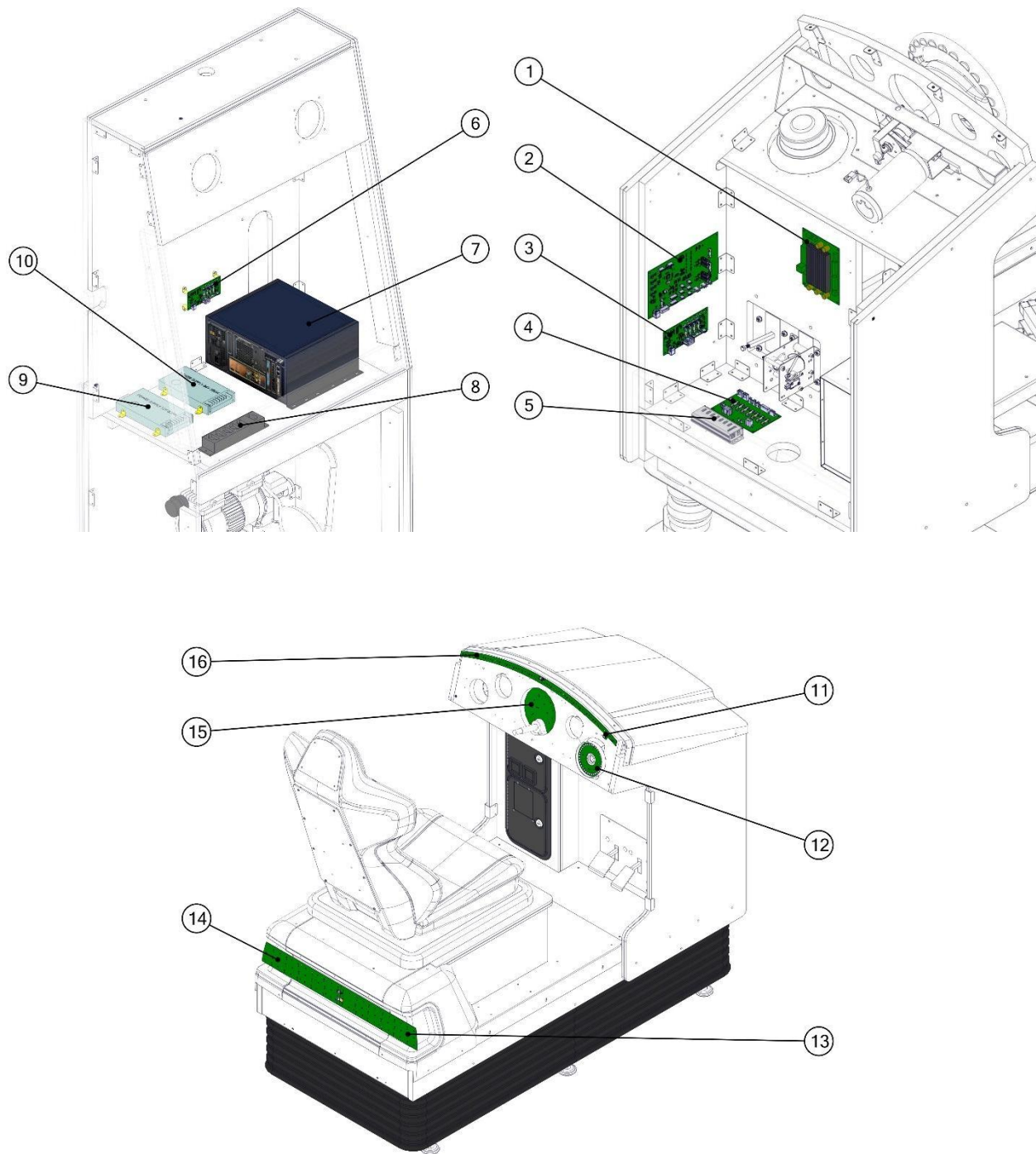
Ref	Part Description	Part #
1	Car Hood	NFSM-07-0026
2	Push Button PCB Holder	NFSM-07-0001
3	Rear Seat Right Cover	NFSM-07-0036
4	Rear Seat Base Cover	NFSM-07-0040
5	Rear Seat Center Cover	NFSM-07-0037
6	Rear Seat Left Cover	NFSM-07-0035
7	Dash Cadran Center	NFSM-07-0045
8	Dash, Need for Speed Motion	NFSM-07-0022

Metal Parts



Ref	Part Description	Part #	QTY
1	Rear Frame	NFSM-01-0042	1
2	Front Rear Cover Bracket	NFSM-01-0025	2
3	Rear Cover Bracket	NFSM-01-0026	2
4	Seat Plate	NFSM-01-0036	1
5	Front Base Frame	NFSM-01-0043	1
6	Pedal Floor Protector	NFSM-01-0015	1
7	Steering Wheelbase	NFSM-01-0012	1
8	LED Side Cover	NFSM-01-0061	1
9	Front Dash Bracket	NFSM-01-0013	4
10	Screen Rear Cover Plate	NFSM-01-0033	1
11	Base Cover for Cabinet	NFSM-01-0005	1
12	Wire Cover Bracket	NFSM-01-0004	2
13	Base Cover for Bottom Holder	NFSM-01-0008	4
14	Exterior LED Holder	NFSM-01-0060	8

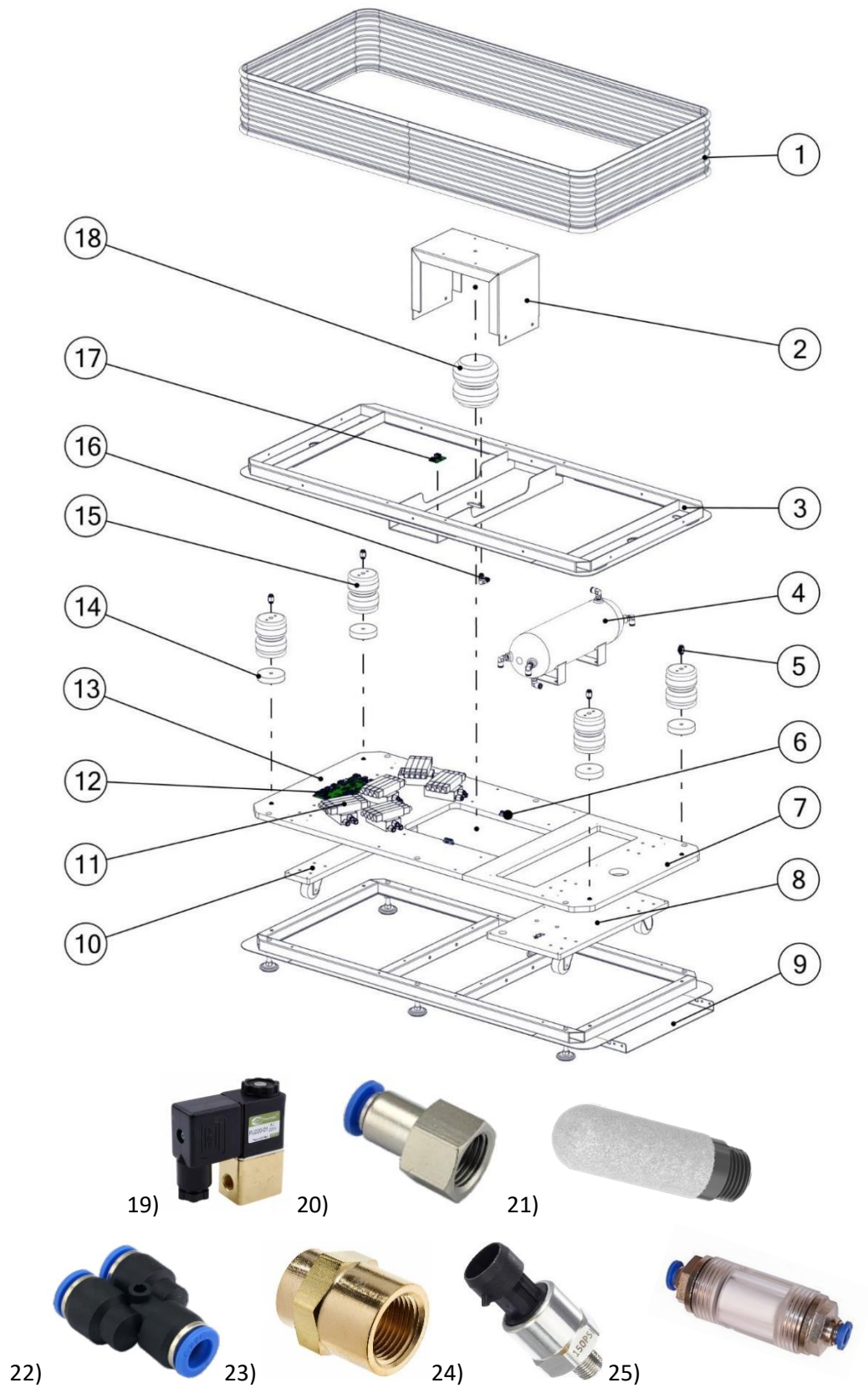
Electronics' location



Ref	Part Description	Part Number
1	7.1 Audio Amplifier Board, Need for Speed	AAG-04-0066
2	Programmed I/O Board 1 Motor Output For NFS/NFSM	AAG-04-0076-PROG-NFS
3	RGB Led Controller Board Assembly 12V	AAG-04-0015-12RL
4	Fuse Board for NFS Motion	AAG-04-0072

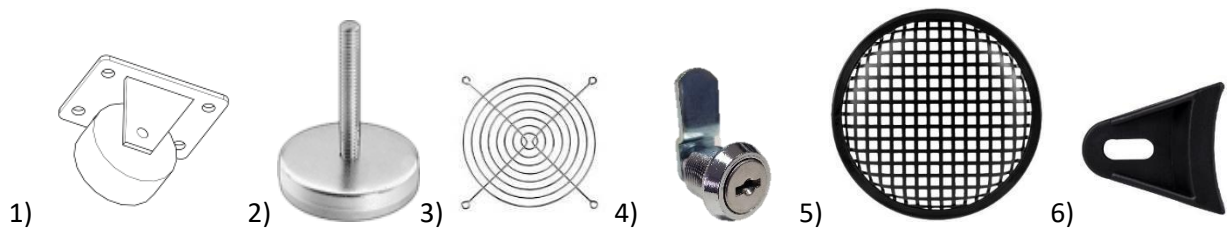
5	7-Port USB, 3.0 Hub, Type A Female USB	AAG-11-0011
6	RGB Led Controller Board Assembly 12V	AAG-04-0015-12RL
7	Pc Box for Need for Speed Motion, With Asrock B660M and SSD	ADR-11-1022-NFSM
8	Power Bar, 5 Outlets	INV-05-1242
9	Switching Power Supply 12V, 350W, 110/220V Manual Selection	AAG-13-0029
10	Switching Power Supply 24V, 350W, 110/220V Manual Selection	AAG-13-0028
11	Led For NFS Motion Dash, Right Side	AAG-14-0016
12	Push-Button RGB Led Ring, Need for Speed	AAG-14-0011
13	LEDs For Need for Speed Motion License Plate, Right Side	AAG-14-0041
14	LEDs For Need for Speed Motion License Plate, Left Side	AAG-14-0040
15	Led For NFS Motion Dash, Speedometer	AAG-14-0017
16	LEDs For NFS Motion Dash, Left Side	AAG-14-0015

Pneumatic system



Ref	Part Description	Part Number	QTY
1	Accordion Seal, 0.65" x 4" With Steel	AAG-05-0049	1
2	Center Bottom Plate, Need for Speed Motion	NFSO-01-0011	1
3	Upper Frame Weld, Need for Speed Motion	NFSO-01-0020	1
4	2.0 Gallon Air Tank	AAG-05-0041	1
5	Male, Straight Push in Fittings, 3/8", 1/4 NPT	AAG-05-0035	20
6	Optical Sensor, 4-30 Cm, Analog	AAG-05-0054	2
7	Front Plywood Floor Panel	NFSO-02-0001-1	1
8	Tank Plywood Base Floor Panel	NFSO-02-0001-3	1
9	Bottom Frame Weld, Need for Speed Motion	NFSO-01-0110	1
10	Shim Plywood for Leveler on Floor Panel	NFSO-02-0001-4	1
11	Pack Solenoid Valves with Intake	AAG-05-0042	5
12	Programmed Pneumatic Controller Board, Need for Speed Motion	AAG-04-0026-PROG-NFSM	1
13	Back Plywood Floor Panel	NFSO-02-0001-2	1
14	Shim Plywood for Small Air Spring on Floor Panel	NFSO-02-0001-5	4
15	Small Air Spring, Model: 2B2200, Need for Speed Motion	AAG-05-0044	4
16	Male, Elbow Push in Fittings, 3/8", 1/4 NPT	AAG-05-0037	7
17	Programmed Pneumatic Controller Board, Need for Speed Motion	AAG-04-0026-PROG-NFSM	1
18	Big Air Spring, Model: 2B6956, Need for Speed Motion	AAG-05-0045	1
19	Drain Solenoid Valve, 12V	AAG-05-0051	1
20	Female, Straight Push in Fittings, 3/8", 1/4 NPT	AAG-05-0036	5
21	Pneumatic Air Silencers 1/4	AAG-05-0040	5
22	Union Y Inch, Composite, Push to Connect, Fittings 3/8"	AAG-05-0038	2
23	Pipe Fitting, Reducing Coupling, Brass, 1/4" F NPT x 1/8" F NPT	PF-RC-B-1/4Fx1/8F	1
24	Modified Pressure Transducer, 150 PSI, 1/8 NPT	AAG-05-0050-MOD	2
25	3/8 Push-In Serviceable Filter	AAG-05-0059	5

Mechanical Parts



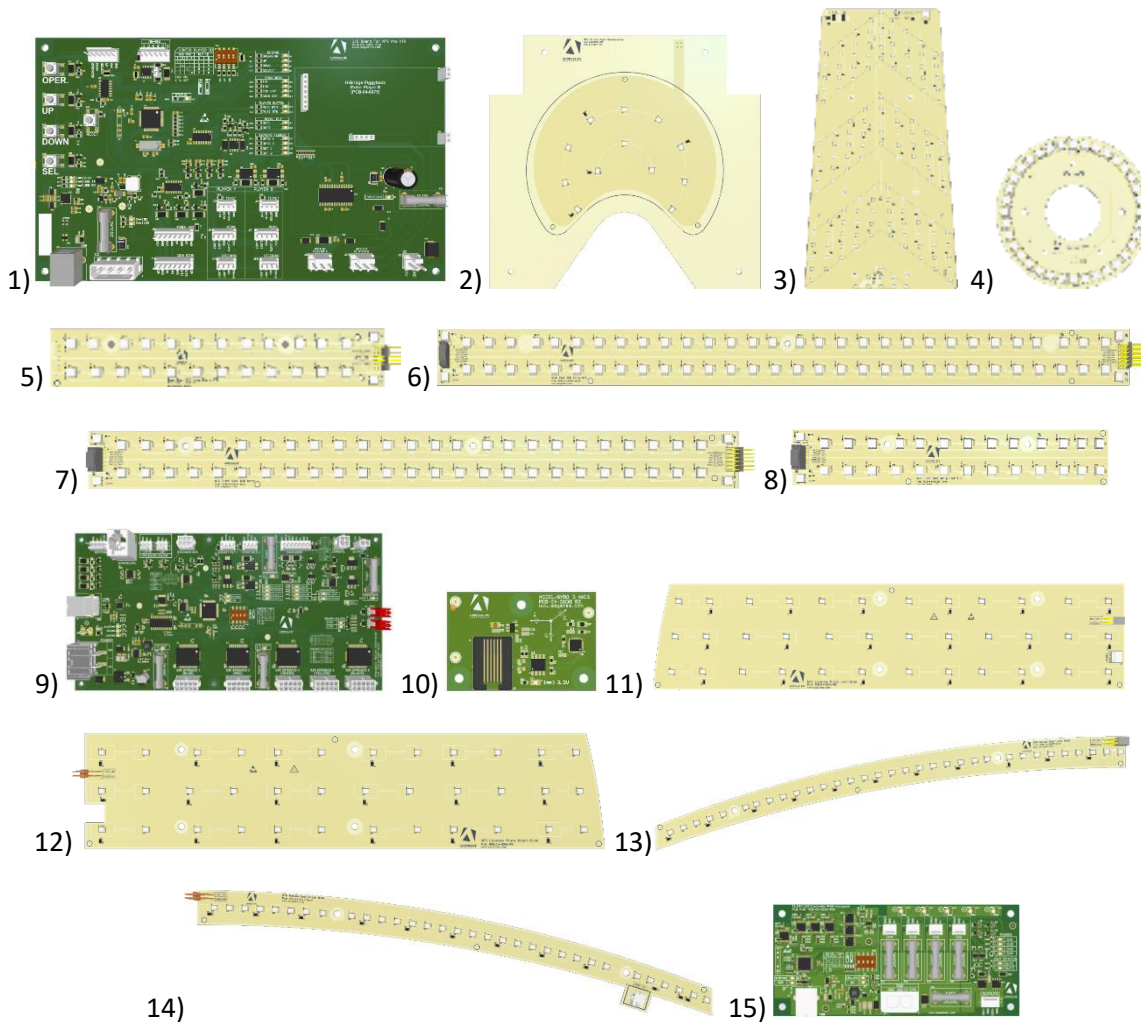
Ref	Part Description	Part #
1	General Duty Rubber Caster, 2-1/2"	INV-F25083
2	Leg Leveler 1/2"-13 x 4" Thread, 2-3/8" Base Diameter	INV-62805K-39
3	Grill 120mm	ADR-GRILLE-120MM
4	Cam Lock for Panel Thickness up to 23mm	ADR-14-2010
5	8" Waffle Style Speaker Grill	ADR-269-2112
6	Black Steel Grill Clamp For Woofer	AAG-01-0011

Sound system



Ref	Part Description	Part #
1	Round Black Speaker, 8 Ohm, 3.3"	AAG-13-0025
2	GSR 8SW-4 8" Poly Cone Subwoofer 4 Ohm	ADR-292-480
3	Audio Bass Shaker 50 Watts	AAG-13-0027
4	7.1 Audio Amplifier Board, Need for Speed	AAG-04-0066

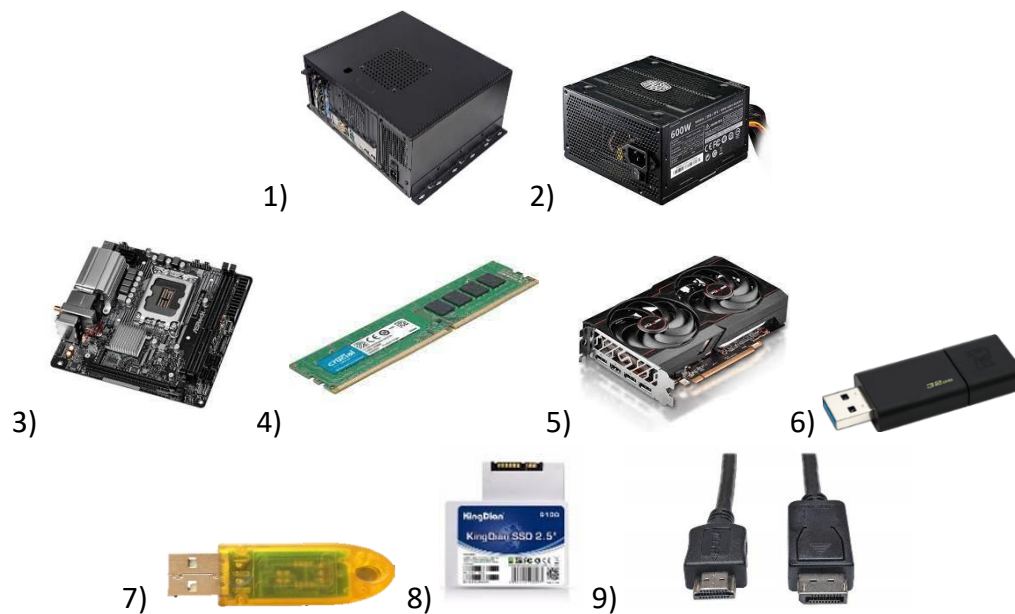
Electronic boards



Ref	Part Description	Part #
-----	------------------	--------

1	Programmed I/O Board 1 motor Output for NFS/NFSM	AAG-04-0076-PROG-NFS
2	NFS Motion Dash Speedometer	AAG-14-0017
3	Back seat Arrow, NFS	AAG-14-0022
4	Push-Button RGB Led Ring, NFS	AAG-14-0011
5	Back Seat RGB Strip Start, NFS	AAG-14-0021
6	Side Seat RGB Strip, NFS	AAG-14-0018
7	Front Seat RGB Strip, NFS	AAG-14-0019
8	Back Seat RGB Strip End	AAG-14-0020
9	Programmed Pneumatic Controller Board, Need for Speed Motion	AAG-04-0026-PROG-NFS
10	Board For Accelerometer and Gyroscope 3 Axes	AAG-04-0038
11	NFS License Plate Left-Side	AAG-14-0040
12	NFS License Plate Right-Side	AAG-14-0041
13	NFS Motion Dash Left-Side	AAG-14-0015
14	NFS Motion Dash Right-Side	AAG-14-0016
15	12V RGB LED Controller with Outputs	AAG-04-0015-12RL

Computer parts



Ref	Part Description	Part Number
1	Metal Pc Box Casing For NFS	AAG-01-0010
2	Power Supply 600W, (Or 500W) For PC Box	AAG-11-0001
3	Motherboard Asrock, B660M, S1700,12TH	AAG-11-0026
4	Crucial RAM, DDR4, 3200, 8GB, DIMM	AAG-11-0025
5	Sapphire Video card, Radeon, RX6600, 8 GB, GDDR6	AAG-11-0023
6	Restore USB Key NFS	ADR-11-2014-NFS-B660M
7	Yellow Dongle	TF-04-1212
8	Hard Drive Need for Speed, ASROCK B660M	INV-11-1027-NFS-B660
9	DisplayPort Male to HDMI Male Cable, 28AWG	INV-DP-HDMI-06K

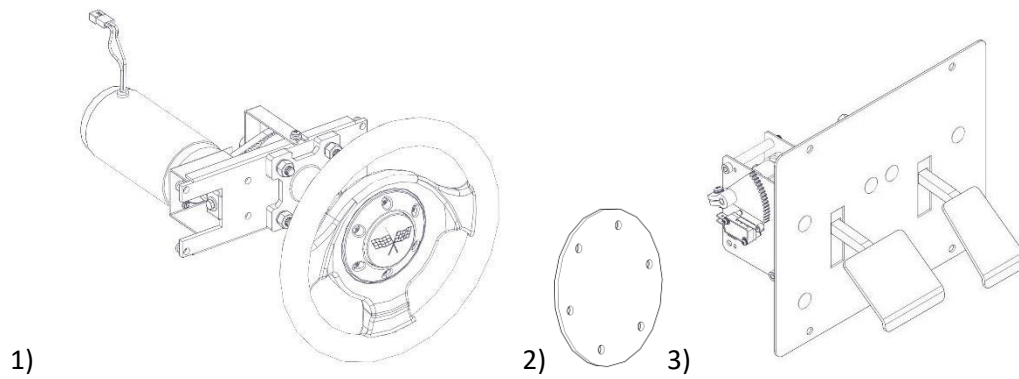
10	DisplayPort Male to HDMI Male Cable, 28AWG	INV-DP-HDMI-06K

Miscellaneous electronics parts



Ref	Part Description	Part Number
1	Power Bar 5 positions	INV-05-1242
2	Multi-Stage Filter 10A	ADR-817-1321-ND
3	Switching Power Supply 12V , 320W	AAG-13-0029
	Switching Power Supply 24V , 320W	AAG-13-0028
4	Kit for Fan 138CFM With Harness, 120mm	ADR-FAN-120MM-02-KIT
5	Miniature Round Pushbutton, White Center	ADR-49-0577-01
6	Meter, 12V, 7 Digit with Bracket	ADR-42-08012-072
7	7-Port USB, 3.0 Hub, Type A Female USB	AAG-11-0011
8	NFS Motion fuses board	AAG-04-0072
9	White Jumbo Round Button, RGB, Translucent Bezel	AAG-13-0026
10	Red Large Round Button with Led White Lamp, Include 'Motion Stop'	AAG-13-0032
11	12V Flexible, 42 RGB Led With 28" Wire	AAG-14-0042
	12V Flexible, 24 RGB Led with 28" Wire	AAG-14-0043
12	Monitor 75", 4K, Need For Speed motion	AAG-10-0005

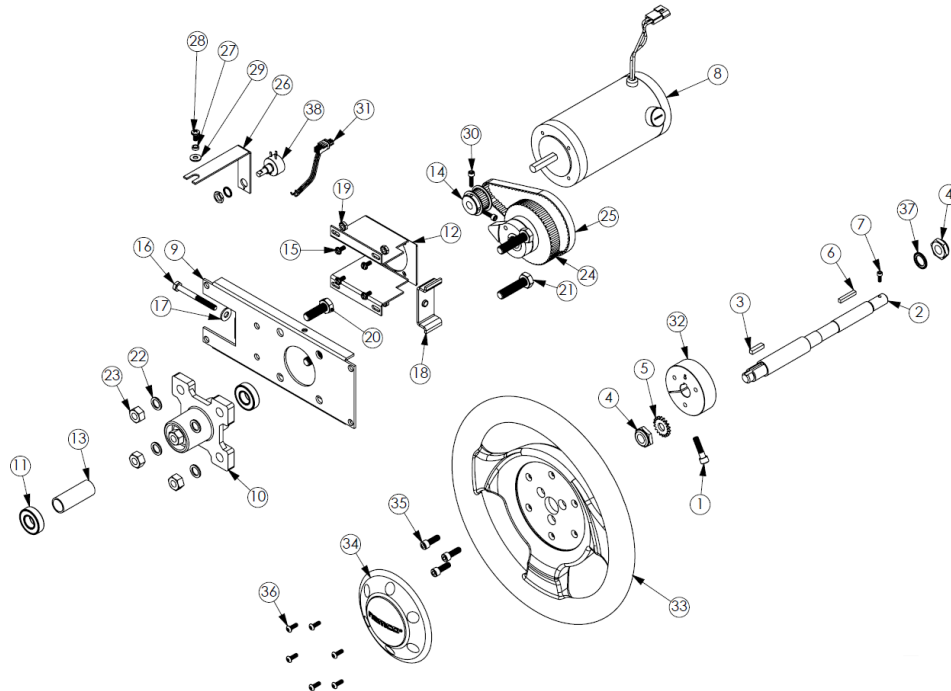
Steering wheels



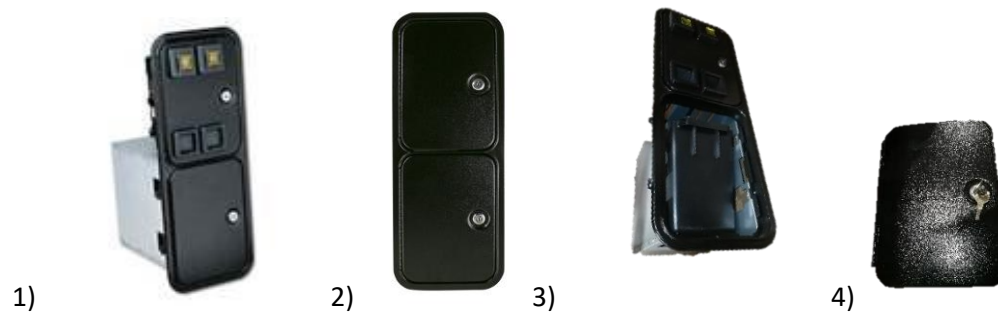
Ref	Part Description	Part Number
1	Steering Wheel with Motor Assembly	AAG-13-0002
2	Center Wheel Sticker, Need for Speed	NFS-09-0003
3	Dual Pedal with Potentiometer On Gas, Need for Speed	AAG-13-0023

Steering Mechanism Assembly Parts available from Suzohapp

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	43-0341-00	SCREW 1/4-28 X 1" SHC BLK OX
2	1	50-4014-00	SHAFT, 270 DEG, ACTIVE WHEEL
3	1	43-0305-00	KEY 3/16 SQUARE x .74 LG FOR ACTIVE STEERING
4	2	43-0232-00	NUT, HEX NYLOCK 1/2-20
5	1	43-0340-00	LOCKWASHER M12 SEPRATED EXTERNAL TOOTH
6	1	50-2092-00	KEY, SHAFT 4MM x 4MM x 25MM
7	1	43-1170-00	SCREW, #6-32 x 3/8" SHCS
8	1	50-4043-00	MOTOR & CONNECTOR ASY.
9	1	50-4016-00	WHEEL MTG BRACKET 270 DEG ACTV WHEEL
10	1	50-8129-00	DIECAST HOUSING FOR STEERING WHEEL W/O B
11	2	50-8130-00	BEARING BALL 6002zz .59 ID X 1.259 OD X .35 THK
12	1	50-8455-00	MOTOR MOUNTING BRACKET FEEDBACK WHEEL
13	1	50-2459-00	BEARING SPACER
14	1	50-4040-00	PULLEY 1/5 PITCH 1.6 TEETH ALL ALUMINUM 3/8 B
15	4	43-0188-00	SCREW 8-32 X 3/8" HWHMS SEMS
16	1	43-0576-00	SCREW M6 X 60MM HHCS PARTIAL THREAD ZINC
17	1	90-1208-00	5/16 FLAT WASHER .06Z ZINC PLT
18	1	50-2545-00	BRKT M6 BELT TIGHTENER FEEDBACK
19	4	42-0093-00	NUT, 10-32 HEX SEMS, ZINC PLTD
20	2	43-0117-00	SCREW M10 X M30 HHCS GRADE 8.8
21	2	43-0978-00	SCREW M10 X 40MM HHCS
22	4	43-0034-00	LOCKWASHER M10 RIBBED
23	4	43-0035-00	NUT HEX M10
24	1	50-4045-PL	STOPPER PIE CAM & PLASTIC PULLEY
25	1	50-4041-90	TIMING BELT FOR STEERING WHEEL URETHANE STEEL
26	1	50-4018-00	POT MOUNTING BRACKET 270 DEG ACTIVE WHEEL
27	1	50-4032-00	SPACER, POT MTG, BRACKET
28	1	43-0184-00	SCREW 10-32 X 3/8" PPHMS
29	1	43-0995-00	WASHER 10 SAE FLAT ZP
30	2	43-1059-00	SCREW 8-32 X 5/8" SHCS W/NYLOK PATCH BLK OX
31	1	50-4089-00	HARNES WHEEL 3 PIN IDC POT
32	1	50-2525-00	SPLIT HUB FOR 5/8" SHAFT & 1/4-20 TAP
33	1	50-1035-00HD	HOOP, SOFT
34	1	50-4135-00	WHEEL CAP FOR SOFT HOOP WITH NAMCO LOGO
35	3	43-0328-00	SCREW 1/4-20 X 3/4" SHCS BLK OX
36	6	43-0284-00	SCREW 8-32 X 1/2" TORX BHCS BLK OX
37	1	43-1554-00	STAR WASHER M14 EXTERNAL TOOTH
38	1	96-4916-00	LONG LIFE POT WITH NUT AND WASHER 5K 320



Doors



Ref	Part Description	Part Number
1	Door Assembly with Two Upper Mech Holder, Round Corner, Universal Logo	ADR-40-0038-KA
2	Door and Frame Assembly with Blank Upper and Bottom Door, Round Corner	ADR-40-0128-00KA
3	Door Assembly with One Upper Mech Holder, Round Corner, Universal Logo, NO Bottom Door	ADR-40-0512-06NMKA
4	Round Corner Blank Door Only	ADR- 42-3145-100C15

Hardware kit



Ref	Part Description	Part #	Qty
1	Button Head Hex Drive Screw, 3/8"-16 Thread, 2-1/2" Long	BS-HRO-BS-3/8-16x2-1/2	4
2	Round Head, Machine Screw, Phillips/ Quadrex, 1/4-20X3"	MS-PRO-ZS-1/4-20X3	2
3	Flat Washer, 1/4", USS, Zinc	FW-Z-1/4-USS	2
4	Rounded Head, Machine Screw, Phillips, Steel, Black Oxide, 8-32 X 3/4"	MS-PRO-BS-8-32X3/4	3
5	Keyboard + Mouse	INV-11-1015	1

Chapter 07 – Diagrams & Schematics

Computer section

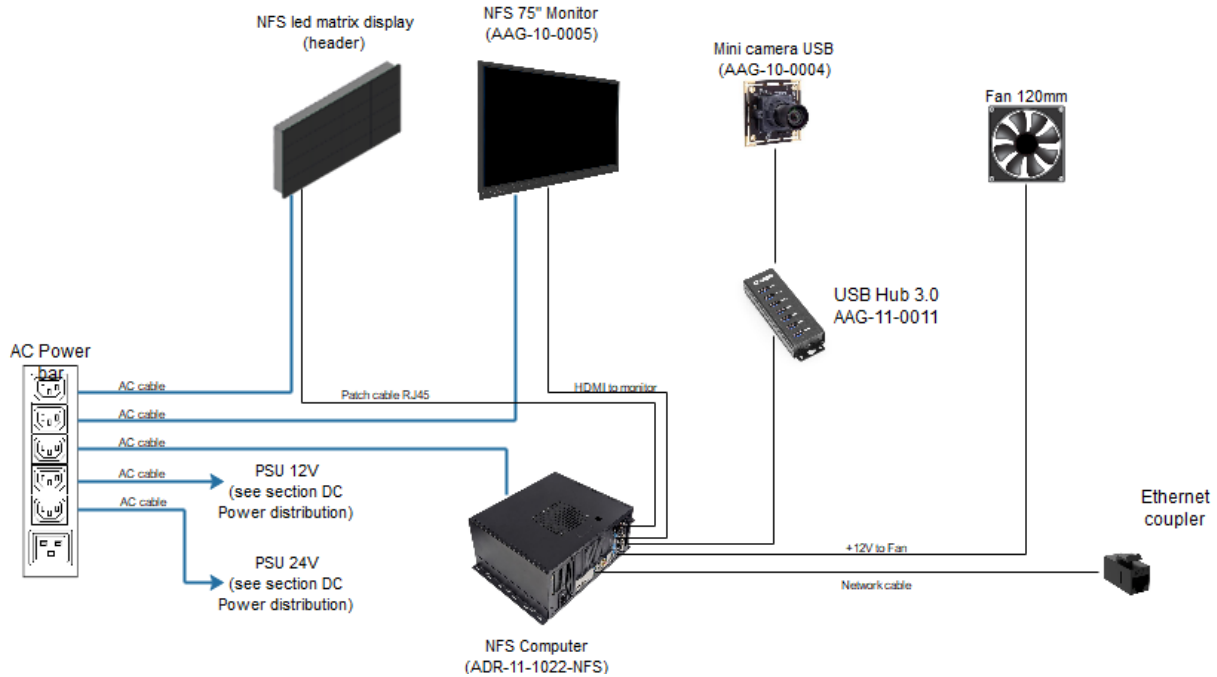


Figure 8.1 : Computer interconnection diagram

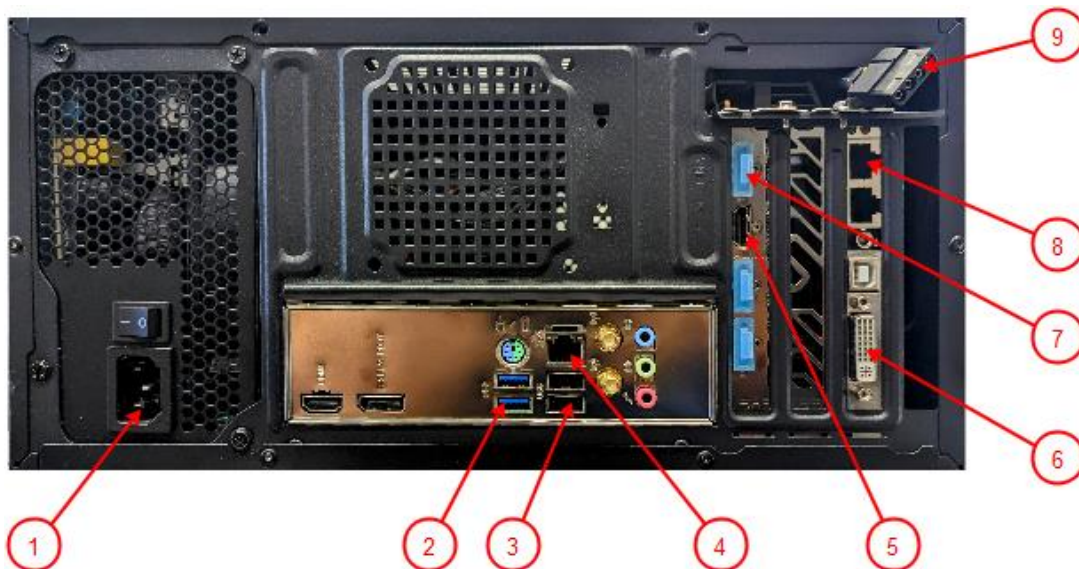


Figure 8.2: Computer connections

Item	Description
1	AC Power Inlet
2	USB port to USB hub
3	USB port to Windows license dongle ¹
4	Ethernet network port
5	HDMI port not used
6	DVI port connected to (Item 5)
7	Display port to 75" monitor (HDMI)
8	RJ45 port not used
9	12V Power-supply connector to 12V fan

I/O board section

The following figure shows all the items connected to the IO board.

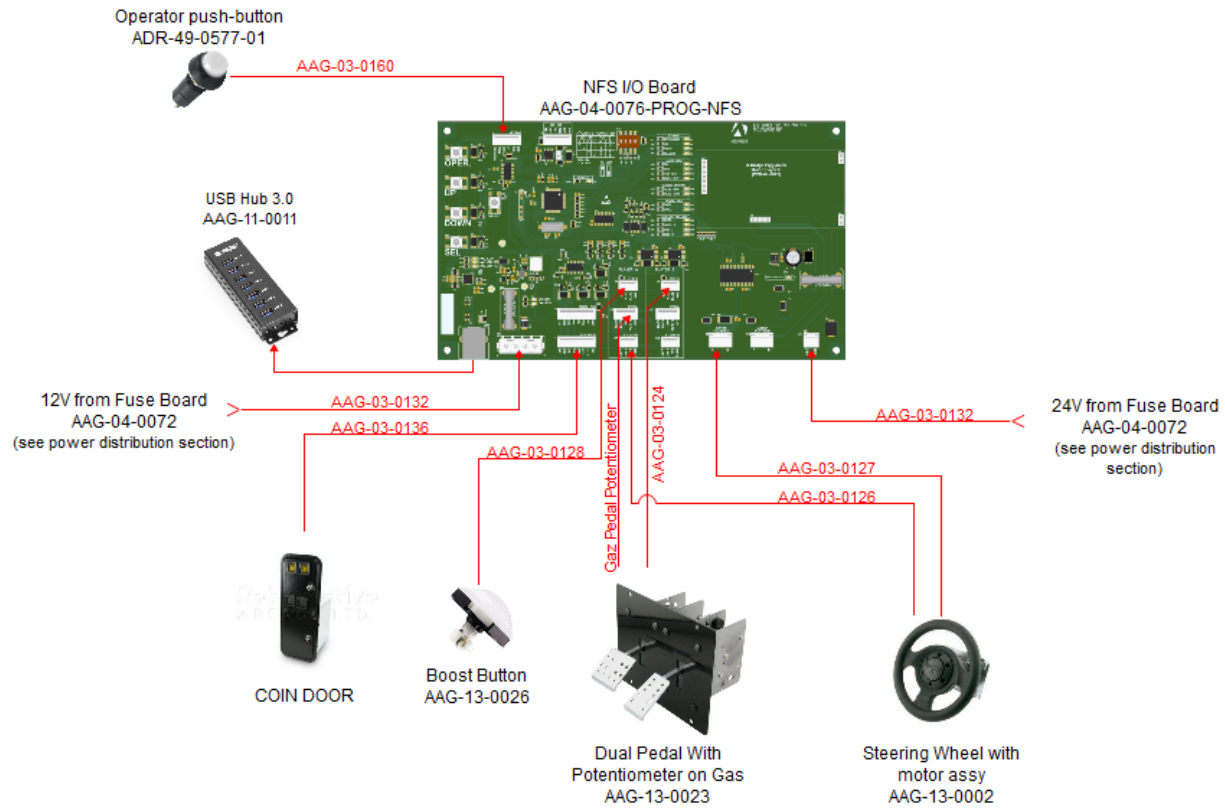


Figure 8.4: I/O board interconnection diagram

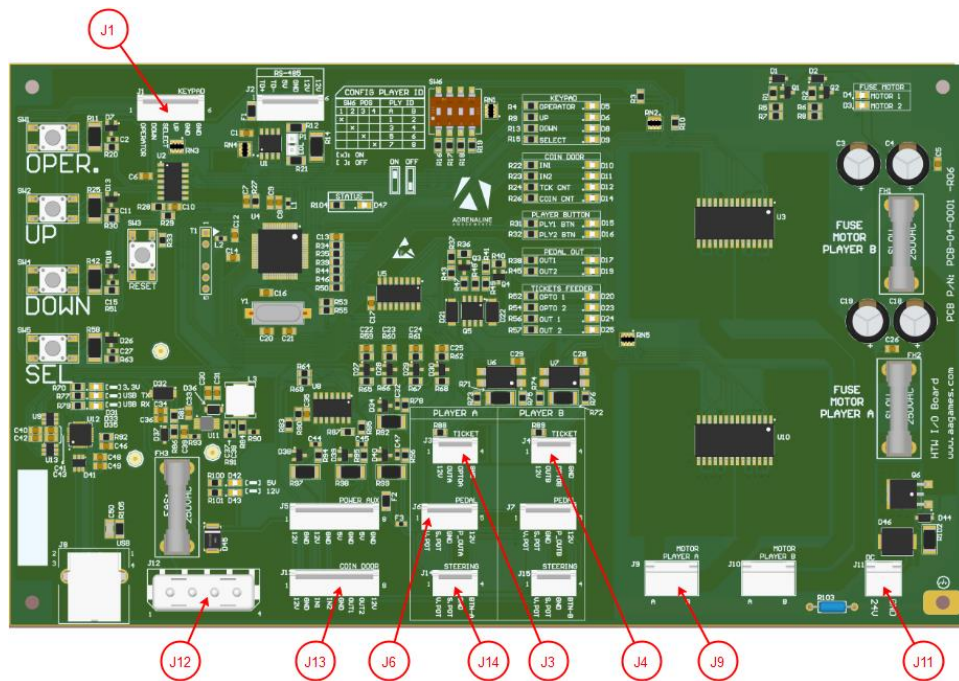


Figure 8.5.1: I/O board connectors locations

Pin Definition:

J1: Operator Button (AAG-03-0160)

Pin	1	2	3	4	5	6
Definition	OPER.	n/c	n/c	n/c	GND	n/c
Color	RED				BLACK	

J3: Boost Button (AAG-03-0147)

Pin	1	2	3	4
Definition	12V	OUTB	OPTOB	GND
Color	RED	BLACK	WHITE	GREEN

*Note: pin 1-2 push-button light, pin 3-4 push-button contact.

J4: Brake Pedal switch (AAG-03-0144)

Pin	1	2	3	4
Definition	n/c	n/c	OPTOB	GND
Color			RED	BLACK

J6: Gaz Pedal potentiometer (AAG-03-0145)

Pin	1	2	3	4	5
Definition	V.POT	S.POT	GND	n/c	n/c
Color	RED	WHITE	BLACK		

J9: Steering wheel motor (AAG-03-0146)

Pin	1	2	3
Definition	A	n/c	B
Color	RED		BLACK

J11: 24V Supply (AAG-03-0159)

Pin	1	2
Definition	24V	GND
Color	RED	BLACK

J12: 12V Supply (AAG-03-0159)

Pin	1	2	3	4
Definition	12V	GND	n/c	n/c
Color	RED	BLACK		

J13: Coin Door (AAG-03-0136)

Pin	1	2	3	4	5	6	7	8
Definition	12V	GND	IN1	IN2	GND	OUT1	OUT2	12V
Color	RED	BLACK	RED	YELLOW	BLUE	ORANGE	BROWN	GREEN

J14: Steering wheel potentiometer (AAG-03-0126)

Pin	1	2	3	4
Definition	V.POT	S.POT	GND	n/c

Color	RED	GREEN	BLACK	
-------	-----	-------	-------	--

Coin door wiring connection

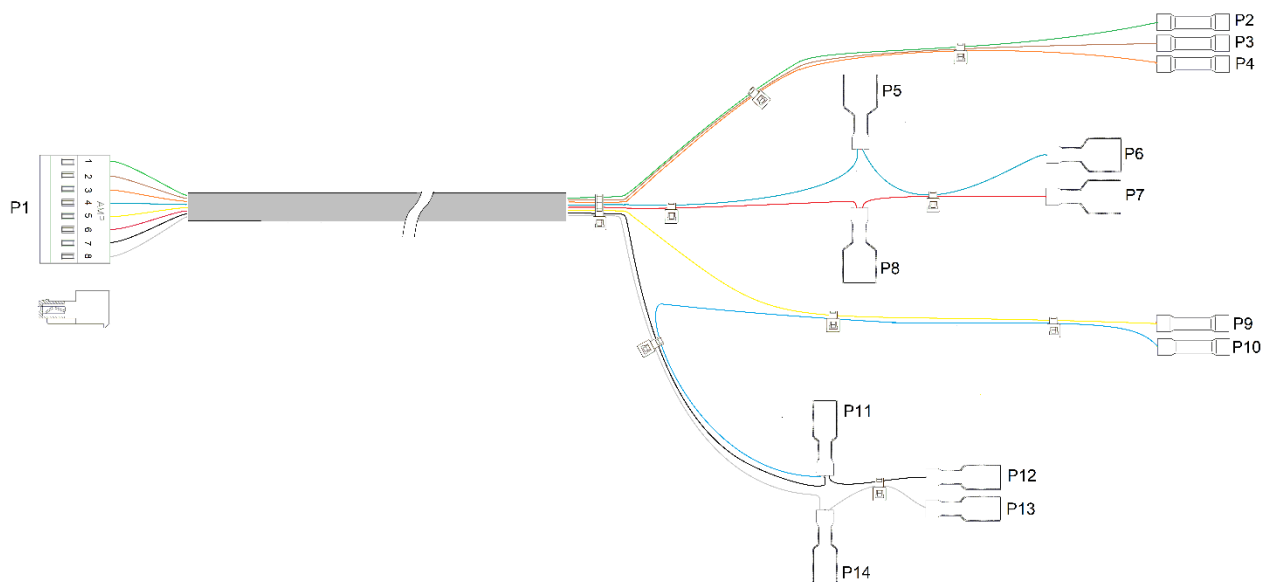


Figure 8.6: Coin door harness AAG-03-0136

Connection Chart			
Wire color	From	To	Function
Green	P1-1	P2	12V coin counter
Brown	P1-2	P3	Coin counter output 2
Orange	P1-3	P4	Coin counter output 1
Blue	P1-4	P5-P6	Common coin input 1 & 2
Yellow	P1-5	P9	Coin input 2
Red	P1-6	P7-P8	Coin input 1
black	P1-7	P11-P12	GND
white	P1-8	P13-14	12V
blue	P11-P12	P10	GND

Audio section

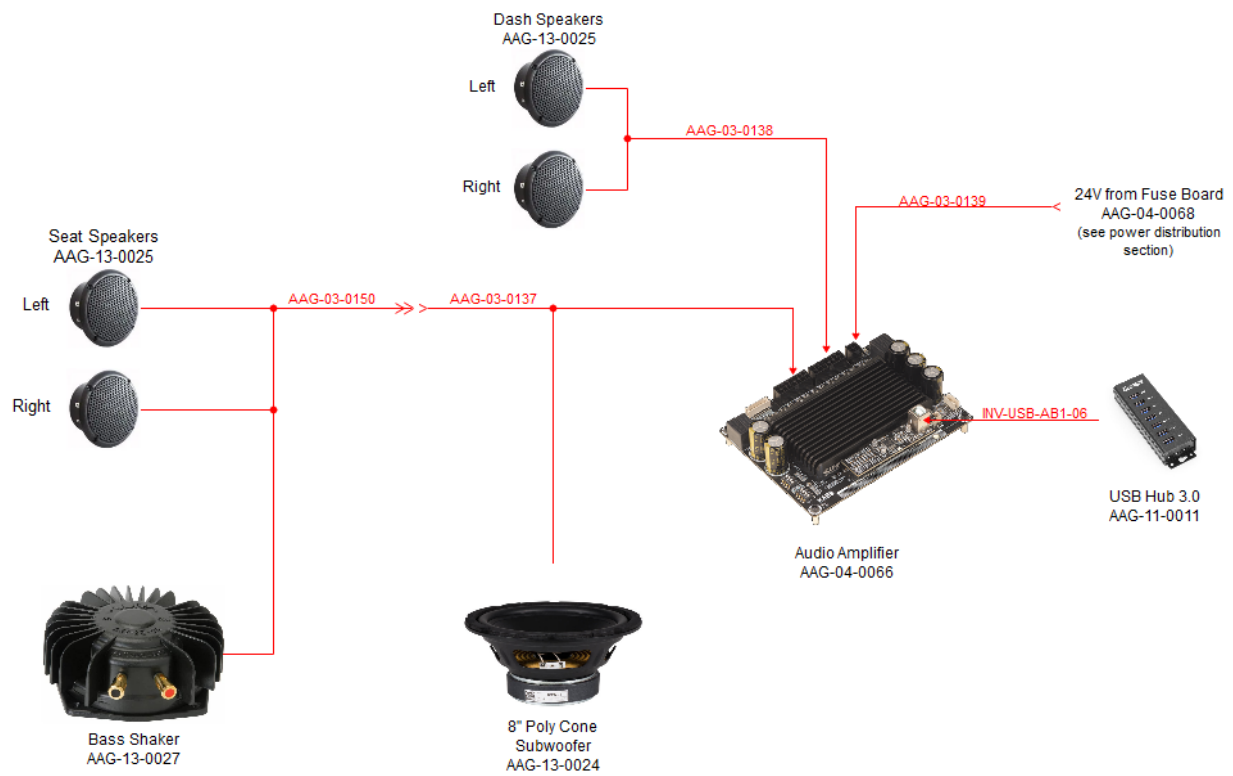
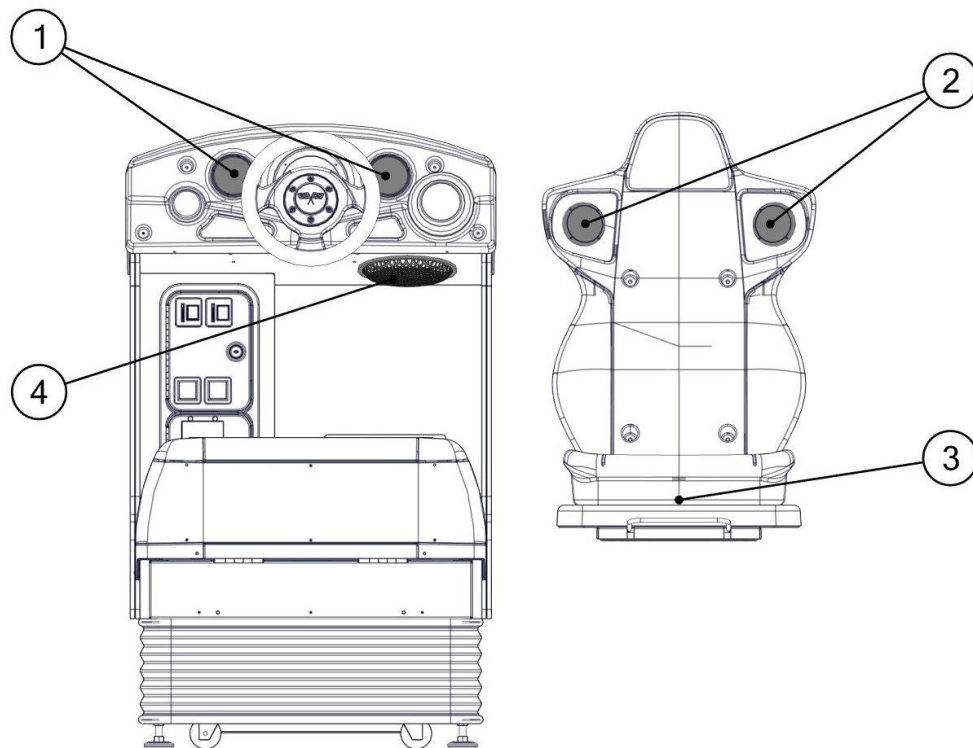


Figure 8.7: Audio connection diagram



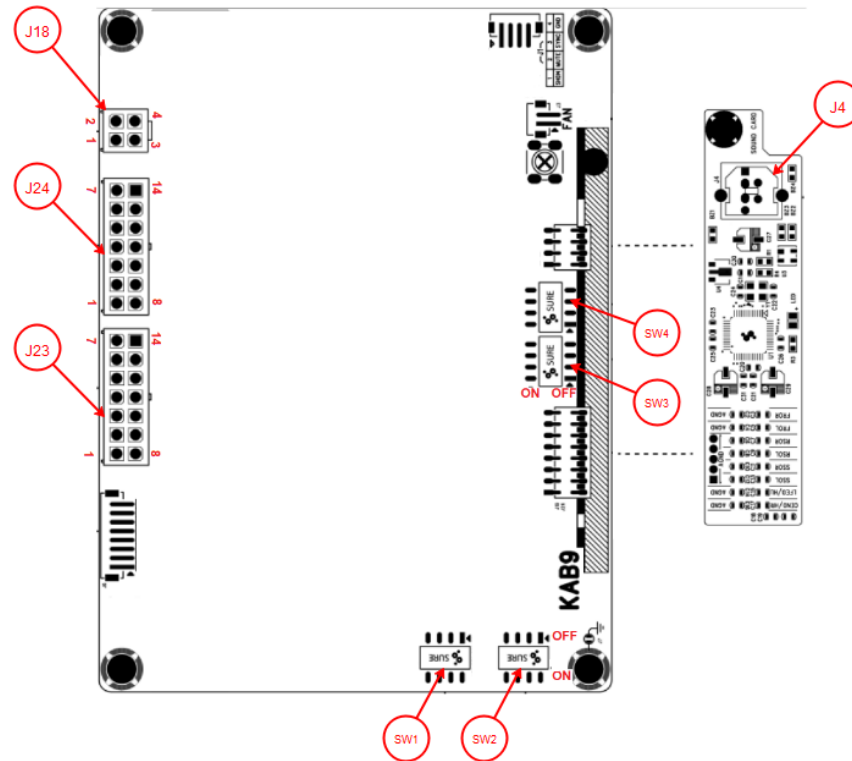


Figure 8.8: Audio amplifier connector location

Pin Definition:

J18: 24V Supply (AAG-03-0139)

Pin	1	2	3	4
Definition	GND	GND	24V	24V
Color	BLACK	BLACK	RED	RED

J23: Shaker, Subwoofer & seat speakers (AAG-03-0137)

Pin	1	2	3	4	5	6	7
Definition	SHAKER+	SUB+	n/c	n/c	SEAT L+	SEAT R+	n/c
Color	RED	RED			RED	RED	
Pin	8	9	10	11	12	13	14
Definition	SHAKER-	SUB-	n/c	n/c	SEAT L-	SEAT R-	n/c
Color	BLACK	BLACK			BLACK	BLACK	

J24: Dash speakers (AAG-03-0138)

Pin	1	2	3	4	5	6	7
Definition	n/c	n/c	n/c	n/c	DASH L+	DASH R+	n/c
Color					RED	RED	
Pin	8	9	10	11	12	13	14
Definition	n/c	n/c	n/c	n/c	DASH L-	DASH R-	n/c
Color					BLACK	BLACK	

Dip-switch settings:

SW1-1	SW1-2	SW1-3	SW1-4
ON	OFF	OFF	OFF

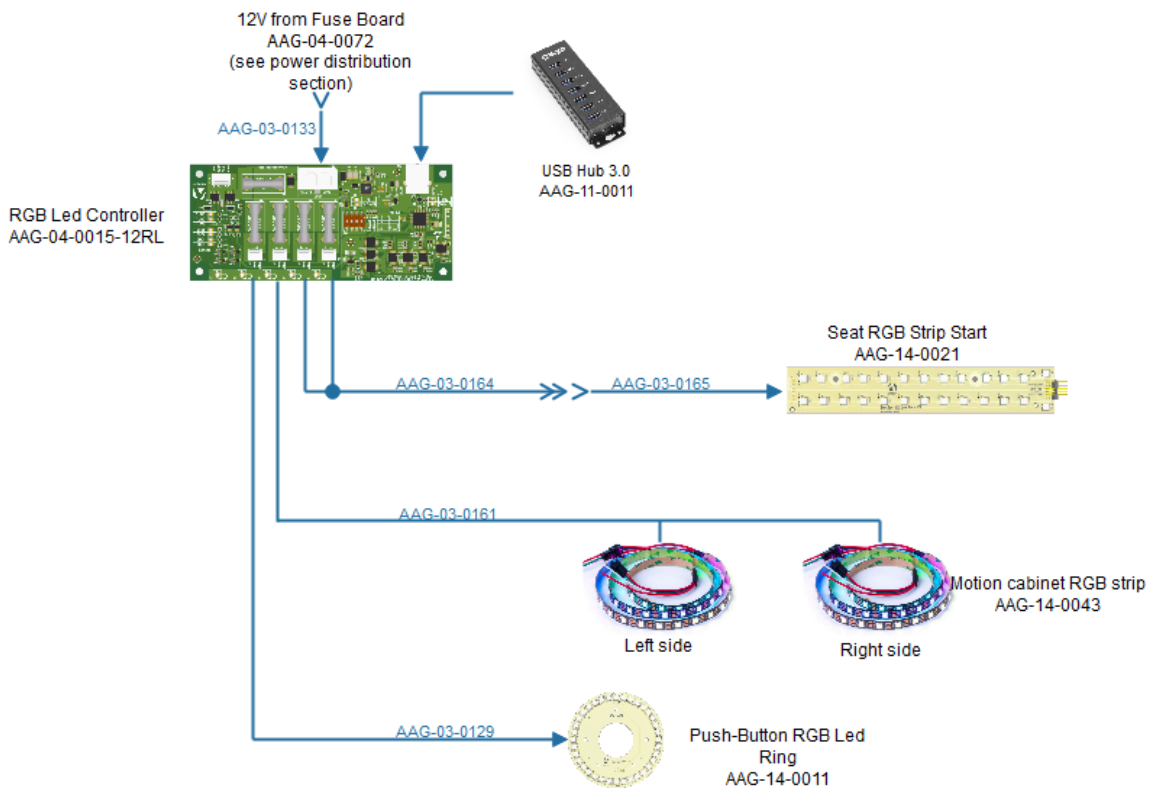
SW2-1	SW2-2	SW2-3	SW2-4
ON	ON	ON	ON

SW3-1	SW3-2	SW3-3	SW3-4
OFF	OFF	OFF	OFF

SW4-1	SW4-2	SW4-3	SW4-4
OFF	OFF	OFF	OFF

Led controller section

The following figure shows all the items connected to led controller present in the motion cabinet.



Figure

8.9: "Motion cabinet" led controller connection diagram.

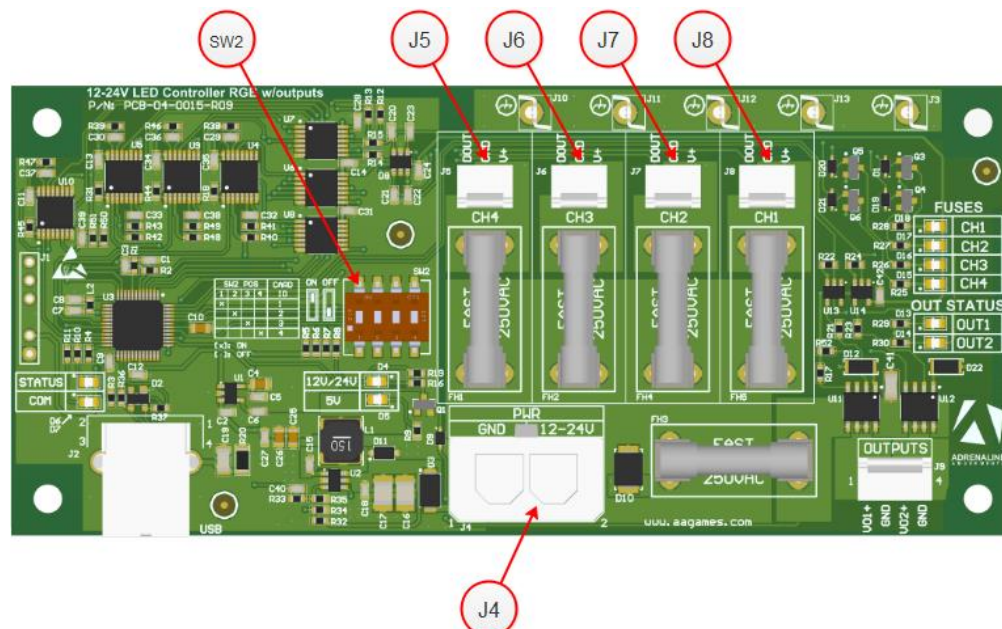


Figure 8.10: "Motion cabinet" led controller connectors description.

Pin description

J4: 12V Supply (AAG-03-0133)

Pin	1	2
Definition	GND	12V
Color	BLACK	RED

J5: Seat RGB strip lower row "CH4" (AAG-03-0164)

Pin	1	2	2
Definition	12V	GND	DOUT
Color	BROWN	BLUE	WHITE

J6: Seat RGB strip upper row "CH3" (AAG-03-0164)

Pin	1	2	2
Definition	12V	GND	DOUT
Color	RED	BLACK	GREEN

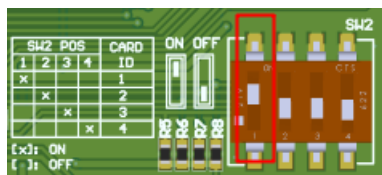
J7: Motion Cabinet RGB strip "CH2" (AAG-03-0161)

Pin	1	2	2
Definition	12V	GND	DOUT
Color	RED	BLACK	GREEN

J8: Boost button RGB ring "CH1" (AAG-03-0129)

Pin	1	2	2
Definition	12V	GND	DOUT
Color	RED	BLACK	GREEN

SW2: Configure card-ID



The led controller present in the screen cabinet should have its card-ID set to #1.

Set Dip-switch position 1 to ON and leave all the others to OFF.

The following figure shows all the items connected to led controller present in the screen cabinet.

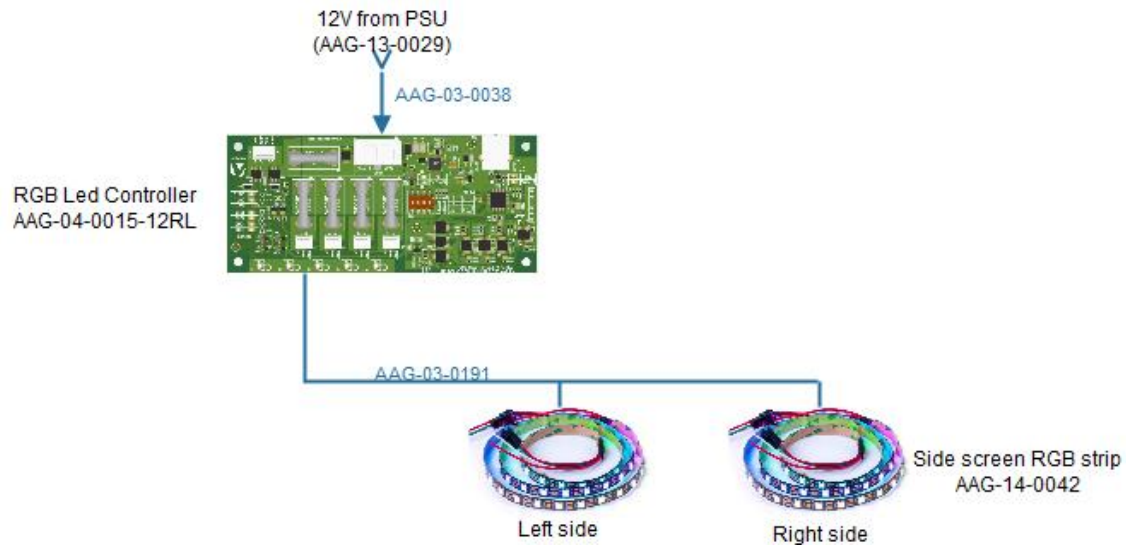


Figure 8.11: "Screen cabinet" led controller connection diagram.

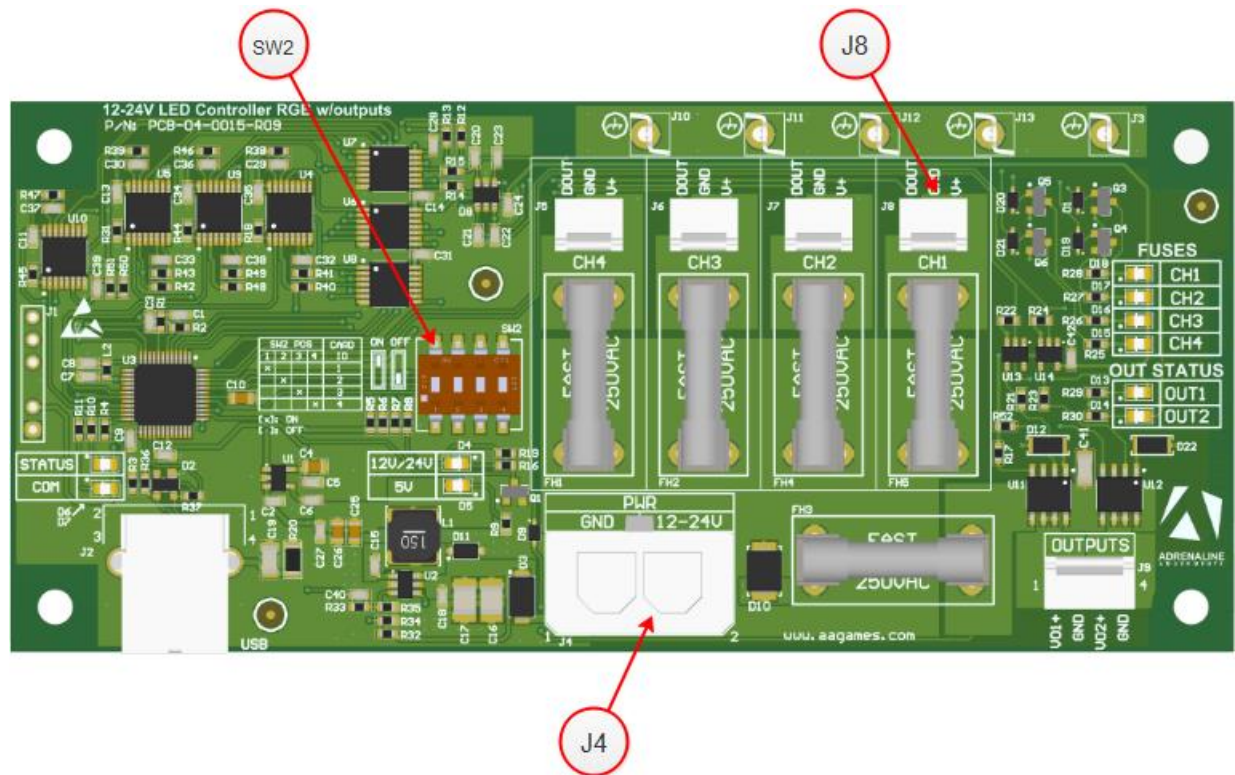


Figure 8.12: "Screen cabinet" led controller connectors description.

Pin description

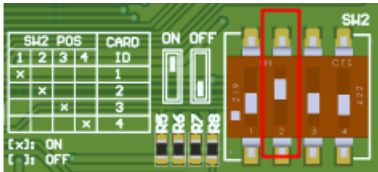
J4: 12V Supply (AAG-03-0038)

Pin	1	2
Definition	GND	12V
Color	BLACK	RED

J8: Side screen RGB strip "CH1" (AAG-03-0191)

Pin	1	2	2
Definition	12V	GND	DOUT
Color	RED	BLACK	GREEN

SW2: Configure card-ID



The led controller present in the screen cabinet should have its card-ID set to #2.

Set Dip-switch position 2 to ON and leave all the others to OFF.

Pneumatic controller section

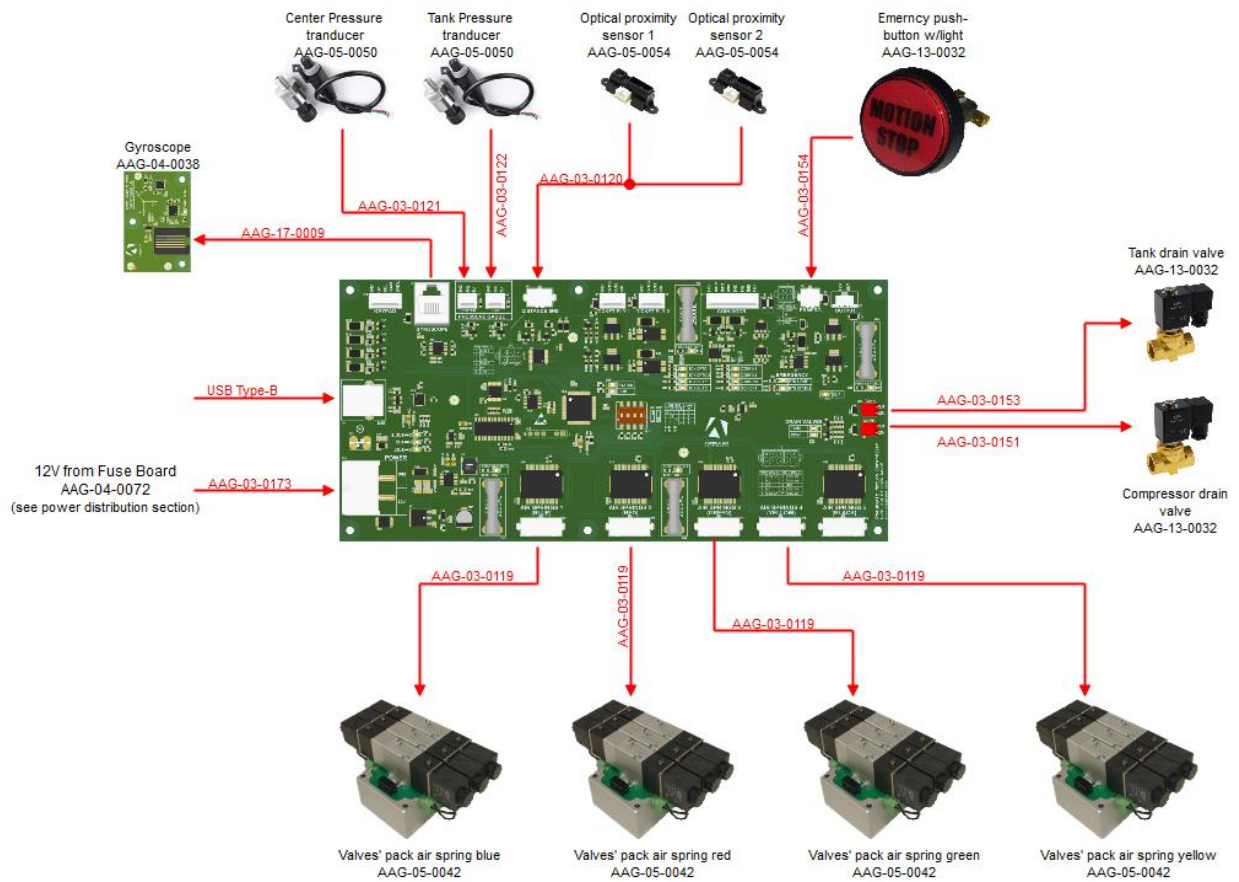


Figure 8.13.1: Pneumatic controller connection diagram.

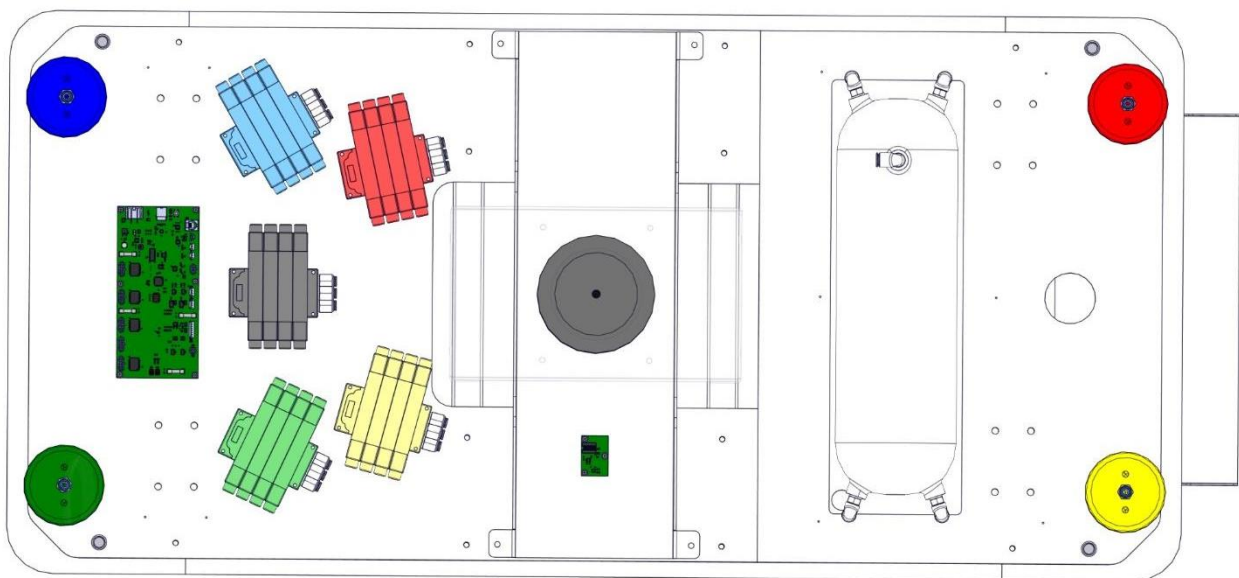


Figure 8.13.1: Pneumatic controller

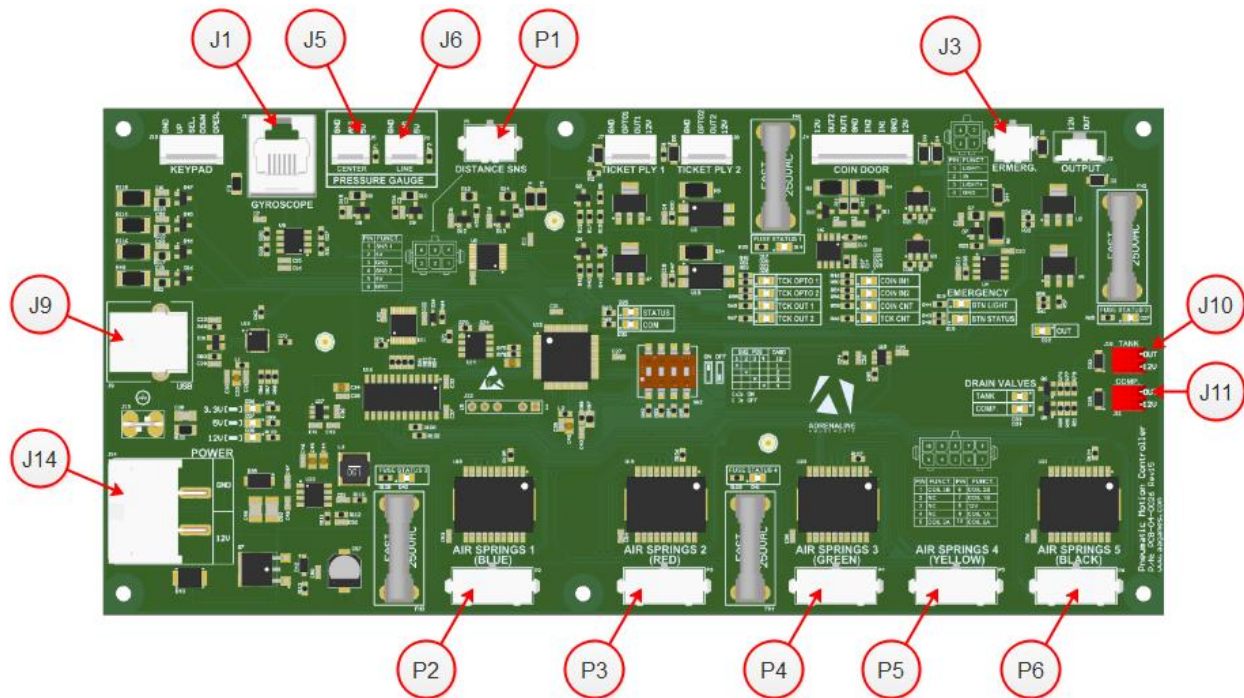


Figure 8.14: Pneumatic controller connectors description.

J14: 12V Supply (AAG-03-0173)

Pin	1	2
Definition	GND	12V
Color	BLACK	RED

P2: Air spring BLUE

P3: Air spring RED

P4: Air spring GREEN

P5: Air spring YELLOW

P6: Air spring BLACK

Pin	10	9	8	7	6
Definition	Valve 2 Coil A	Valve 1 Coil A	12V	Valve 1 Coil B	Valve 2 Coil B
Color	WHITE	BLUE	RED	ORANGE	GREEN
Pin	5	4	3	2	1
Definition	Valve 3 Coil A	n/c	n/c	n/c	Valve 3 Coil B
Color	BROWN	-	-	-	BLACK

J10: Tank drain valve (AAG-03-0153)

J11: Compressor drain valve (AAG-03-0153)

Pin	1	2
-----	---	---

Definition	OUT	12V
Color	BLACK	RED

J13: Emergency Push-Button (AAG-03-0154)

Pin	1	2	3	4
Definition	LIGHT-	IN	LIGHT+	GND
Color	BLACK	WHITE	RED	GREEN

Chapter 08 – Software Recovery

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 F11 on the keyboard to display the boot menu.
- Choose the UEFI: USB device ~16GB

The process takes 25-30 minutes, 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 09 – Card Reader

Configure your Operator settings as seen in Chapter 5 - Operator Menu.

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.

The typical Embed settings are *Standard* except:

- Ticket Mech Type: Dumb DC
- Drive Polarity: Positive
- Notch Polarity: Negative
- Game ticket notch width = 6 (60ms)
- Game ticket notch spacing = 24 (240ms)
- Game Drive Threshold = 15 (1.5V or 1500mV)
- Drive Debounce = 40ms

Chapter 10 – Troubleshooting


Troubleshooting

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

Video Troubleshooting

No Picture or Display Problem	There might have loose or faulty connections between the monitor and the computer. Make sure the DVI cable is connected properly in the computer's video card and in the monitor connector.
	Verify that the computer is powered on. The fan on the side of the computer case should be spinning as a reference, if it's not spinning press the Power Button on the front of the computer.

Audio Troubleshooting

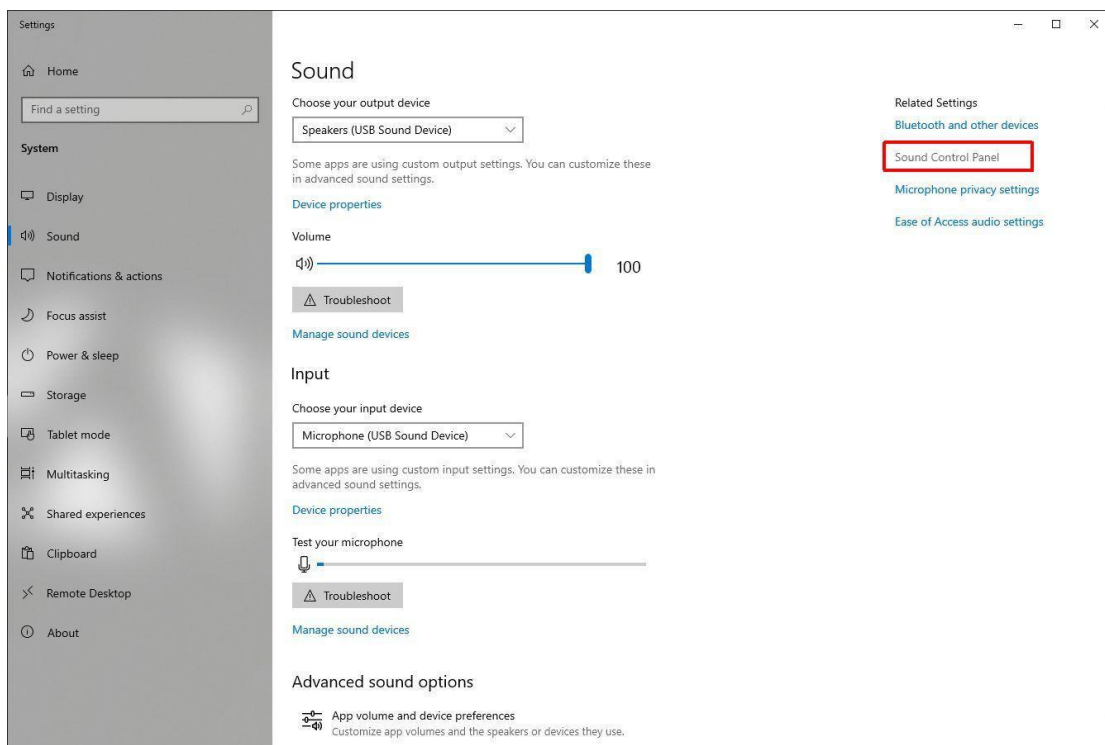
Low Volume / No Sound	Increase the volume in the game by pressing the Operator Button and adjusting the volume options in the Operator Menu. You might also Quit the game to Windows desktop and increase the volume via the  Speaker icon on the bottom right of your screen.
	Verify the USB connection between the computer and the audio amplifier. Verify the fuse of the audio amplifier on the fuse board.

If the sound still not playing in all the speakers, please do the following procedure:

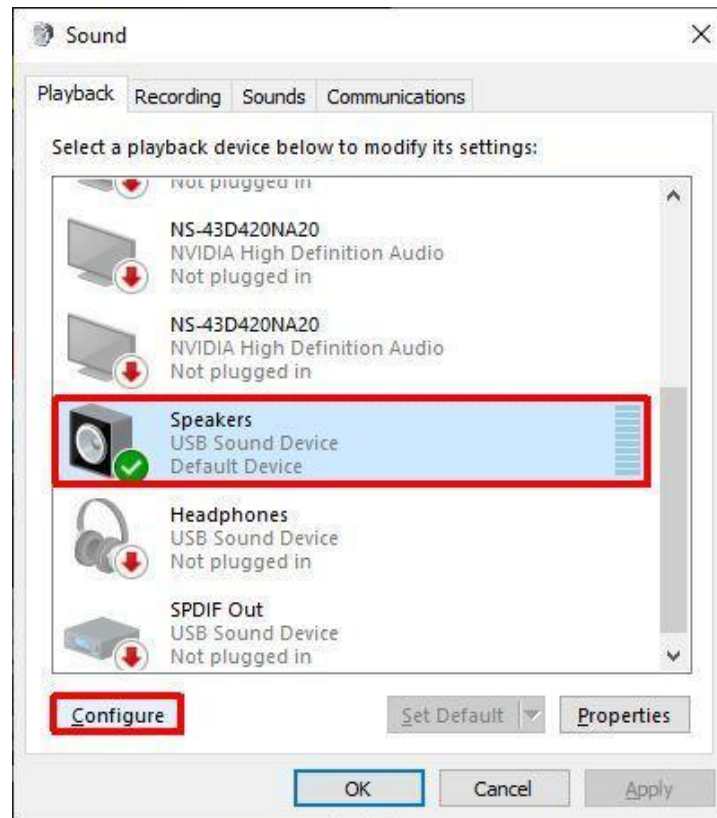
1. Right click on the sound icon in the task bar and select “Open Sound settings.”



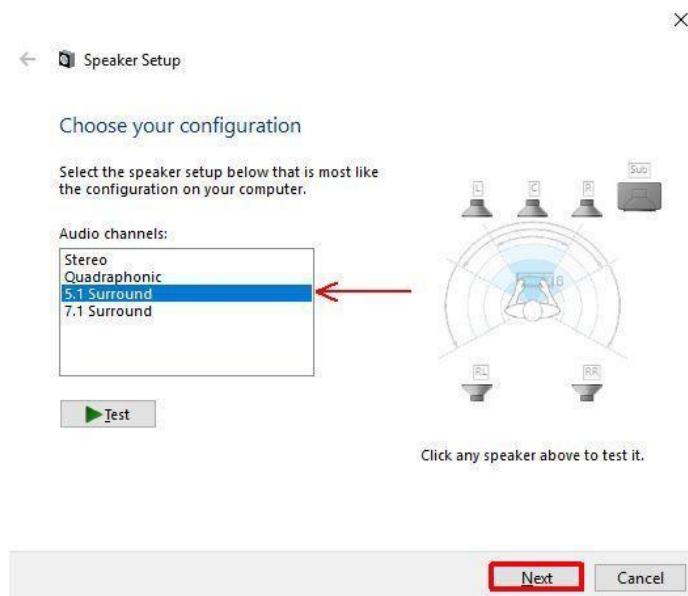
2. Click on the “Sound Control Panel”.



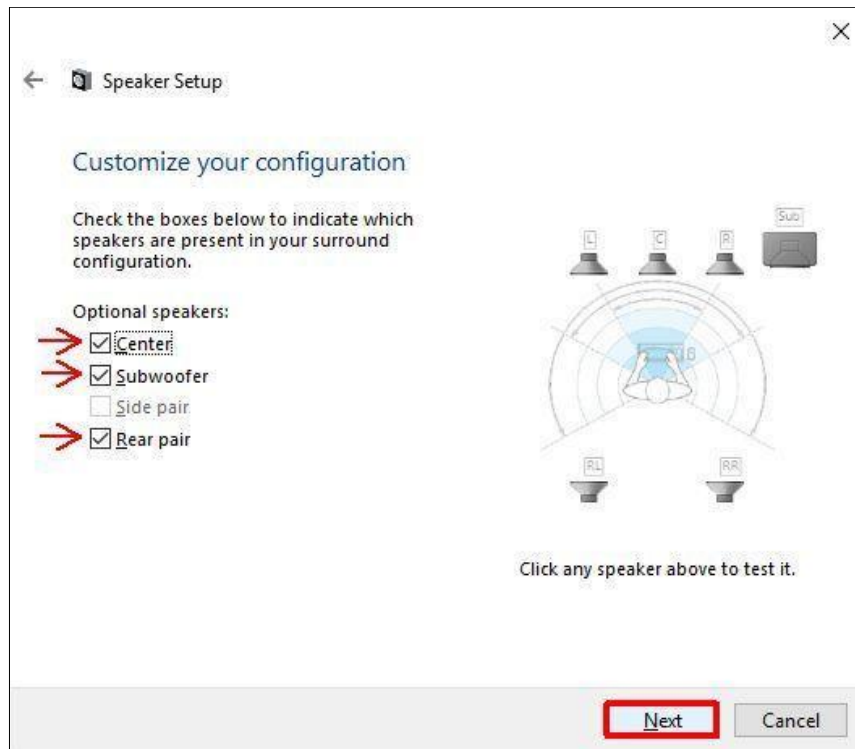
3. Select “Speakers USB Sound Device” and click on “Configure”.



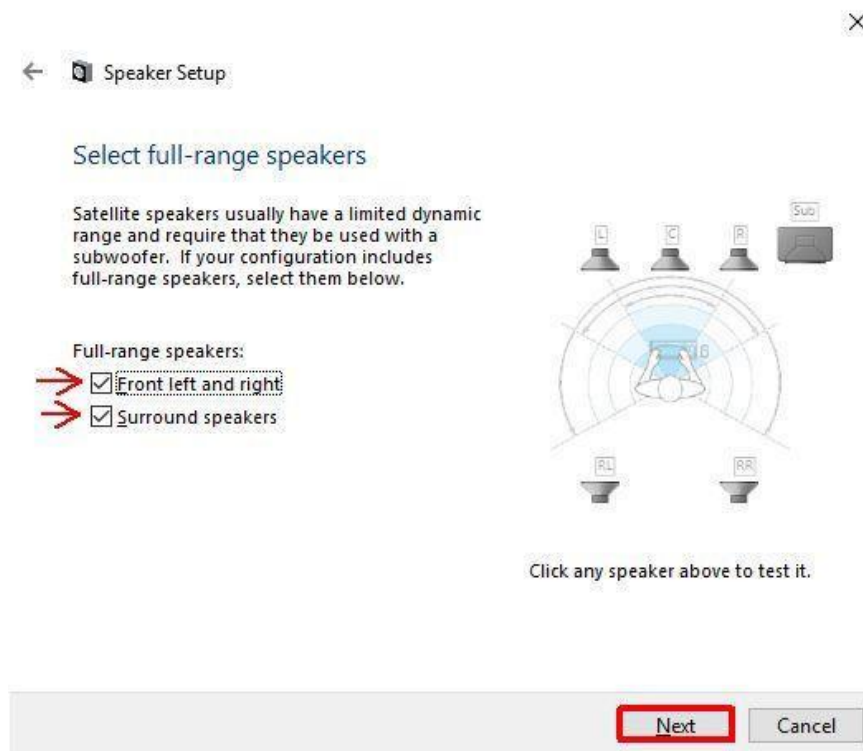
4. Select "5.1 Surround" and click on "Next".



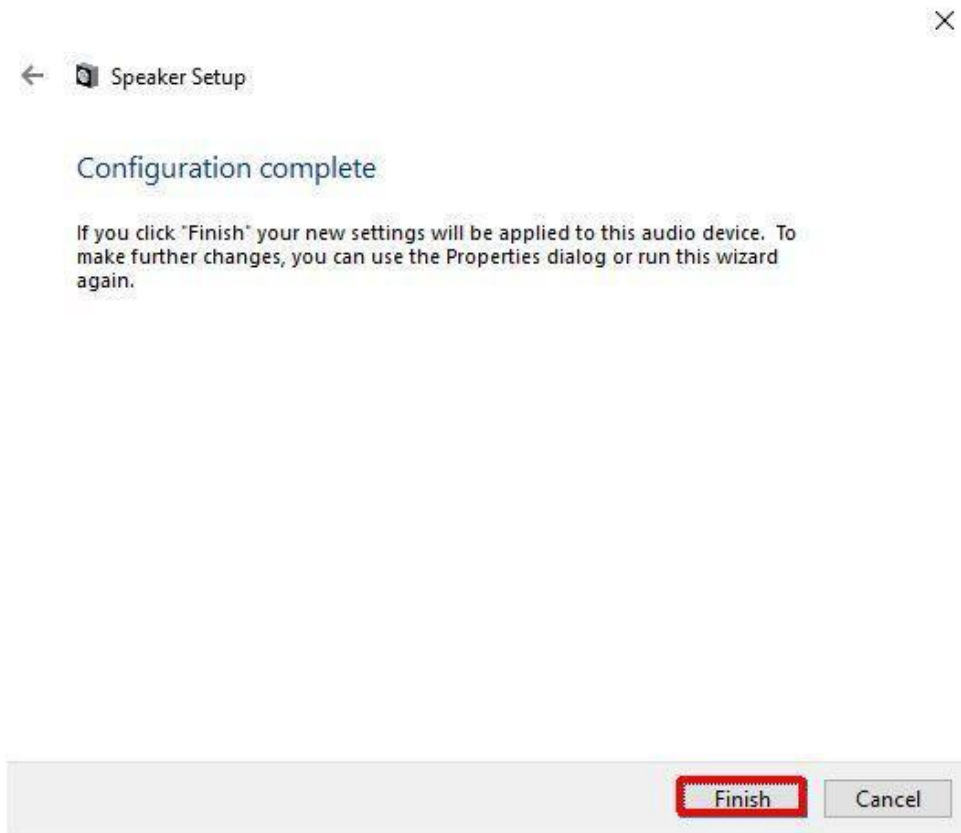
5. Select "Center", "Subwoofer", "Rear pair" and click on "Next".



6. Select “Front left and right”, “Surround speakers” and click on “Next”.



7. Click on “Finish”



Computer not powering at boot.

If your computer is not powering on by itself at boot, you'll need to verify the Bios Setting.

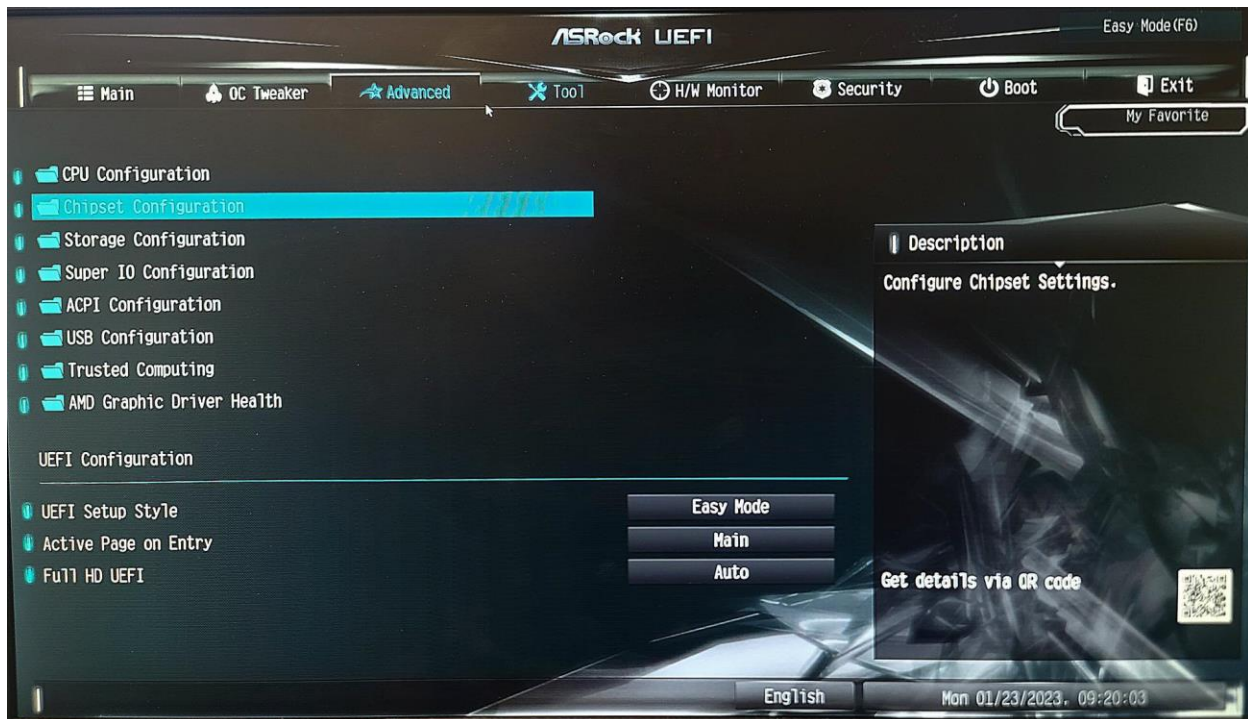
- Power off the computer.
 - Plug a USB keyboard and a USB mouse.
 - Press the power button on the computer.
- Press and hold F2 on the keyboard until you see the Bios screen.



-Press on F6 or using a mouse click on advanced.



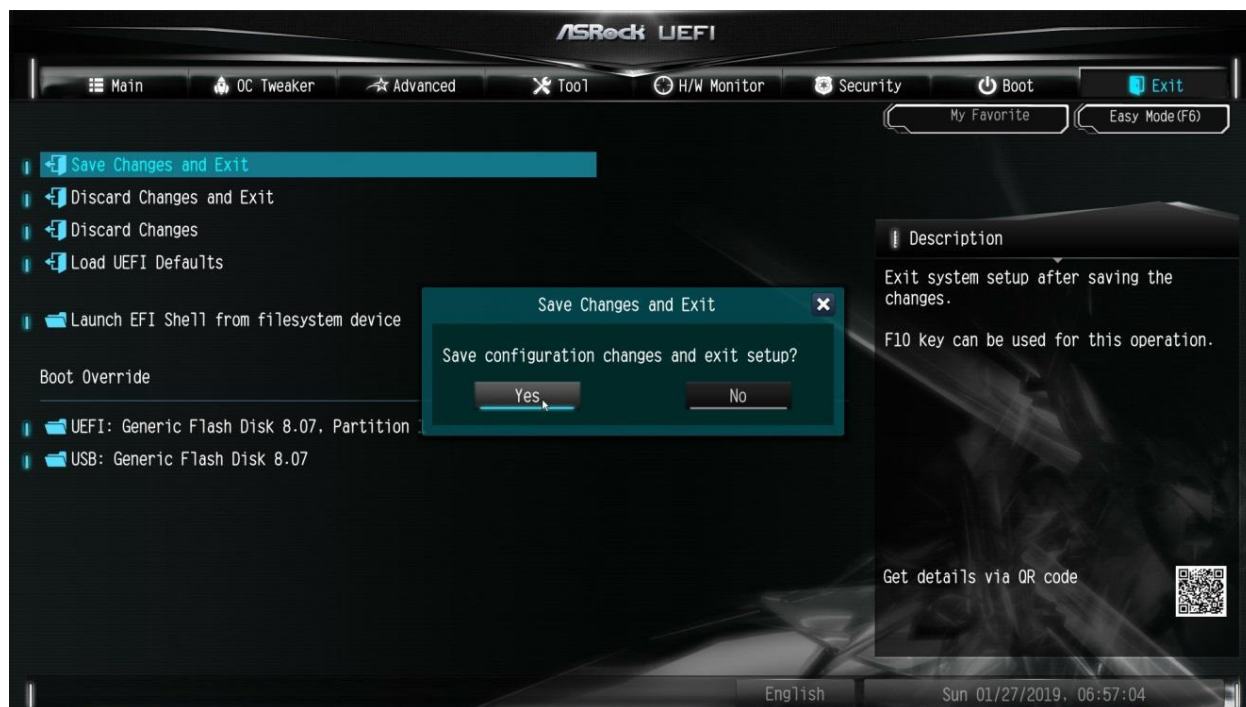
-Then click on Chipset Configuration.



-Go to the bottom of that page, click/select the line Restore AC Power Loss, click on the drop box where it displays “Power Off” and select Power On.



-On your keyboard press on **F10** and then click on OK to confirm and save the settings.
Or go to the Exit tab, click save and Exit.





Limited Warranty Policies

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 a 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.

We offer an advanced replacement program, and the customers have 30 days from delivery date to return back the defective equipment at their fees or they will be charged automatically for the replacement parts.

Improper servicing or abuse will VOID existing warranties.

All warranty request needs to be validated 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.

Adrénaline Amusements Inc.
2273 Antonio-Hérroux Street
Terrebonne, QC
J6X 4R3 Canada
+1.450.824.1671