



NFS-43-1001



## **Operation & Service Manual**

Version 1.0

\* 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 <a href="mailto:techsupport@aagmes.com">techsupport@aagmes.com</a> or by calling our support line +1-450-824-1671

Adrenaline Amusements Team

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

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# **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  $59^{\circ}$  -  $86^{\circ}$ F ( $15^{\circ}$  -  $30^{\circ}$ C).

### **Operating & Voltage**

This game cabinet is shipped configured as either 120V or 240V and is not user switchable. Do not attempt to change the voltage switches on the power supplies to change the required voltage.

Voltage	Operating
120V AC	6 AMP
240V AC	3 AMP



# **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





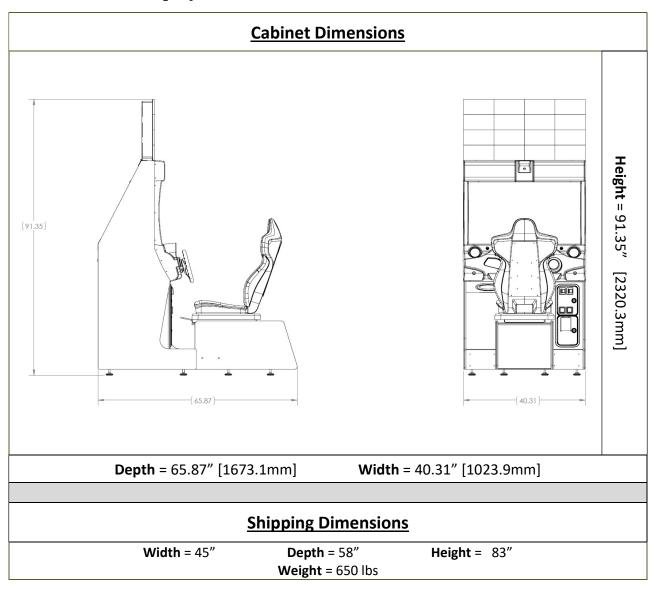


# **Chapter 03 – Unit Features**

### **Hardware Features**

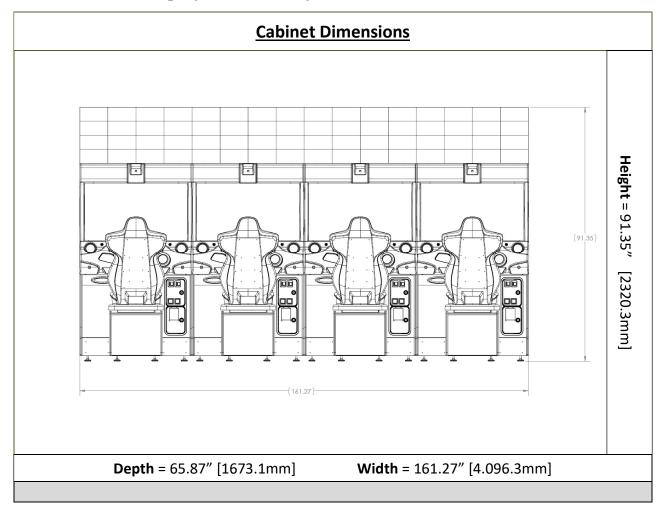
- 1 to 4 Players Game
- Steering wheels & accelerator pedals for each player
- 43 inches LCD Screen

### **Cabinet Facts - 1 player version**





## **Cabinet Facts - 4 players assembly**

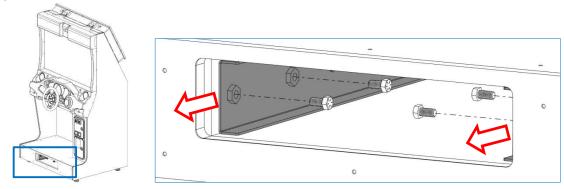




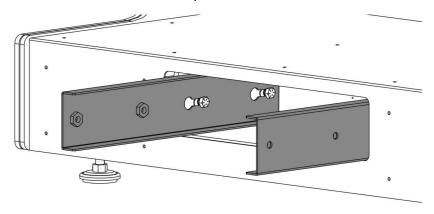
# **Chapter 04 – Unit Installation**

## How to assemble your NFS Heat Takedown

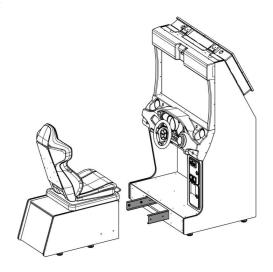
1) Remove the four screw who hold the two steel bars inside and take them out...



2) Install back the steel bars as show on the picture.

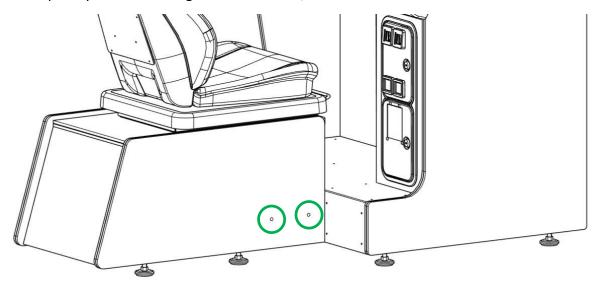


**3)** Move the seat module towards the large cabinet. Connect all three cables coming from the seat to the cabinet.

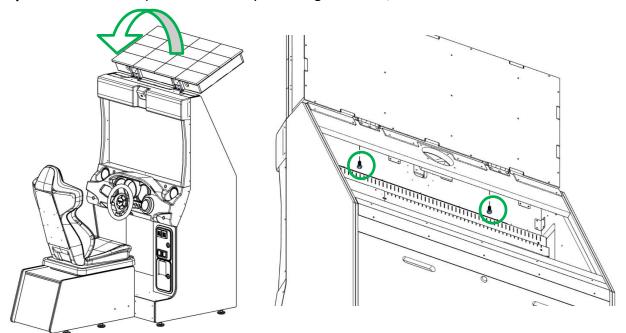




**4)** In order to secure the seat to the cabinet, Push the seat until the steel bars are completely inserted. Using the ¼-20 screws, secure the seat in each side.

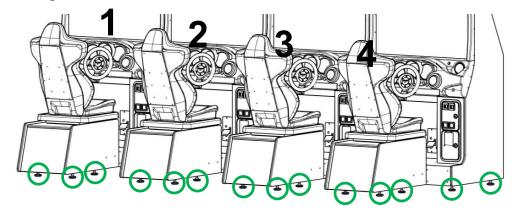


**5)** Push the screen up and secure it by installing the two 1/4 screws from the inside.



### How to assemble and connect two or more NFS Heat Takedown

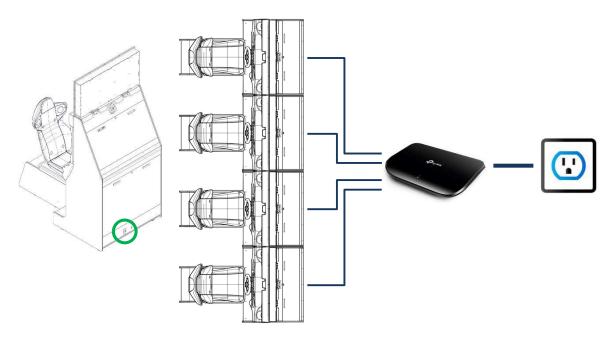
- 1) Place the machines beside each one. The first arcade to the left will be the player #1.
- 2) When you are pleased by the arrangement of the machines, secure them by fixing all the leveling mounts of each arcade.



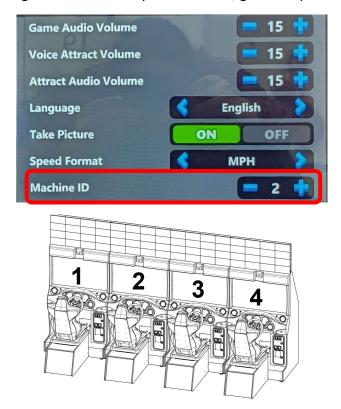


### **Multiplayer network connection**

3) connect all the arcades to the network hub.



4) start the arcades, access to the operator menu and change one by one the Machine ID. (To know how to get access to the operator menu, go to chapter 5.)

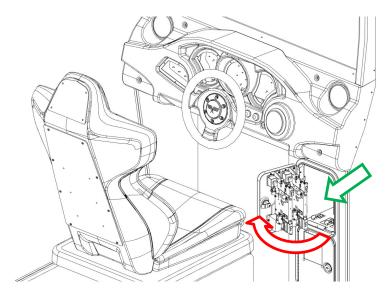




# **Chapter 05 – Operator Menu**

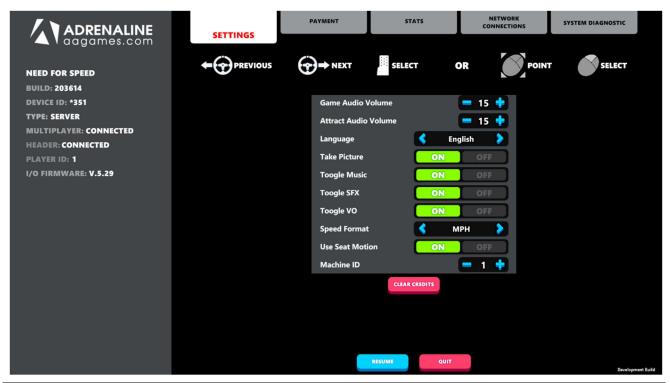
# **Operator Menu**

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



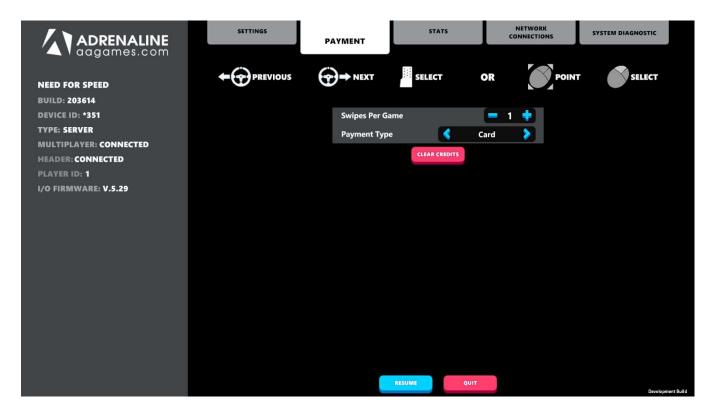


#### **SETTINGS**



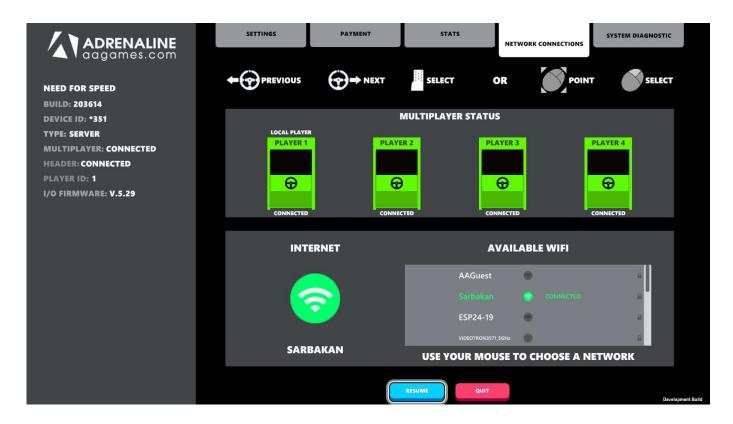
<b>Operator Menu</b>	<u>Values</u>	What It Does	
Game Audio Volume	1-20	Adjusts the in-game audio volume. "0" will mute the game.	
Attract Audio Volume	0-20	Adjusts the volume of the voice attract loop. "0" will mute	
Language	English/Français	Switches the game and the menu's language	
Take Picture	On / 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.	

### **PAYMENT**



<b>Operator Menu</b>	<u>Values</u>	What It Does	
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 guick 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.



#### NFS Heat Takedown V1.0 Chapter 05 – Operator Menu

### 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

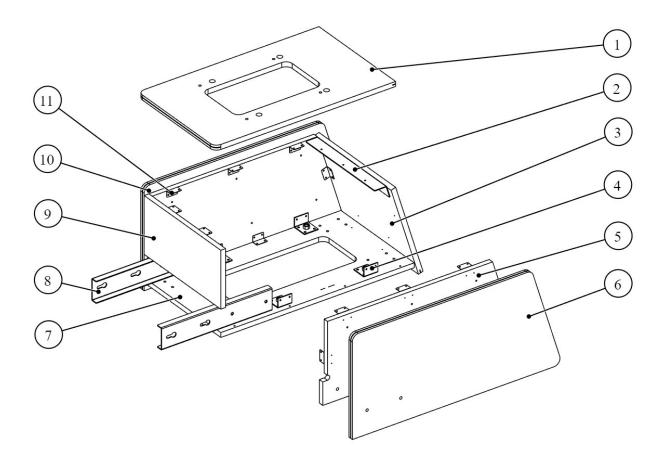
The lower part of the screen will allow you to connect to an available WIFI network.

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**

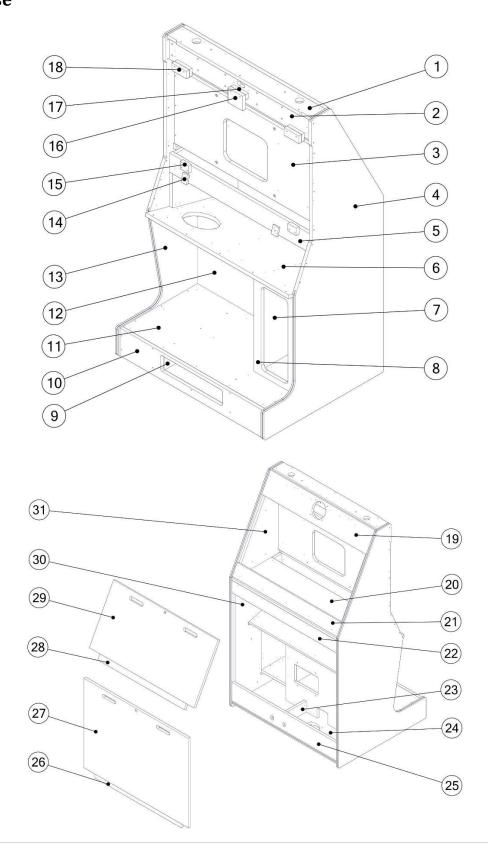
## Seat base



Ref	Part Description	Part #	QTY
1	Seat Melamine Black Top	NFS-02-0002-04	1
2	Top Rear Bracket, Seat Cabinet	NFS-01-0017	1
3	Seat Printed Melamine Back	NFS-02-0002-05	1
4	Angle Leg Support, 1/2-13	RAC-01-0140	4
5	Seat Melamine Black Inside Sides R/L	NFS-02-0002-07	2
6	Seat Printed Melamine Left Side	NFS-02-0002-02	1
7	Seat Plywood Floor	NFS-02-0002-01	1
8	Steel Plate, Need for Speed	NFS-01-0024	2
9	Seat Melamine Black Front	NFS-02-0002-06	1
10	Seat Printed Melamine Right Side	NFS-02-0002-03	1
11	Multi-Position Wide Corner Bracket, 1" x 1-3/4"	SB-1-3/4X1X1	12



## Seat base



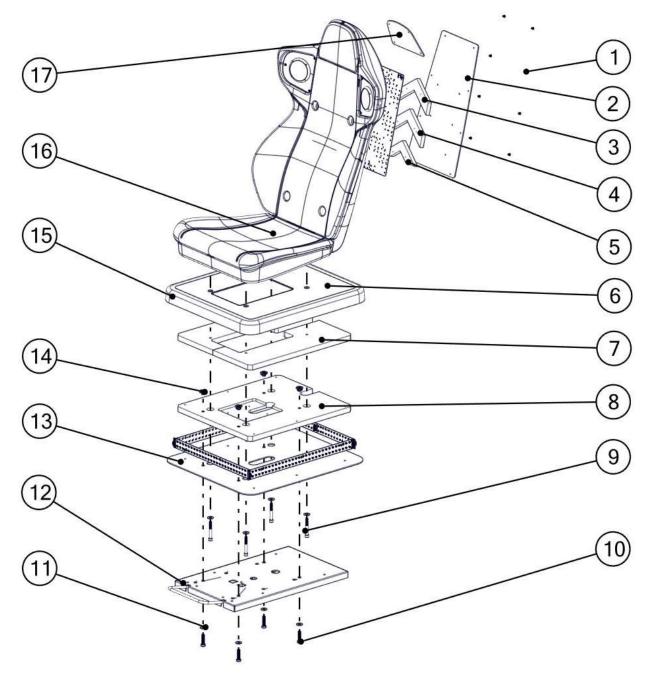


#### NFS Heat Takedown V1.0 Chapter 06 – Parts

Ref	Part Description	Part #	QTY
1	Cabinet Melamine Top	NFS-02-0010-05	1
2	Cabinet Melamine Front Up	NFS-02-0010-06	1
3	Cabinet Melamine Back Thin Screen	NFS-02-0010-31	1
4	Cabinet Printed Melamine Right Side	NFS-02-0010-09	1
5	Cabinet Melamine Front Screen Bottom Mounting	NFS-02-0010-23	1
6	Cabinet Melamine Speaker Mounting	NFS-02-0010-02	1
7	Cabinet Melamine Cash Door Side Panel	NFS-02-0010-11	1
8	Cabinet Melamine Cash Door Mounting Panel	NFS-02-0010-10	1
9	Cabinet Melamine Center Floor Support	NFS-02-0010-03	2
10	Cabinet Plywood Floor Facing	NFS-02-0010-04	1
11	Cabinet Plywood Top Floor	NFS-02-0010-07	1
12	Cabinet Melamine Pedal Panel	NFS-02-0010-12	1
13	Cabinet Printed Melamine Left Side	NFS-02-0010-08	1
14	Dash Upper Plywood 3/8 Shim	NFS-02-0010-29	2
15	Bottom Screen Holder	NFS-02-0010-30	2
16	Cabinet Melamine Camera Mounting	NFS-02-0010-27	1
17	Cabinet Melamine Upper Shim	NFS-02-0010-26	1
18	Cabinet Melamine Screen Upper Mounting	NFS-02-0010-28	4
19	Cabinet Melamine Back Fan Mounting	NFS-02-0010-16	1
20	Cabinet Melamine Inside Shelf	NFS-02-0010-13	1
21	Cabinet Melamine Up Center Back Panel	NFS-02-0010-24	1
22	Cabinet Melamine Up Back Access Door	NFS-02-0010-20	1
23	Cabinet Melamine Bottom Inside Brace	NFS-02-0010-25	1
24	Cabinet Plywood Bottom Floor	NFS-02-0010-01	1
25	Cabinet Melamine Back EMI Mounting	NFS-02-0010-21	1
26	Cabinet Melamine Bottom Back Access Door Held Up	NFS-02-0010-22	1
27	Cabinet Melamine Bottom Back Access Door	NFS-02-0010-19	1
28	Cabinet Melamine Up Back Access Door Held Up	NFS-02-0010-18	1
29	Cabinet Melamine Up Back Access Door	NFS-02-0010-17	1
30	Cabinet Melamine Bottom Sides Lining	NFS-02-0010-14	2
31	Cabinet Melamine Up Sides Lining	NFS-02-0010-15	2



## **Seat assembly**



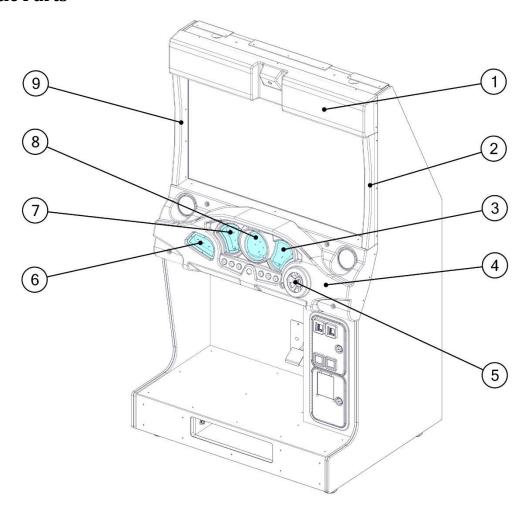


#### NFS Heat Takedown V1.0 Chapter 06 – Parts

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, Need for Speed Motion	NFSM-07-0017	1
3	Back Upper Arrow LED Shim, Need for Speed	NFSM-02-0006-01	1
4	Back Middle Arrow LED Shim, Need for Speed	NFSM-02-0006-02	1
5	Back Bottom Arrow LED Shim, Need for Speed	NFSM-02-0006-03	1
6	Seat Sticker Cover, Need for Speed	NFSM-09-0002	1
7	Top Seat Base	NFSM-02-0002-01	1
8	Bottom Seat Base	NFSM-02-0002-02	1
9	Socket Head Screw, Black-Oxide, Steel, M8-1.25x65MM	MS-HSO-BS-M8x65MM	4
10	Hex Head Screw, Yellow Zinc, 3/8-16x3/4"	HS-HH-YS-3/8-16x3/4	4
11	Flat Washer, 3/8", USS, Zinc, 1" OD	FW-Z-3/8-1	8
12	Seat Slider, Need for Speed	AAG-01-0007	1
13	Seat LED Bottom Cover, Need for Speed Motion	NFSM-07-0010	1
14	Tee Nuts, Zinc Plated, 3/8"-16, 0.501" Installed Length	TN-Z-3/8-16	4
15	Seat LED Cover, Need for Speed Motion	NFSM-07-0009	1
16	Black Mold Seat, Need for Speed	AAG-07-0008	1
17	Seat Back Top Plate, Need for Speed Motion	NFSM-07-0018	1

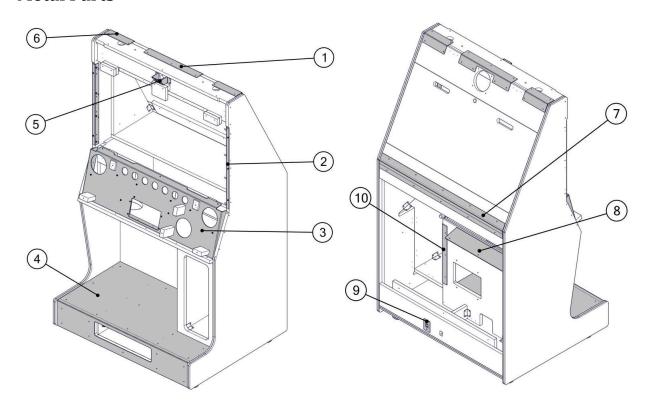


## **Plastic Parts**



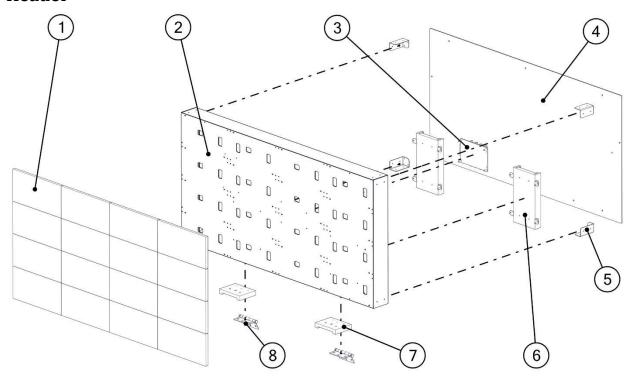
Ref	Part Description	Part #
1	Top Screen Cover, Need for Speed	NFS-07-0021
1	Diffuser For Police Thermoformed Header	NFS-07-0021-DIFF
2	Side Screen Cover R/H, Need for Speed	NFS-07-0010
3	RPM Plastic for Dash, Need for Speed	NFS-07-0037
4	Dash, Need for Speed	NFS-07-0005
5	Push Button PCB Holder	NFSM-07-0001
6	Buttons Indicator for Dash, Need for Speed	NFS-07-0038
7	Road Map for Dash, Need for Speed	NFS-07-0035
8	RPM Indicator for Dash, Need for Speed	NFS-07-0036
9	Side Screen Cover L/H, Need for Speed	NFS-07-0011

## **Metal Parts**



Ref	Part Description	Part #	QTY
1	Top Rear Plate Center	NFS-01-0023	1
2	Side Led Bracket	NFS-01-0005	2
3	Steering Wheel Support	NFS-01-0020	1
4	Checker Plate Cabinet Floor	NFS-01-0026	1
5	Camera Bracket	NFS-01-0015	1
6	Top Rear Plate	NFS-01-0022	2
7	Rear Panel Cover	NFS-01-0027	1
8	Bottom Rear Bracket	NFS-01-0018	1
9	Ethernet Plate Holder	AAG-01-0008	1
10	Inner Bracket	NFS-01-0012	1

## Header



Ref	Part Description	Part Number	QTY
1	Display Module, 64x32', RGB LED - 4mm pitch	AAG-14-0004-DISPLAY	16
2	Header's Frame	NFS-07-0044	1
3	Programmed Led Matrix Card, Receiving Card	AAG-14-0032-PROG	1
4	Header's Back Plate	NFS-07-0043	1
5	Header's Corner Brace	NFS-01-0043	4
6	5 Vdc Power Supply 200W	AAG-13-0021	2
7	Header's Shim	NFS-07-0042	2
8	3" Hinge, Kit Of 2, Need For Speed	AAG-05-0048	1

### NFS Heat Takedown V1.0 Chapter 06 – Parts

## **Mechanical Parts**



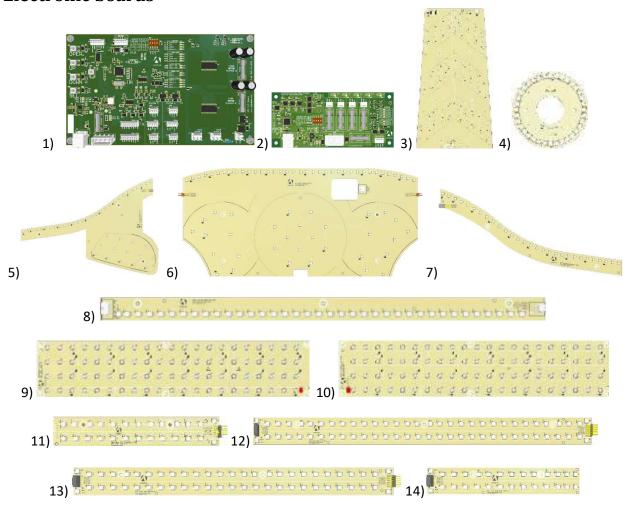
Ref	Part Description	Part #
1	General Duty Rubber Caster, 2-1/2"	INV-F25083
2	Leg Leveler 1/2"-13 x 4" Thread, 2-3/8" Base Diameter	INV-62805K-39
3	Grill 120mm	ADR-GRILLE-120MM
4	Cam Lock for Panel Thickness up to 23mm	ADR-14-2010
5	8" Waffle Style Speaker Grill	ADR-269-2112
6	Plastic Grill Clamp for Woofer	AAG-05-0055

## Sound system



Ref	ef 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

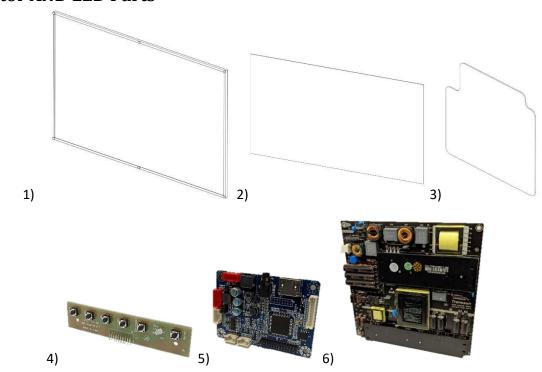
### **Electronic boards**



Ref	Part Description	Part #
1	Program I/O Board Assembly With 4 Analog Input for Hot Wheels	AAG-04-0001-PROG-NFS
2	12V RGB LED Controller with Outputs	AAG-04-0015-12RL
3	Back seat Arrow, NFS	AAG-14-0022
4	Push-Button RGB Led Ring, NFS	AAG-14-0011
5	Left Side Dash white LEDs, NFS	AAG-14-0025
6	Center Dash white LEDs, NFS AAG-14-00.	
7	Right Side Dash white LEDs, NFS AAG-14-00	
8	Side Screen, 12V RGB strip 19.68", NFS AAG-14-0030	
9	Red LED board (Police) AAG-14-0028	
10	Blue LED board (Police) AAG-14-0029	
11	Back Seat RGB Strip Start, NFS AAG-14-0021	
12	Side Seat RGB Strip, NFS AAG-14-0018	
13	Front Seat RGB Strip, NFS AAG-14-0019	
14	Back Seat RGB Strip End	AAG-14-0020



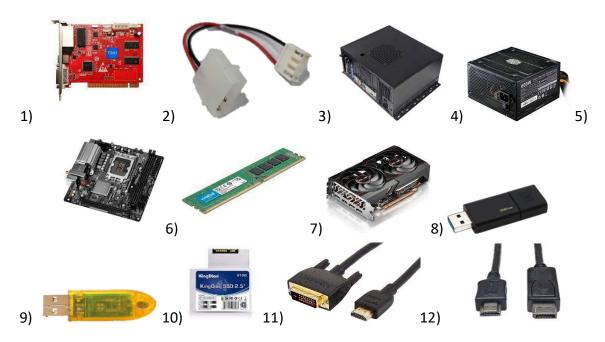
## **Monitor AND LED Parts**



Ref	Part Description	Part #
1	43" Monitor for NFS <sup>1</sup>	AAG-10-0004
2	Screen Tempered Protective Glass, Need for Speed	NFS-10-0001
3	Screen's Power Supply Protector	NFS-07-0050
4	HDMI Card for Monitor VG85-13652-10	AAG-04-0069
5	HDMI Card for Monitor VG85-13652-10	AAG-04-0070
6	Power-Supply for Monitor VG85-13652-10	AAG-04-0071

Note<sup>1</sup>: The monitor includes item 3 to 6.

## **Computer parts**



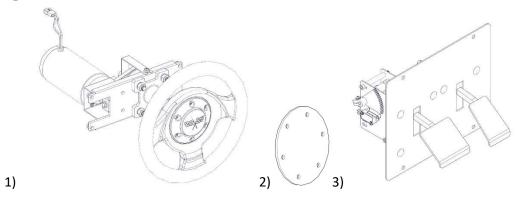
Ref	Part Description	Part Number
1	Led Matrix Controller – sending card	AAG-14-0039
2	T901 PC Card Power Cable	AAG-03-0185
3	Metal Pc Box Casing For NFS	AAG-01-0010
4	Power Supply 600W, (Or 500W) For PC Box	AAG-11-0001
5	Motherboard Asrock, B660M, S1700,12TH	AAG-11-0026
6	Crucial RAM, DDR4, 3200, 8GB, DIMM	AAG-11-0025
7	Sapphire Video card, Radeon, RX6600, 8 GB, GDDR6	AAG-11-0023
8	Restore USB Key NFS	ADR-11-2014-NFS-B660M
9	Yellow Dongle	TF-04-1212
10	Hard Drive Need for Speed, ASROCK B660M	INV-11-1027-NFS-B660
11	HDMI to DVI (M) cable	
12	DisplayPort Male to HDMI Male Cable, 28AWG	INV-DP-HDMI-06K

## Miscellaneous electronics parts



Part Description	Part Number
Power Bar 5 positions	INV-05-1242
Multi-Stage Filter 10A	ADR-817-1321-ND
Switching Power Supply 12V, 320W	AAG-13-0029
Switching Power Supply <b>24V</b> , 320W	AAG-13-0028
Kit for Fan 138CFM With Harness, 120mm	ADR-FAN-120MM-02-KIT
Miniature Round Pushbutton, White Center	ADR-49-0577-01
Meter, 12V, 7 Digit with Bracket	ADR-42-08012-072
7-Port USB, 3.0 Hub, Type A Female USB	AAG-11-0011
NFS fuses board	AAG-04-0068
White Jumbo Round Button, RGB, Translucent Bezel	AAG-13-0026
Programmed Led Matrix Card, Receiving Card	AAG-14-0032-PROG
	Power Bar 5 positions  Multi-Stage Filter 10A  Switching Power Supply 12V, 320W  Switching Power Supply 24V, 320W  Kit for Fan 138CFM With Harness, 120mm  Miniature Round Pushbutton, White Center  Meter, 12V, 7 Digit with Bracket  7-Port USB, 3.0 Hub, Type A Female USB  NFS fuses board  White Jumbo Round Button, RGB, Translucent Bezel

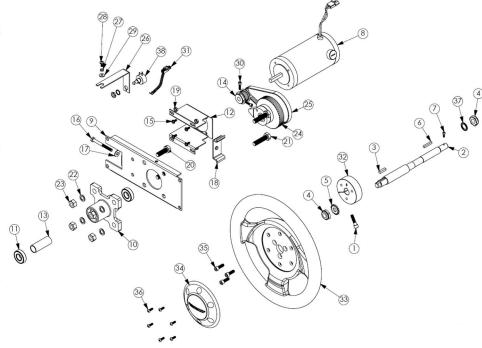
## **Steering wheels**



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	OTY	PART NO.	DESCRIPTION
1	8 8	43-0341-00	SCREW 1/4-28 X 1" SHC BLK OX
2		50-4014-00	SHAFT, 270 DEG, ACTIVE WHEEL
3	100	43-0305-00	KEY 3/16 SQUARE x .74 LG FOR ACTIVE STEERIN
4		43-0232-00	NUT, HEX NYLOCK 1/2-20
5		43-0232-00	LOCKWASHER M12 SERRATED EXTERNAL TOOTH
6		50-2092-00	KEY, SHAFT 4MM × 4MM × 25MM
7	1	43-1170-00	SCREW, #6-32 x 3/8" SHCS
8	8 3	50-4043-00	MOTOR & CONNECTOR ASY.
9		50-4016-00	WHEEL MTG BRACKET 270 DEG ACTV WHEEL
10	100		
		50-8129-00	DIECAST HOUSING FOR STEERING WHEEL W/O
11	2 9	50-8130-00	BEARING BALL 6002zz .59 ID X 1.259 OD X .35 THK
12		50-8455-00	MOTOR MOUNTING BRACKET FEEDBACK WHEEL
13		50-2659-00	BEARING SPACER
14	1 3	50-4040-00	PULLEY 1/5 PITCH 16 TEETH ALL ALUMINUM 3/8
15		43-0188-00	SCREW 8-32 X 3/8" HWHMS SEMS
16		43-0576-00	SCREW M6 X 60MM HHCS PARTIAL THREAD ZIN
17	-	90-1208-00	5/16 FLAT WASHER .06T 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 WHEE
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	HARNESS 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		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	7	43-0284-00	SCREW 8-32 X 1/2" TORX BHCS BLK OX
37		43-1554-00	STAR WASHER M14 EXTERNAL TOOTH
38		96-4916-00	LONG LIFE POT WITH NUT AND WASHER 5K 320



## Doors

1)



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

## **Wiring Harnesses**

Part Description	Part Number
Harness For NFS Police Red and Blue Lights	AAG-03-0143
Harness For NFS Seat Speaker	AAG-03-0150
Harness For NFS Audio Amp Front Speaker	AAG-03-0137
Harness For NFS & NFSM Front speaker Audio Amp	AAG-03-0138
Harness Coin Door Need for Speed	AAG-03-0136
Harness For NFS Backseat LED/Licences Plate to Cabinet	AAG-03-0142
Harness For NFS PSU 12V to Seat LED	AAG-03-0141
Harness For NFSM Audio Amp Power	AAG-03-0140
Harness 68" SuperSaber to SPADE TERM Yellow	AAG-03-0158
Dash LEDs Harness, Need for Speed	AAG-03-0166
Seat LEDs Harness, Need for Speed	AAG-03-0165
Harness For NFS Audio Amp Power	AAG-03-0139
Harness For PSU Power, Blox Breaker	BLX-03-0014

## 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	Keyboard + Mouse	INV-11-1015	1

# **Chapter 07 – Diagrams & Schematics**

## **Computer section**

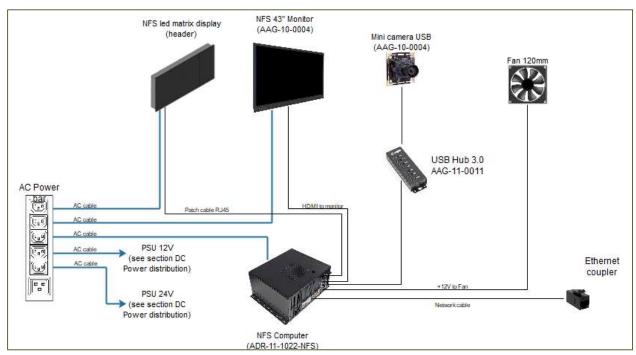


Figure 8.1: Computer interconnection diagram

#### NFS Heat Takedown V1.0 Chapter 07 – Parts

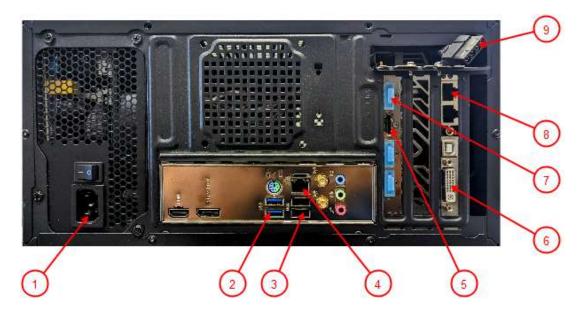


Figure 8.2: Computer connections

Item	Description
1	AC Power Inlet
2	USB port to USB hub
3	USB port to Windows license dongle <sup>1</sup>
4	Ethernet network port
5	HDMI port connected to DVI port (Item 6)
6	DVI port connected to (Item 5)
7	Display port to 43" monitor (HDMI)
8	RJ45 conn. to Led matrix display (header) <sup>2</sup>
9	12V Power-supply connector to 12V fan

Note<sup>1</sup>: USB hub must be connected in a blue connector.

Note<sup>2</sup>: The led matrix display should be connected in the upper connector as shown on the figure.



### 12V/24V Power distribution

The following figure shows all the items connected to the fuses board. Harnesses' part numbers are specified in red.

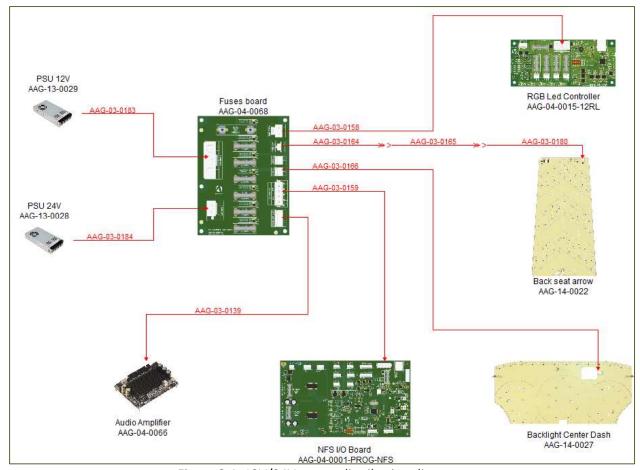


Figure 8.4: 12V/24V power distribution diagram

## I/O board section

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

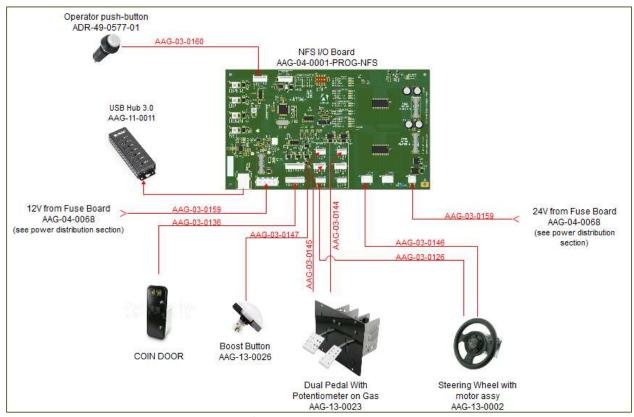


Figure 8.5: I/O board interconnection diagram

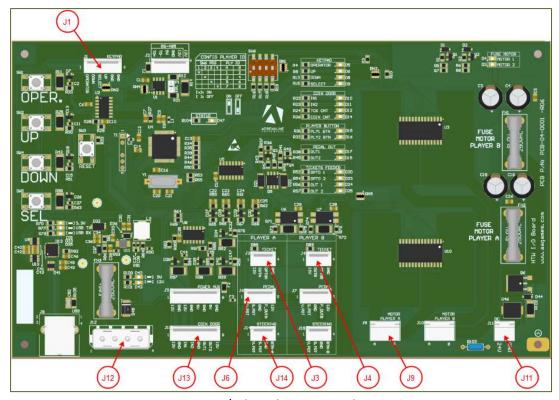


Figure 8.6: I/O board connectors locations

#### **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	ОРТОВ	GND
Color	RED	BLACK	WHITE	GREEN

<sup>\*</sup>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	ОРТОВ	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	Α	n/c	В	
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**

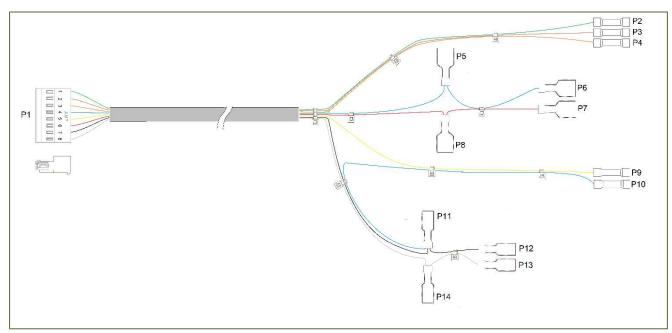


Figure 8.7: Coin door harness AAG-03-0136

Connection Chart						
Wire color	From	То	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**

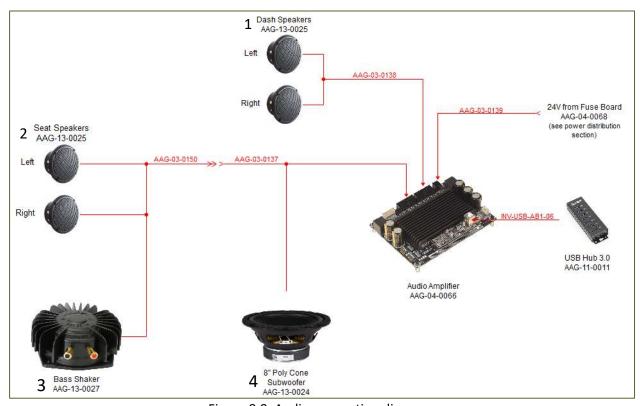
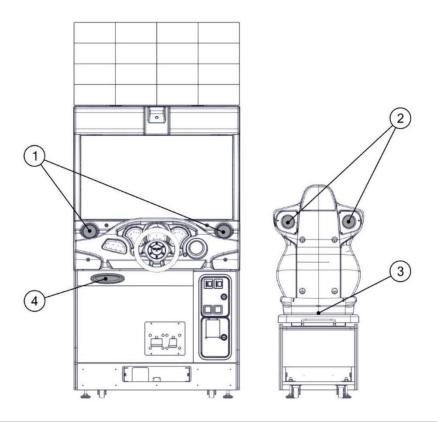


Figure 8.8: Audio connection diagram





#### NFS Heat Takedown V1.0 Chapter 07 – Parts

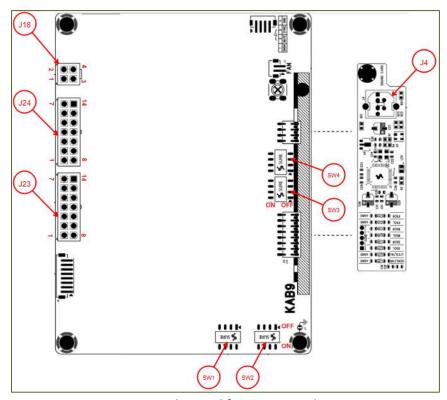


Figure 8.9: Audio amplifier connector location

#### **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)

124. Dash speakers (AAO 03 0130)							
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	

SW4-4

OFF

#### **Dip-switch settings:**

SW4-1

OFF

SW1-1	SW1-2	SW1-3	SW1-4
ON	OFF	OFF	OFF
SW2-1	SW2-2	SW2-3	SW2-4
ON	ON	ON	ON
ON	ON	ON	ON
ON SW3-1	ON SW3-2	ON SW3-3	ON SW3-4
-	-		-

SW4-3

OFF

## Led controller section.

SW4-2

OFF

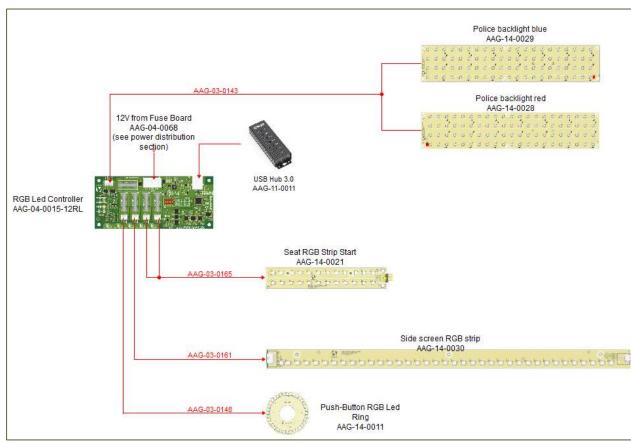


Figure 8.10: Led controller connection diagram.

#### NFS Heat Takedown V1.0 Chapter 07 – Parts

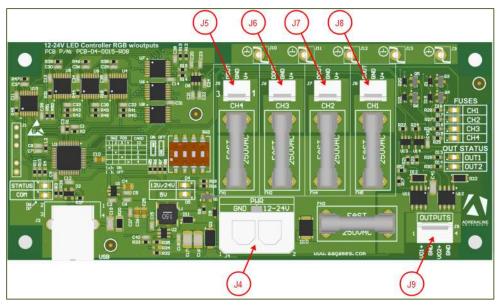


Figure 8.11: Led controller connector location.

### Pin description

J4: 12V Supply (AAG-03-0158)

Pin	1	
Definition	GND	12V
Color	BLACK	RED

J9: Police backlight red & blue (AAG-03-0143)

Pin	1	2	3	4
Definition	12V	OUT1	12V	OUT2
Color	RED	BLACK	RED	BLACK

\*Note: pin 1-2 red police, pin 3-4 blue police.

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: Side TV screen 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-03-0148)

Pin	1	2	2
Definition	12V	GND	DOUT
Color	RED	BLACK	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 <u>UEFI: USB device ~16GB</u>

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	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.
Problem	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	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.			
Sound	Verify the USB connection between the computer and the audio amplifier.  Verify the fuse of the audio amplifier on the fuse board.			

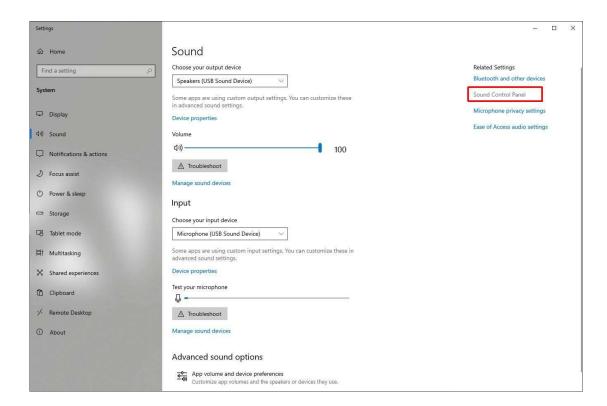


If the sound still not playing in all the speakers, please do the following procedure:

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

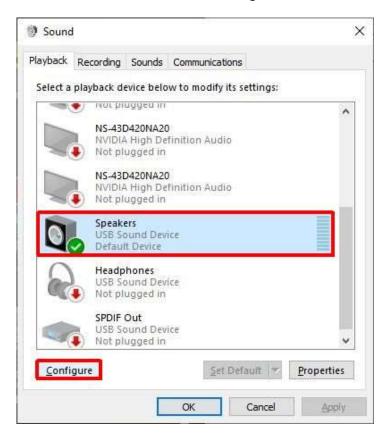


2. Click on the "Sound Control Panel".

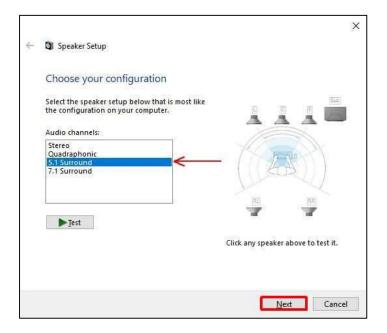




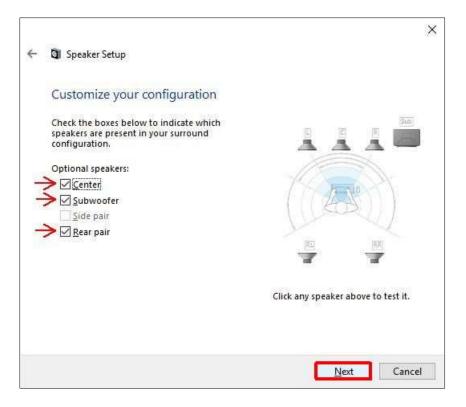
3. Select "Speakers USB Sound Device" and click on "Configure".



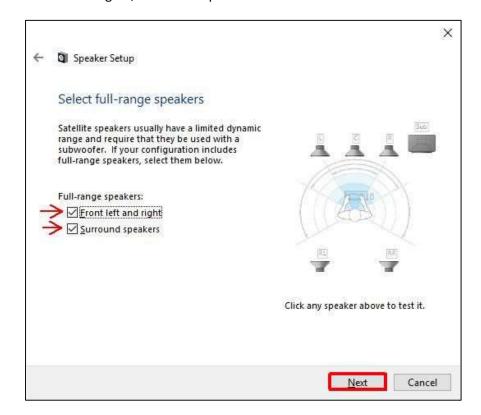
4. Select "5.1 Surround" and click on "Next".



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

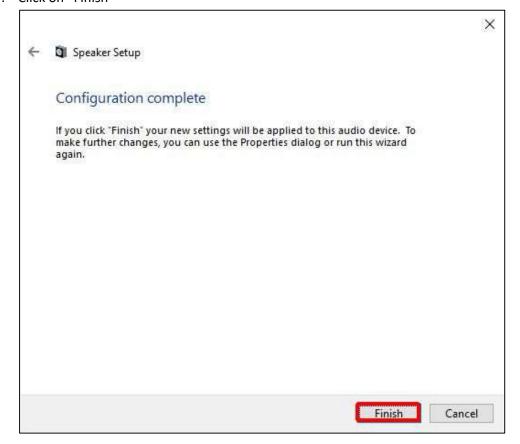


6. Select "Front left and right", "Surround speakers" and click on "Next".





#### 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.





## *NFS* Heat Takedown V1.0 Chapter 10 – Service & repair

-On your keyboard press on 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-Héroux Street Terrebonne, QC J6X 4R3 Canada +1.450.824.1671

