

# PONG®



**IMPORTANT**



Be Sure  
to Read this  
Manual  
Before Use



[www.universal-space.com](http://www.universal-space.com)

# Operation Manual

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Thank you for purchasing **PONG**. We hope you enjoy the product.

This manual contains valuable information about how to operate and maintain your game machine properly and safely. It is intended for the owner and/or personnel in charge of product operation. Carefully read and understand the instructions.

If you need any help during installation and setup please utilize this manual and troubleshooting guide. If the product fails to function properly, *non-technical personnel should under no circumstance attempt to service the machine*. Contact your distributor or manufacturer for help.

Before use, please read **IMPORTANT SAFETY INSTRUCTIONS**.

## **IMPORTANT SAFETY INSTRUCTIONS**

**To ensure the safe usage of this product, carefully read and understand these instructions before operating your game.**

**Save these instructions for future reference.**

Use this product only as described in this manual. Other uses not recommended may cause fire, electric shock or personal injury. Unplug the game from the outlet when not in use, when moving from one location to another, and before cleaning/servicing.

Explanations which require special attention are indicated by signs of warning. Depending on the potential hazardous degree, the terms: **NOTE**, **NOTICE**, and **WARNING** are used.

**NOTE:** A NOTE indicates useful hints or information about product usage.

**NOTICE:** A NOTICE indicates potential damage to product and how to avoid the problem.

**WARNING:** A WARNING indicates a potential for product damage or serious personal injury.

It is important to understand the meaning of the following HAZARD SIGNS before continuing:

### **High Voltage and Shock Hazard:**

High voltage can cause electric shock.  
Turn off/unplug power before servicing.



### **High Temperature Hazard:**

This part may cause scalding.  
Do not touch. Surface may be hot.



### **No Touching Hazard:**

This part may be hot or can cause electric shock.  
Do not touch.



Use the following safety guidelines to help ensure your own personal safety and to help protect your equipment and surrounding environment from potential damage.



**This product is an indoor game machine. Do not install outdoors.**

Avoid installing in the following places to prevent fire, electric shock, injury and/or machine malfunctioning:

- Places subject to rain/moisture, or places subject to high humidity.
- Places subject to direct sunlight, or places subject to extremely hot or cold temperatures to ensure that it is used within the specified operating range.
- Places where inflammable gas may be present or in the vicinity of highly inflammable/volatile chemicals or items that can easily catch fire.
- On unstable or sloped surfaces. The machine may topple or cause unforeseen accidents.
- Vicinity of fire exits, fire extinguishers etc that may block/prevent safety measures.

**IMPORTANT NOTE:**

**ALL REPAIRS MUST BE DONE TO ORIGINAL MANUFACTURER SPECIFICATIONS. FAILURE TO DO SO VOID ALL WARRANTIES AND OPERATOR ASSUMES ALL RISKS.**

**ANY LUBRICATION TO THE MECHANISM WILL VOID THE WARRANTY**

**IMPORTANT NOTE:**  
**ALL REPAIRS MUST BE DONE TO ORIGINAL MANUFACTURER SPECIFICATIONS.**  
FAILURE TO DO SO VOIDS ALL WARRANTIES  
AND THE OPERATOR ASSUMES ALL RISKS.

Maintenance should be performed with caution on always done with power off.

If a liquid spill has occurred, you must take immediately action to assure that the spill has been absorbed to prevent damage.  
Turn the machine off and unplug immediately.

**THIS GAME SHOULD BE SERVICED BY AUTHORIZED PERSONNEL ONLY**

# 1. SPECIFICATIONS

Rated power supply: AC110V 50/60Hz; AC220V 50/60Hz

Min. Power consumption: 80W

Max. Power consumption: 150W

Dimension: W47.64×D29.07×H18.90 in

W1210×D738.4×H480 mm


Packing Dimension: W52.36×D 33.86×H 27.56 in

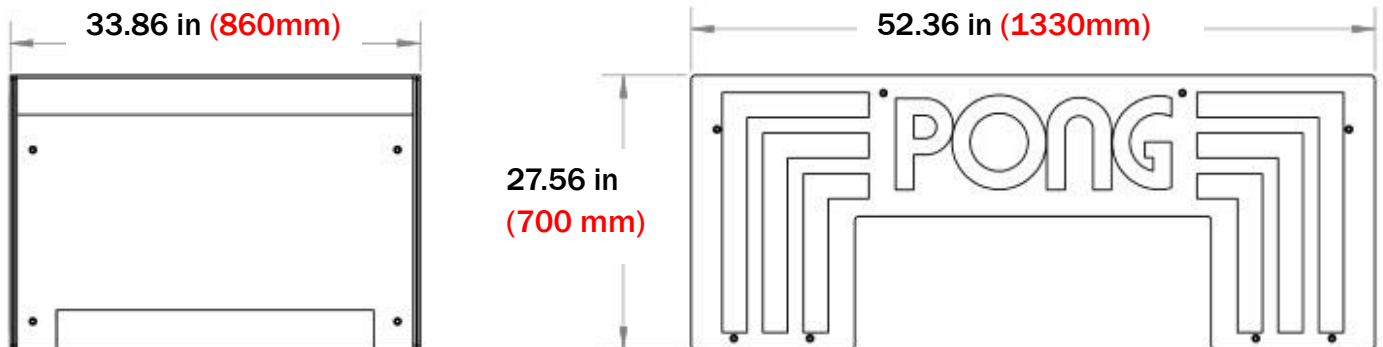
W1330×D 860×H 700 mm

Weight: Approximately 154.3 lb

70KG

Part No: P140

 **NOTICE:** After turning off the game, please wait at least 1 minute before restarting again.










**Note:** Game specifications are subject to change without notice.

## 2. CONTENTS OF THE ACCESSORY KIT

Open the package and make sure all the items are included:

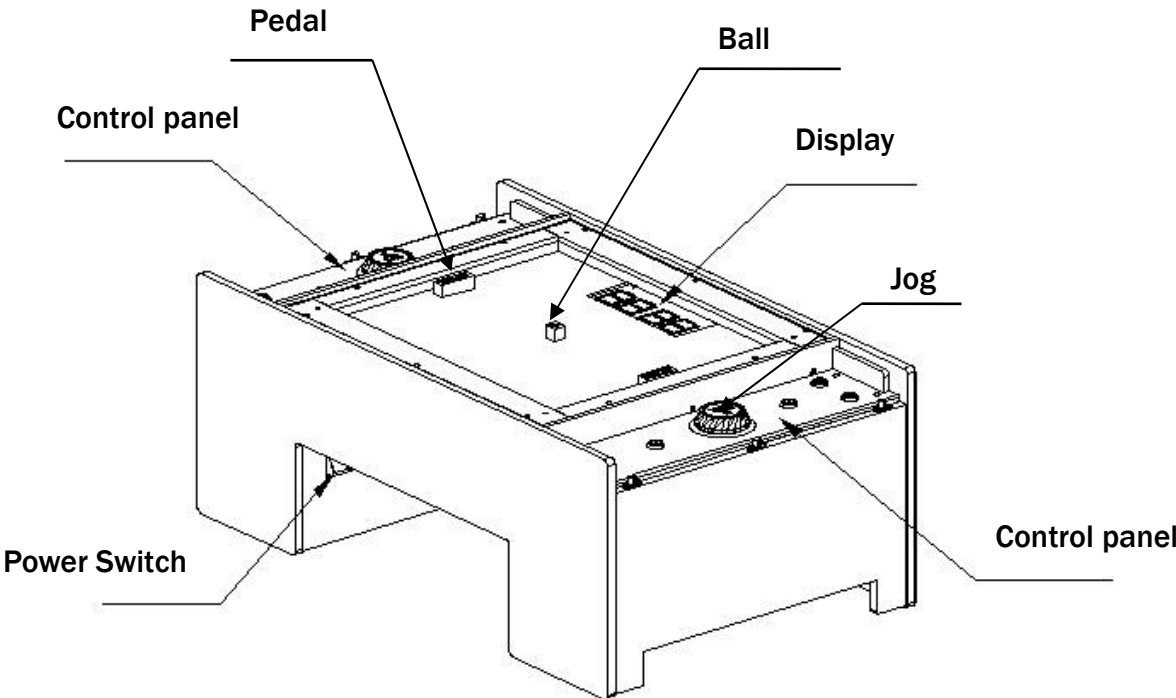
### 1. Following accessories

No.	Part No.	Code	Name	Picture	Qty
1	P140-801-000	23301010020	Power cord		1
2	P140-802-000	21901000010	Fuse		1
3	P140-803-000	40607000014	L wrench		1
4	P140-804-000	41440000247	Manual		1
5	P140-805-000	25100080015	Suction cup		1
6	P140-806-001	20211707045A	Adjust plate A		5
7	P140-807-001	20211707046A	Adjust plate B		5

**NOTE:** Part models are subject to change without notice.

### 3. PART NAME

### Key Components



## 4. SET UP & INSTALLATION

### ⚠ NOTICE

We do not recommend using power tools as they may cause damage.

⚠ **This product is an indoor game machine. Do not install outdoors.**

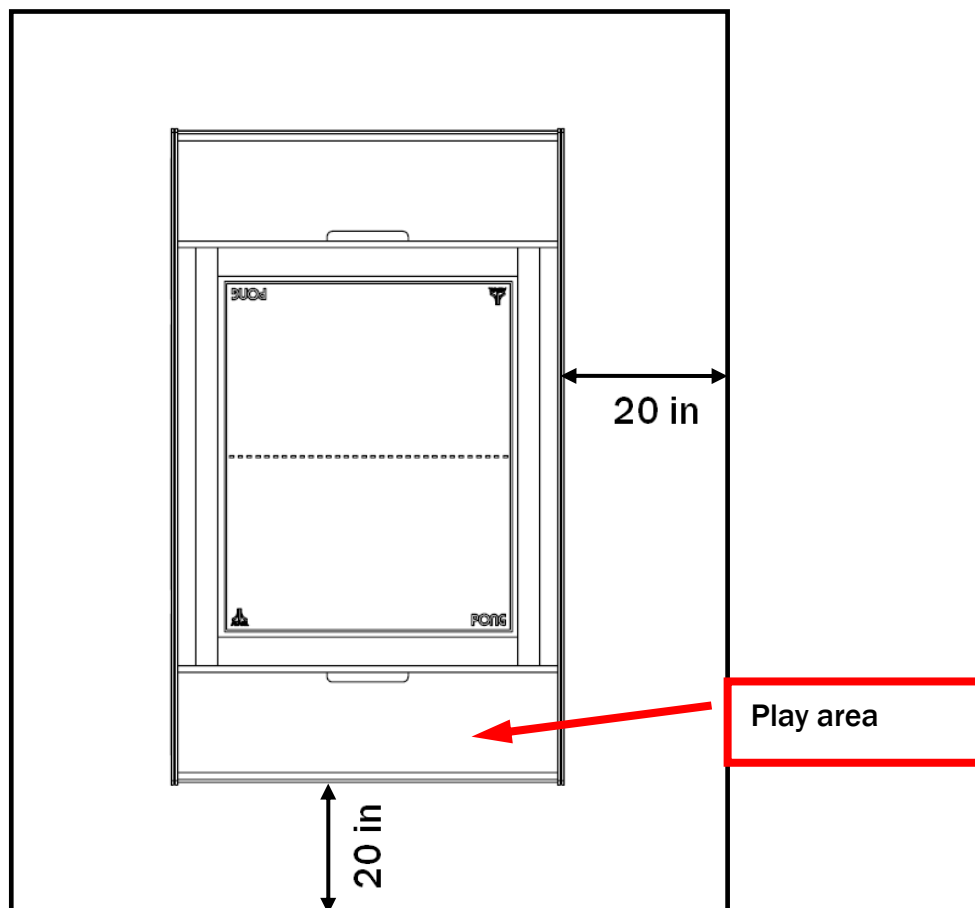
- Refer to IMPORTANT SAFETY INSTRUCTIONS (Pg. 3) for places to avoid
- Place the unit on a dry level surface
- Ventilation openings must not be obstructed by objects or by wall.

### 4.1 Play Zone

This machine requires space for playing and for maintenance as shown below.

Leave space around the game upon installation:

Service area: 20 in



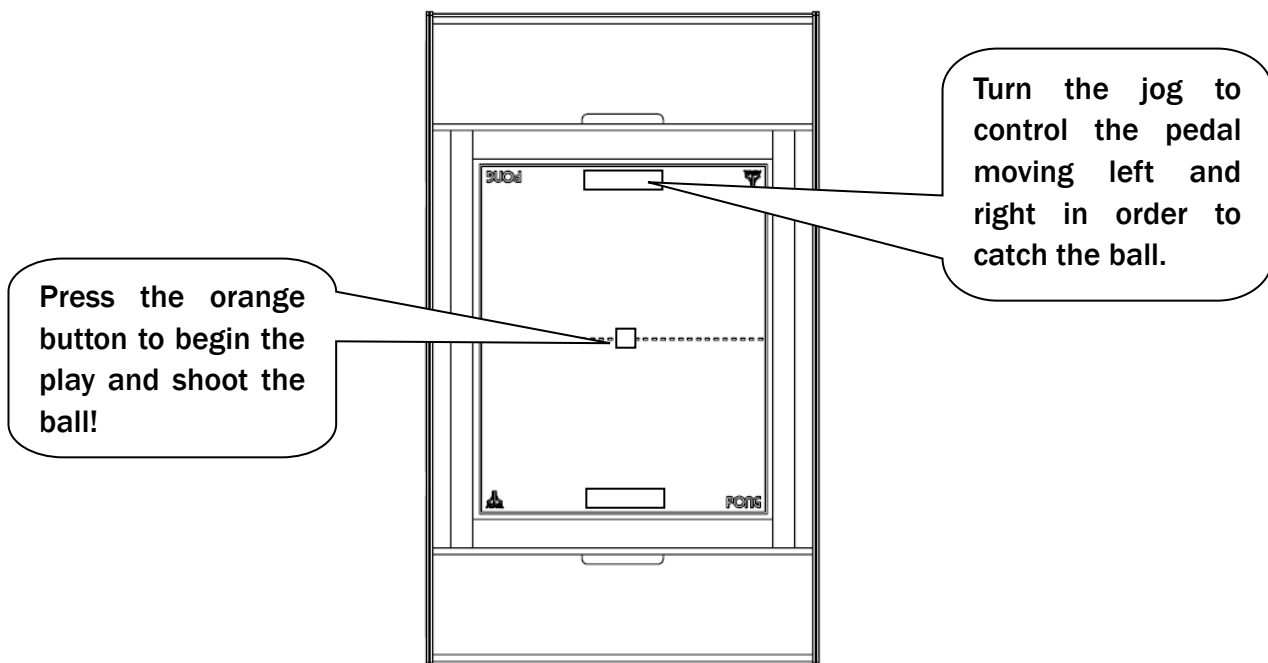
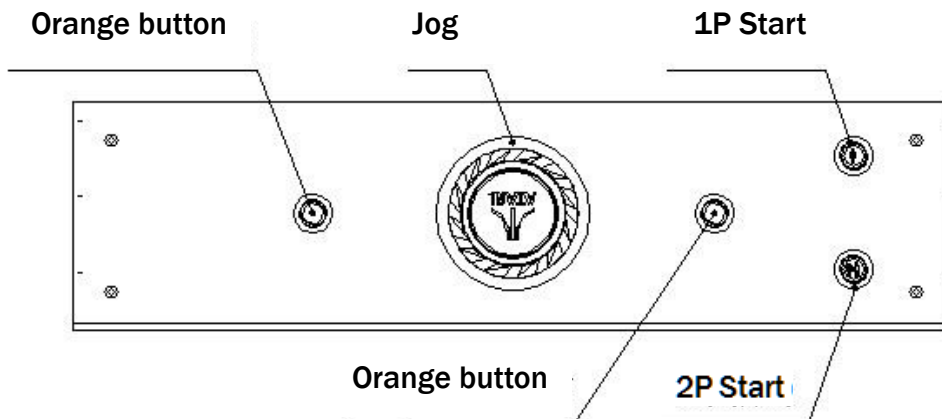
### NOTICE

Your unit must be leveled to operate properly.



## 5. HOW TO PLAY

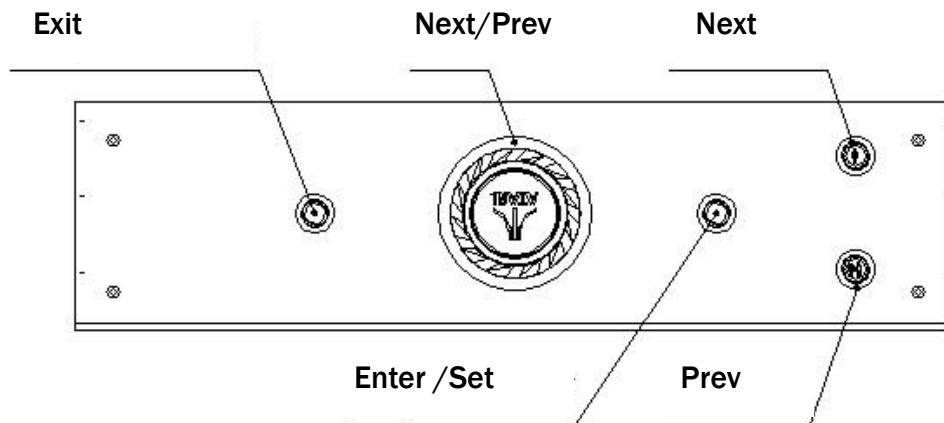
5.1 Press 1P Start button or 2P Start button to start the game. Move the jog to control the pedal, press the orange button to shoot. (Same function of the two orange buttons)



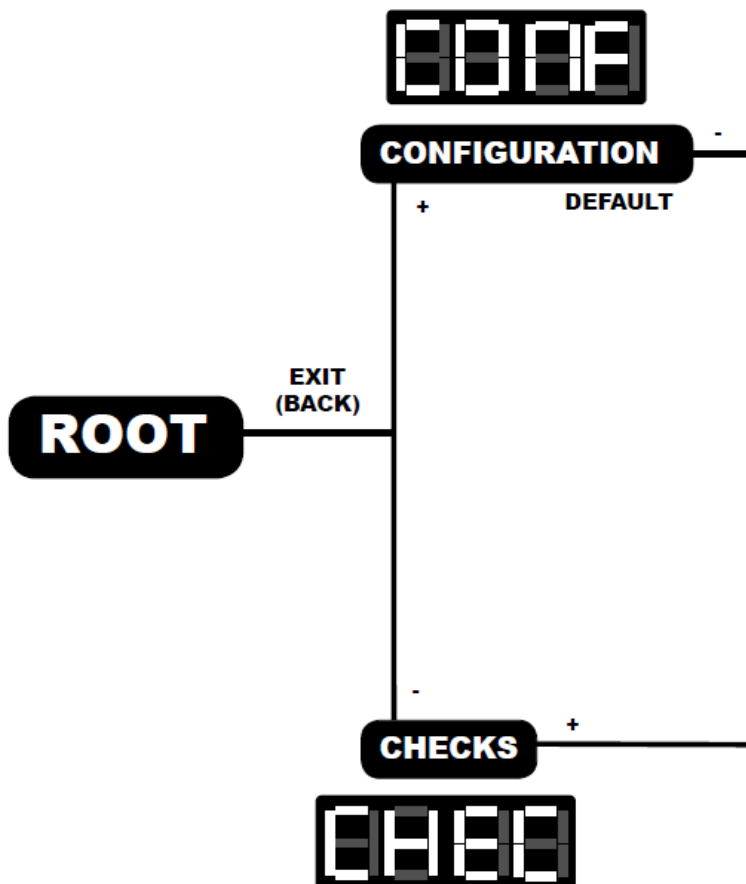
## 6. GAME OPTION

Locate the player 1 side and settings. Press both of the orange buttons and the 1P start button and it will go to SERVICE MODE (white light in the playfield).

Press the right orange button to enter and set, press the left orange button to exit.

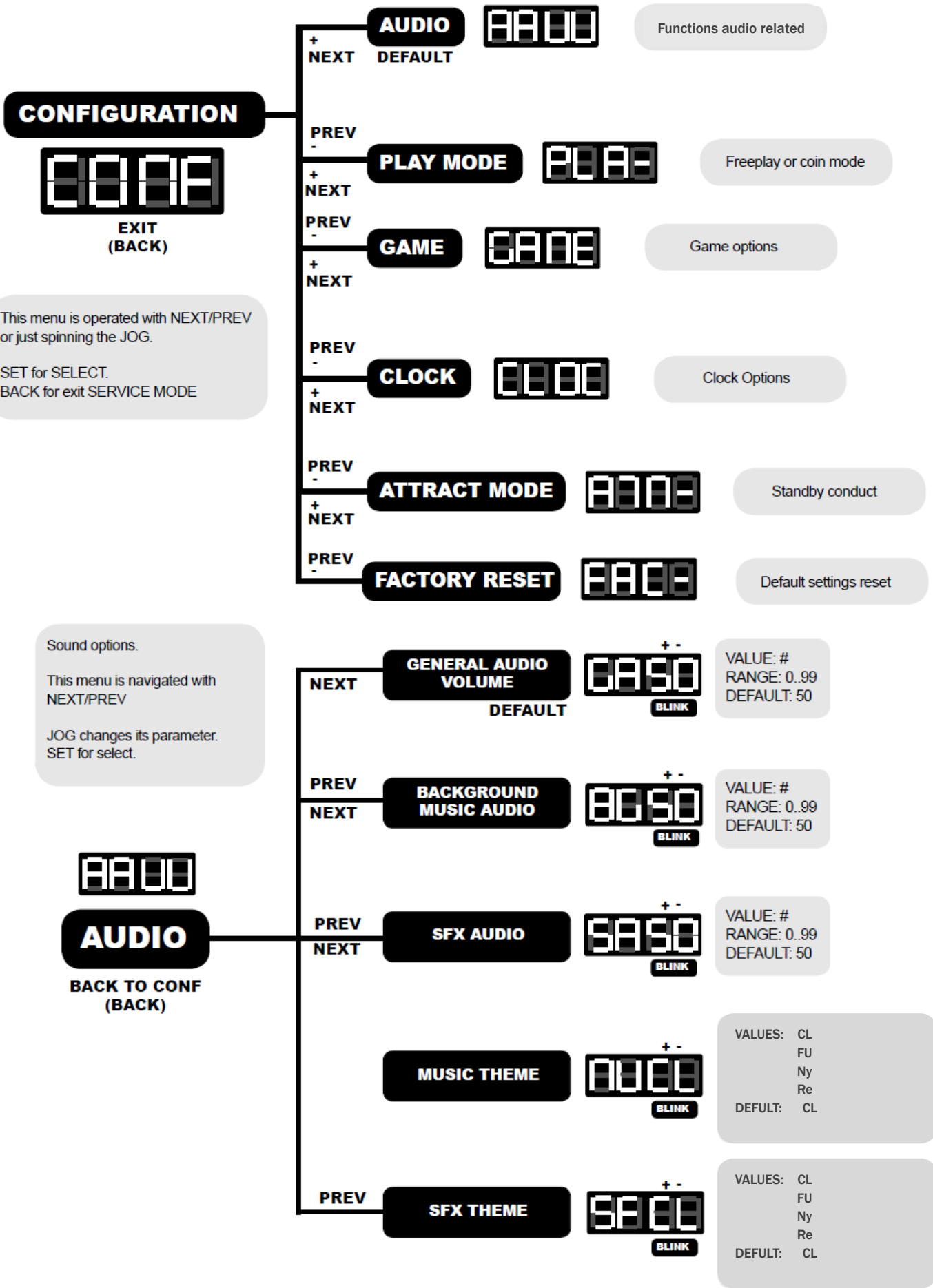


### 6.1 Setting menu



When SERVICE MODE is active, you will see CONF in the scoreboard by default. Spinning the JOG will switch spelling between configuration (CONF) and checks (CHEC)

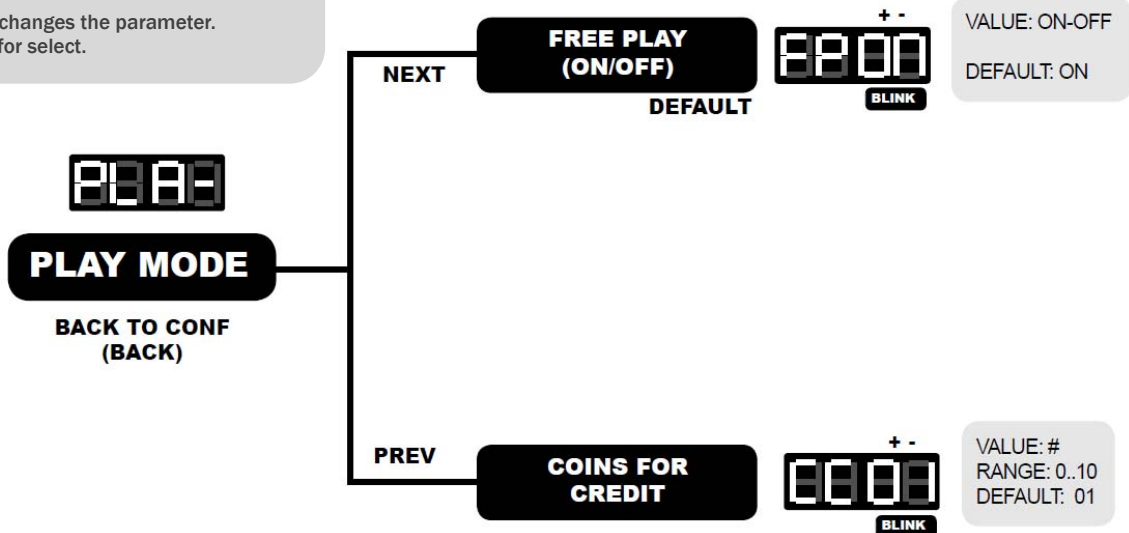
PREV exits SERVICE MODE and SET selects the active option.



This option only applies to units fitted with a coin mechanism. Choose FREE PLAY or COIN OPERATED.

This menu is navigated with NEXT/PREV

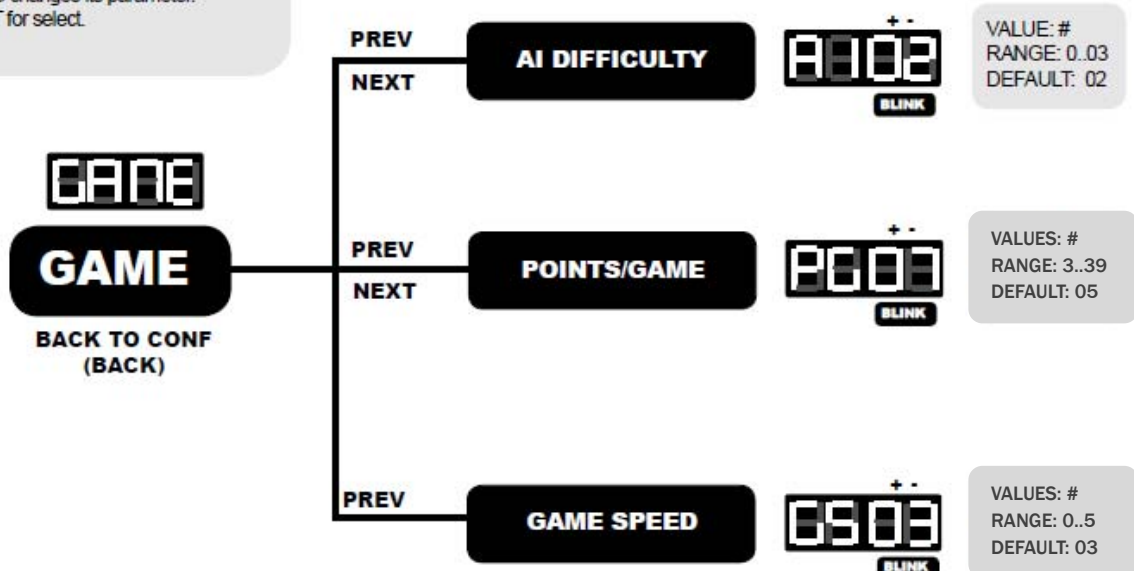
JOG changes the parameter. SET for select.



GAME OPTIONS:  
Mode, difficulty and speed.

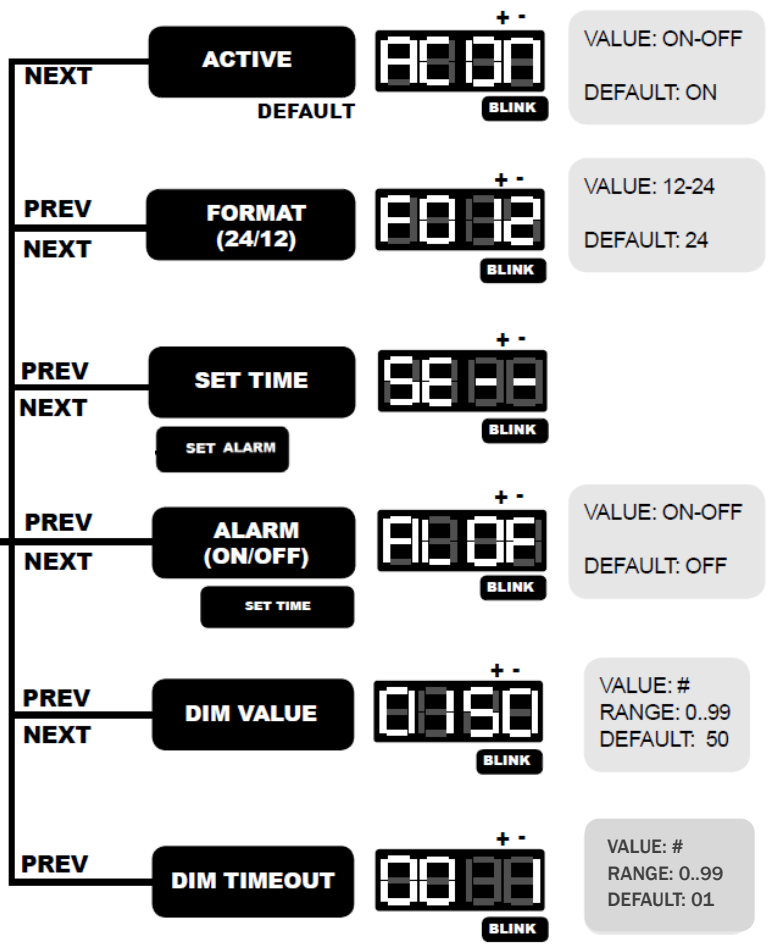
This menu is navigated with NEXT/PREV

JOG changes its parameter. SET for select.



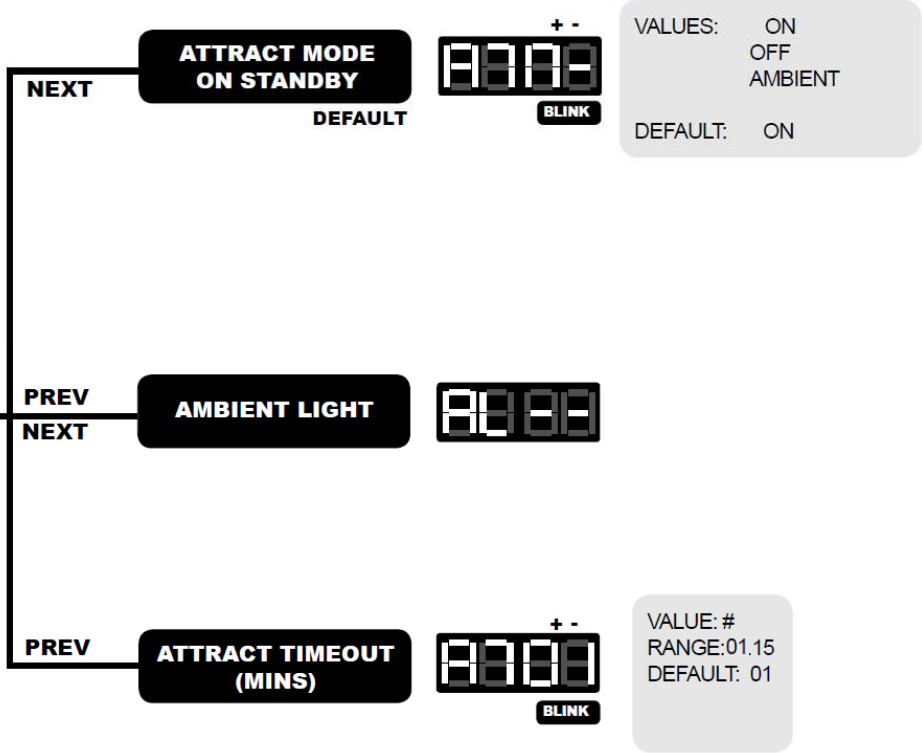
This menu is navigated with NEXT/PREV  
 JOG changes its parameter.  
 SET for select.

**CLOCK**  
 BACK TO CONF  
 (BACK)



Attract mode option when the unit is in standby.  
 This menu is navigated with NEXT/PREV  
 JOG changes its parameter.  
 SET for select.

**ATTRACT MODE**  
 BACK TO CONF  
 (BACK)



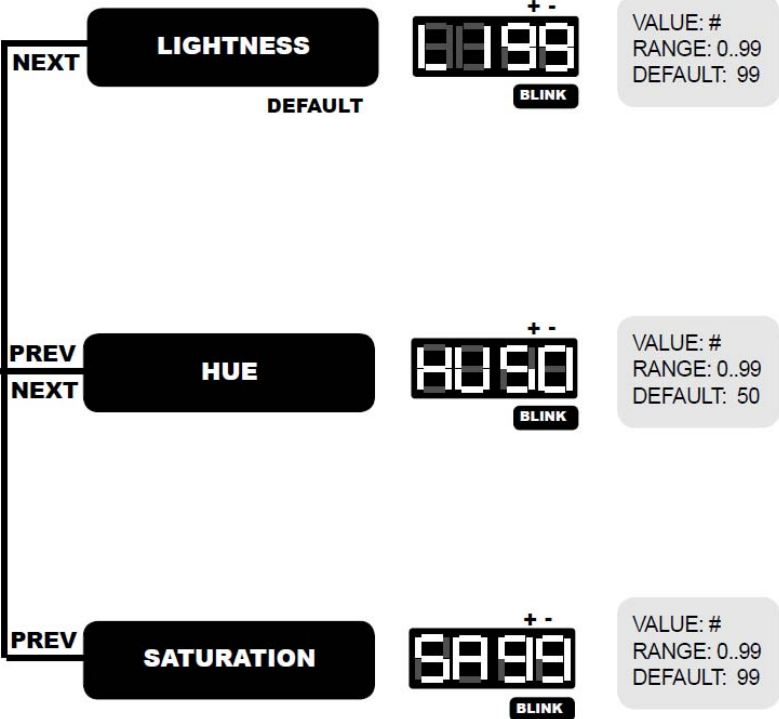
This menu is navigated with NEXT/PREV

JOG changes its parameter. SET for select.

**8888**

**AMBIENT LIGHT**

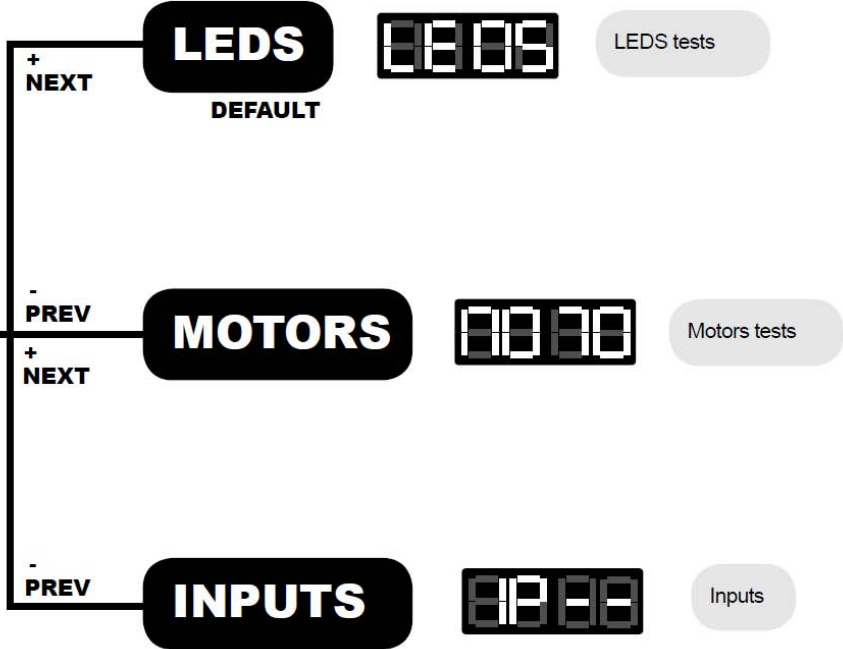
BACK TO ATTRACT MODE (BACK)



**CHECKS**

**CHHE**

EXIT (BACK)



This menu is navigated with NEXT/PREV  
JOG changes its parameter.  
SET for select.  
BACK for exit SERVICE MODE

**Playfield leds test**

The first option you can turn on LED by LED with the JOG

This menu is navigated with NEXT/PREV

JOG changes its parameter.

SET for select.

BACK for go back to CHECKS

0000

**LEDS**

BACK TO CHECKS  
(BACK)

PREV	<b>ALL WHITE</b>	0000	All white
NEXT			
PREV	<b>ALL RED</b>	8888	All red
NEXT			
PREV	<b>ALL GREEN</b>	0000	All green
NEXT			
PREV	<b>ALL BLUE</b>	8800	All blue
NEXT			
PREV	<b>ALL OFF</b>	6000	All OFF

Check motors and sensor. When a skate enables a sensor, all playfield leds turn on and they turn off again when the skate leaves the sensor zone.

The JOG controls the selector button.

This menu is navigated with NEXT/PREV

BACK for go back to CHECKS

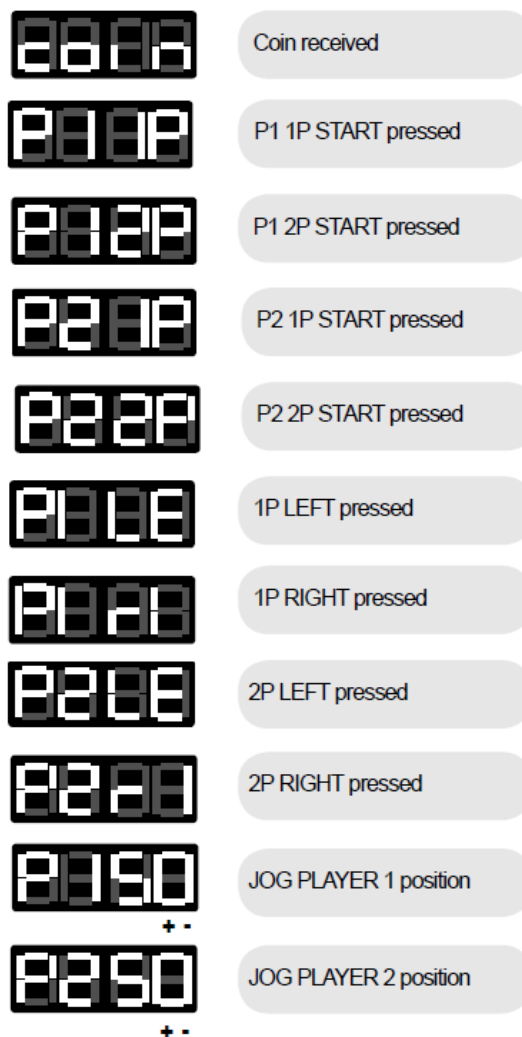
0000

**MOTORS**

BACK TO CHECKS  
(BACK)

NEXT	<b>MOTOR X</b>	8888	Moves motor X
	<b>DEFAULT</b>	-	
PREV	<b>MOTOR Y</b>	8888	Moves motor Y
NEXT		-	
PREV	<b>MOTOR P1</b>	8888	Moves 1P motor
NEXT		-	
PREV	<b>MOTOR P2</b>	8888	Moves 2P motor
		-	

**INPUTS**  
**BACK TO CHECKS**  
 (press RIGHT 3 secs)



## 7. TROUBLESHOOTING

### 7.1 Common Problem

Please confirm that all connectors fit tightly.

Symptom	Possible Cause	Recommended action
Game will not start	Frame assembly connector is loose.	Check connector.
	Frame assembly fault	Contact with UNIS Service.
Power off	Circuit protector make power SW in off state.	Turn on power SW again. If appeared again and again, machine has anomaly. Please contact UNIS Service.
No sound	Low volume	Raise the volume.
	Connector loose.	Check connector.
	Speaker fault.	Check speaker.
	Audio cable problem.	Reconnect the audio cable or change it.
	Driver problem	Restart the audio driver.



## 8. MAINTENANCE & INSPECTION

### 8.1 Safety Check

These checks are necessary for safe machine operation:

1. Test game before operation each day.
2. Conduct monthly routine checks of game components to ensure good working condition
3. Check the machine regularly for dust and clean as necessary.

**Note:** Parts and components require preventative maintenance to maintain proper operation.

### 8.2 Handling Precautions

When inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.



Non-compliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine

 **NOTICE**

We do not recommend using power tools as they may cause damage.

### 8.3 How to clean the playfield

Before processing with assembly assure you have the following tools.

No.	Name	Picture
<b>1</b>	Philip's screwdriver	
<b>2</b>	Suction cup	

**Step 1** Power off the game and use the suction cup as shown in the picture to remove the glass.



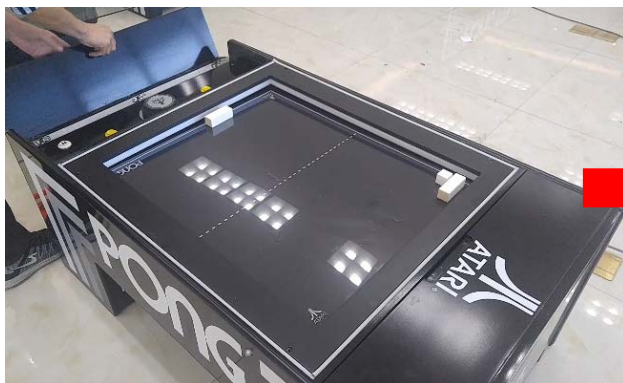


On both side player positions

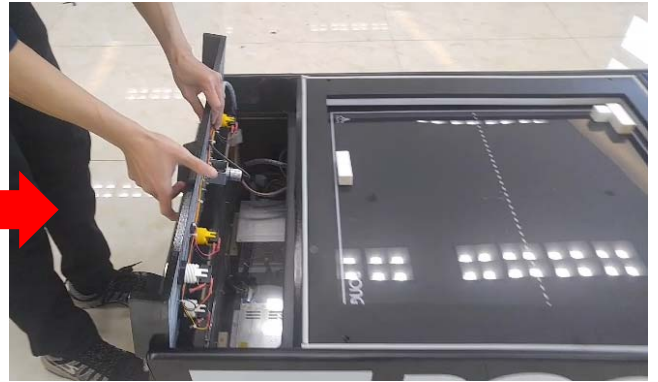
**Step 2** Remove the corner screw covers shown in the picture and loosen the screws.



**Step 3** Open end panel of player position shown in the pictures.



**Step 4** Open the control panel as shown. Unplug the connector in red circle, then remove the square frame.



**Step 5** Remove the Pedals and Ball and place them in a safe location, please avoid them sticking together.

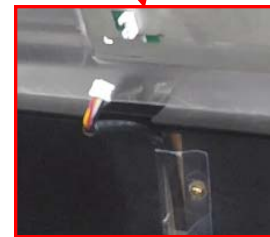


**Step 6** Loosen the screws and remove the playfield as shown.





**Step 7** Remove the metal plate and unplug the display connector as shown. Proceed to the movement mechanism.




Movement mechanism

**CAUTION:** Do not leave the game unattended with the playfield removed.

## 8.4 How to tighten the belt



Before processing with assembly assure you have the following tool.

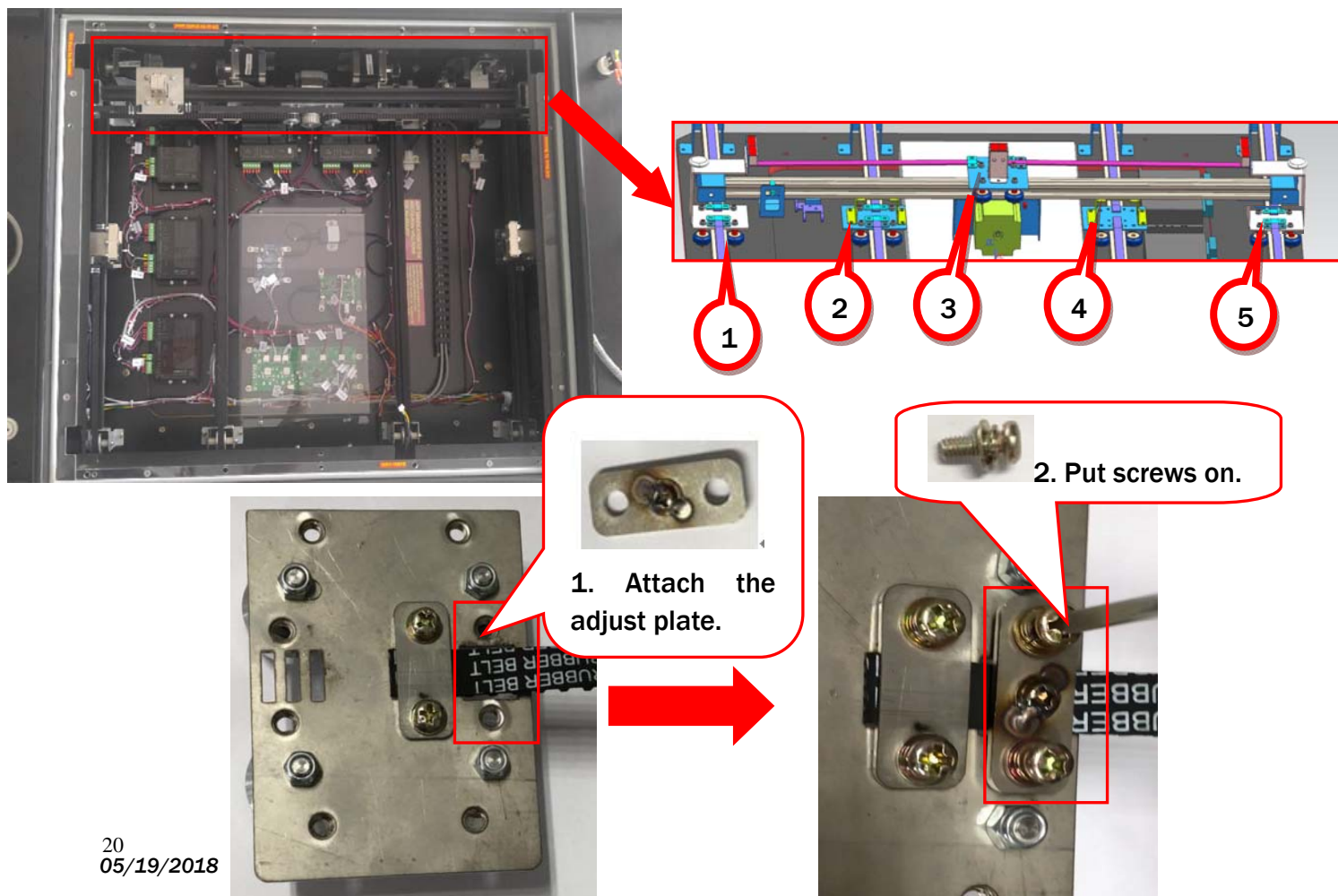
No.	Name	Picture
1	Philip's screwdriver	

If noise is heard from the tracks inside the machine, one of the reasons is that the belts has loosen. Here is the way to tighten the belt.

Follow the 8.3 steps to remove the playfield. Utilize the Philip's screwdriver to attach the adjust plate A or adjust plate B with screws as picture shown. Totally 5 places can adjust the belt.

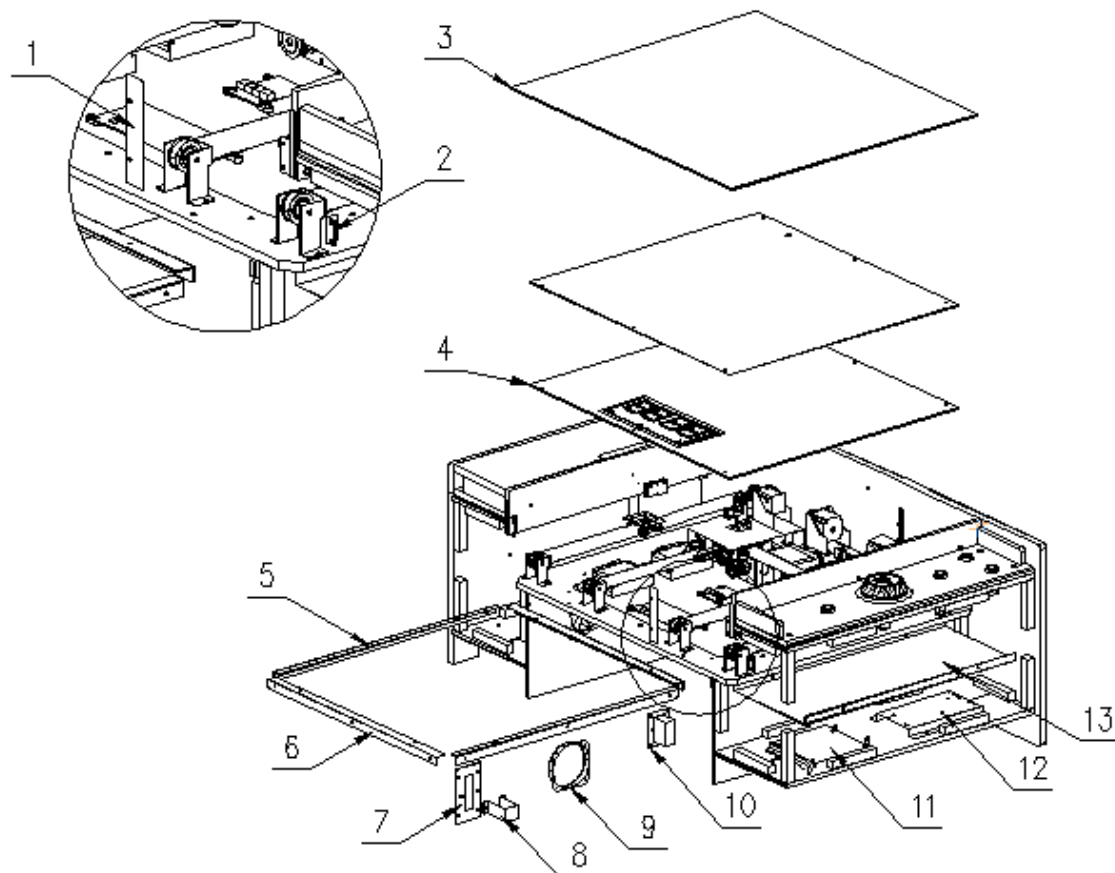
### Kits for installation

No.	Part No.	Code	Name	Picture	Qty
1	P140-806-000	20211707045	Adjust plate A		5
2	P140-807-000	20211707046	Adjust plate B		5



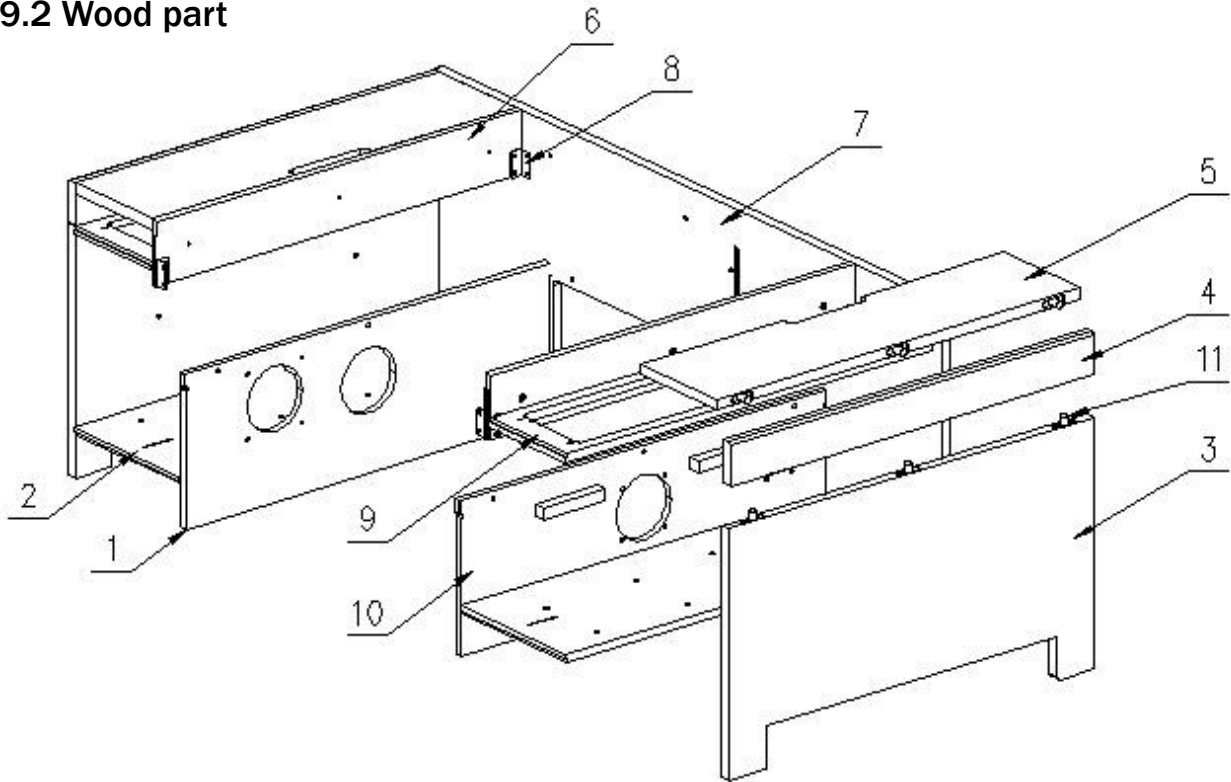
## 9. OVERALL CONSTRUCTION

### 9.1 General Assembly



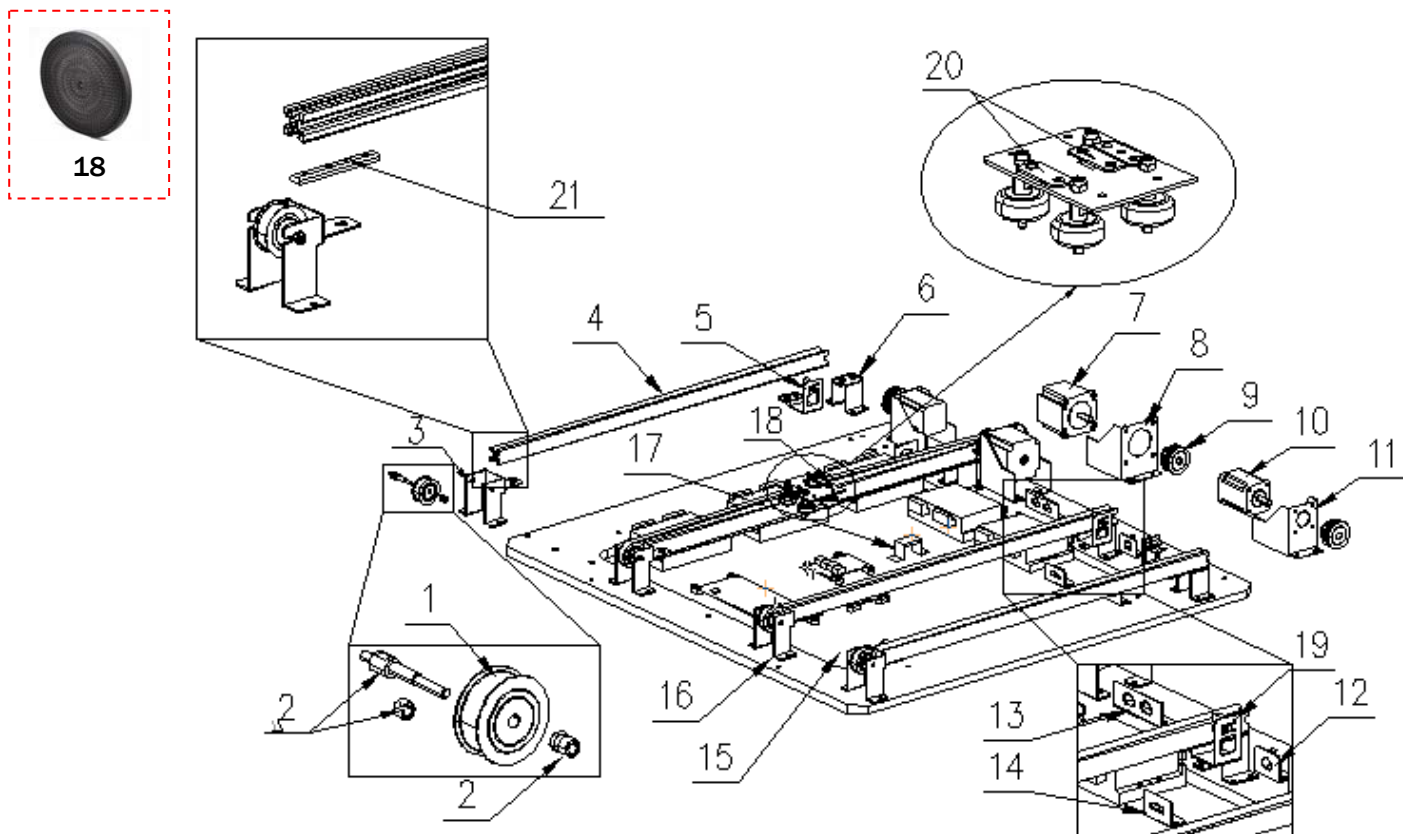
No.	Part No.	Code	Name	Qty
1	P140-105-000	20611707002A	Wiring plate	1
2	P140-106-000	20211707016	Bracket	1
3	P140-107-000	20611707011	Glass	1
4	P140-108-001	20611707010B	Base support plate	1
5	P140-101-000	20211707009	Bottom support A	2
6	P140-102-000	20211707010	Bottom support B	2
7	P140-116-000	20211707039	USB panel	1
8	P140-117-000	20211707040	USB pressing plate	1
9	P140-429-000	25900016000	4"Speaker net light cover	2
10	P140-103-000	20211707011	SW plate	1
11	P140-175-000	26000061000	PC bracket	1
12	P140-120-000	20211707050	Power supply bracket	1
13	P140-104-000	20611707001	Anti water plate	1

## 9.2 Wood part



No.	Part No.	Code	Name	Qty
1	P140-503-000	20311707010C	Speaker plate A	1
2	P140-505-000	20311707012B	Side bottom plate	2
3	P140-502-000	20311707009B	Front plate	2
4	P140-508-000	20311707002B	Control panel side cover	2
5	P140-509-000	20311707003B	Control panel top cover	2
6	P140-506-000	20311707001A	Control panel front plate	2
7	P140-501-000	20311707008A	L&R side plate	2
8	P140-121-000	20211707012	Connect plate	4
9	P140-507-000	20311707013	Control panel bottom plate	2
10	P140-504-000	20311707011A	Speaker plate B	1

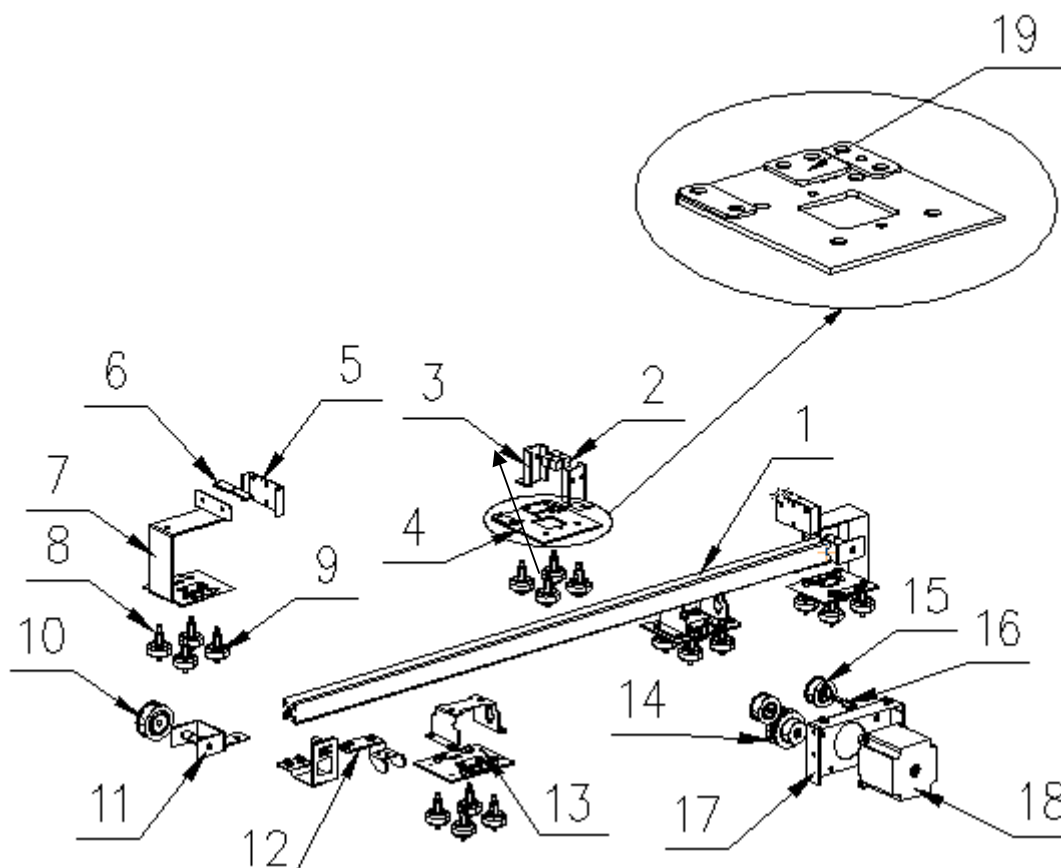
### 9.3 Movement mechanism



No.	Part No.	Code	Name	Qty
1	P140-125-000	20211707032A	Idle wheel A	4
2	P140-126-001	20211707047A	Idle wheel B bracket	4
	P140-304-000	20102000022	Non-metallic hexagon lock nut	4
	P140-301-000	20113000055	C flat washer	4
	P140-176-000	20211707054	Wheel sleeve	4
	3	P140-124-000	20211707017A	Idle wheel A bracket
4	P140-144-000	20211707035	X axle track	4
5	P140-143-001	20211707023B	Sensor SW bracket	3
6	P140-142-000	20211707022	Track bracket	4
7	P140-460-000	23406000031	Hybrid stepping motor	2
8	P140-131-001	20211707020A	57 motor bracket A	2
9	P140-130-000	20211707033	Driving wheel	4
10	P140-459-000	23406000030	Hybrid stepping motor	2
11	P140-129-000	20211707019	42 motor bracket	2
12	P140-147-000	20211707025	Wiring plate B	2
13	P140-146-000	20211707024	Wiring plate A	1
14	P140-148-000	20211707026	Wiring plate C	3



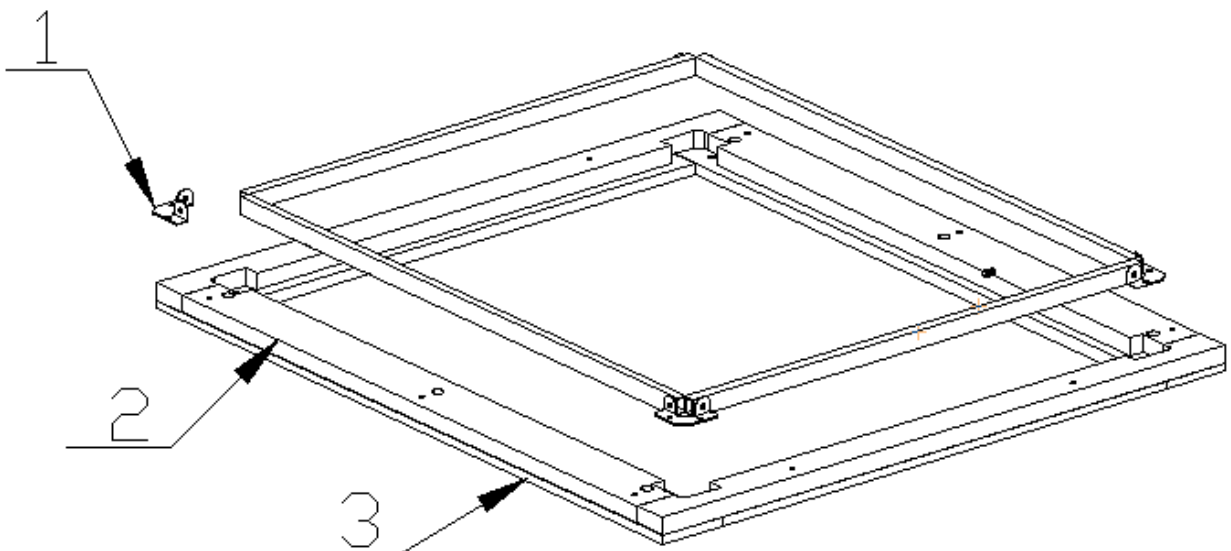
No.	Part No.	Code	Name	Qty
15	P140-511-000	20311707015D	Electric part support plate	1
16	P140-510-000	20311707014C	Support plate	1
17	P140-150-000	20211707041	Small pressing plate	1
18	P140-461-000	26504010002	Belt	7.5m
19	P140-153-001	20211707052A	Sensor SW bracket	1
20	P140-154-001	20211707043A	Fix plate A	9
21	P140-158-001	20211707049A	Short fix bar	8



No.	Part No.	Code	Name	Qty
1	P140-145-000	20211707036	Y axle track	1
2	P140-466-000	23502000045	Strong NdFeB magnet	2
3	P140-141-000	20211707006A	Magnet plateB	2
4	P140-140-000	20211707005B	Y axle bracket	1
5	P140-138-000	20211707004A	Magnet plate A	2
6	P140-465-000	23502000041	Strong NdFeB Magnet	4
7	P140-137-000	20211707003A	X axle bracket	2
8	P140-136-001	20211707048A	Wheel shaft	20
9	P140-178-000	20611707030	Axle wheel	20

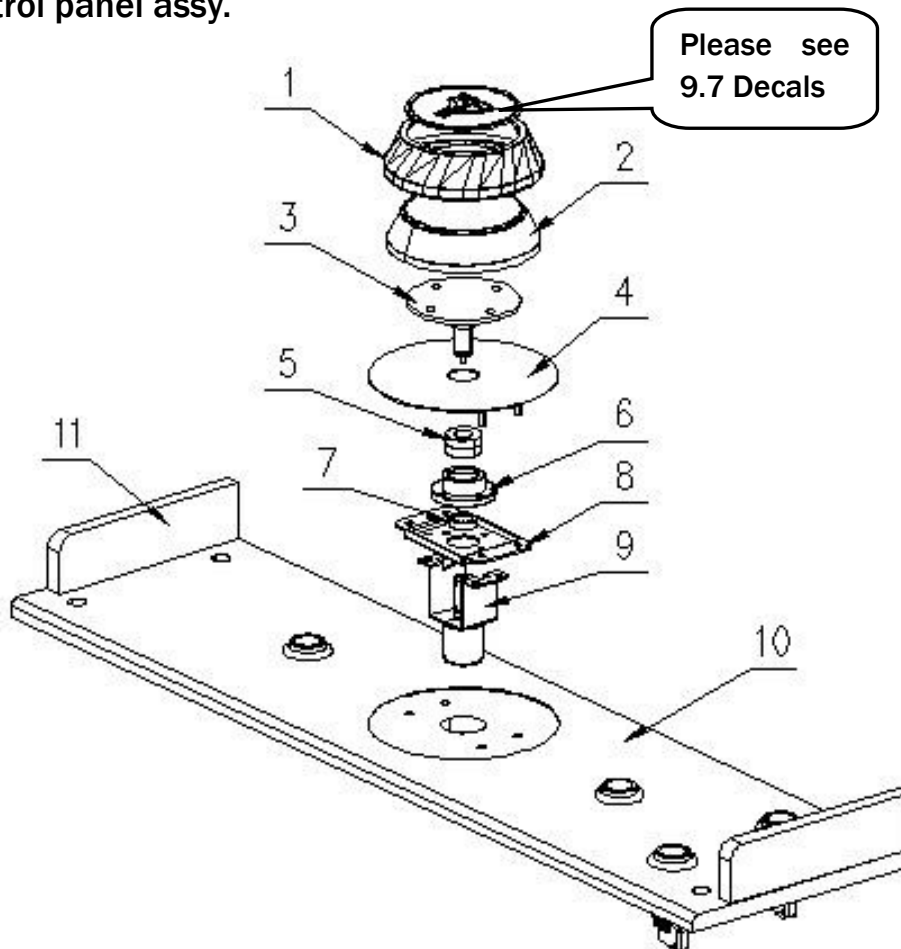
No.	Part No.	Code	Name	Qty
10	P140-125-000	20211707032A	Idle wheel A	2
11	P140-127-001	20211707018B	Idle wheel B bracket	2
	P140-128-001	20611707026A	Support bracket axle	2
	P140-177-000	20211707055	Idle wheel axle B	2
12	P140-149-000	20211707027A	Chain mounting plate	1
13	P140-135-000	20211707002A	Y axle bracket	2
	P140-152-001	20211707051A	Connecting bracket	2
14	P140-130-001	20211707033A	Driving wheel	1
15	P140-133-000	20211707034A	Idle wheel B	2
16	P140-134-001	20211707007B	Axle	2
17	P140-132-001	20211707021A	58 motor bracket B	1
18	P140-460-000	23406000031	Hybrid stepping motor	1
19	P140-155-001	20211707044A	Fix plate B	1

#### 9.4 Frame Assy.



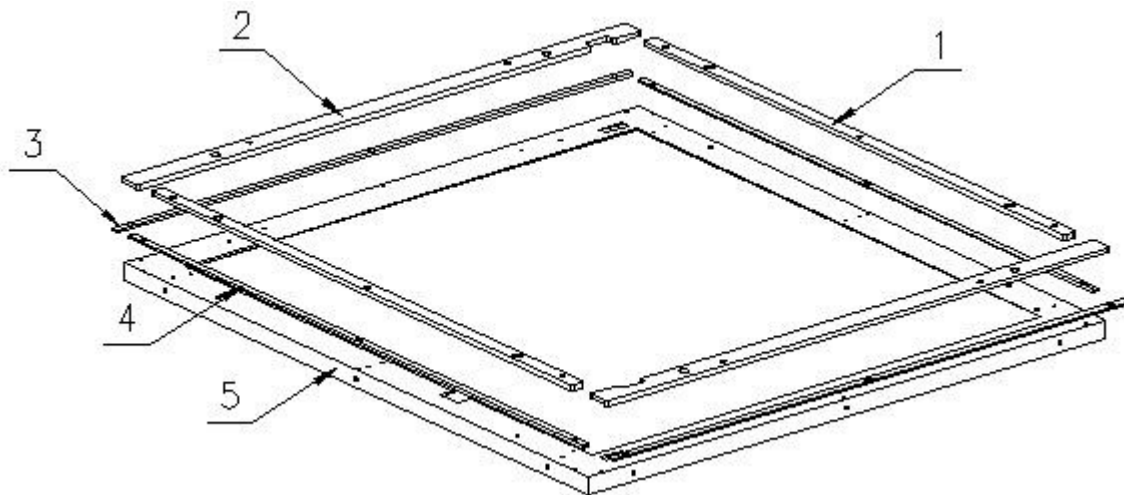
No.	Part No.	Code	Name	Qty
1	P140-160-000	20211707028	Connecting plate	4
2	P140-513-000	20311707005A	Frame bottom plate	1
3	P140-512-000	20311707004A	Frame top plate	1

### 9.5 Control panel assy.



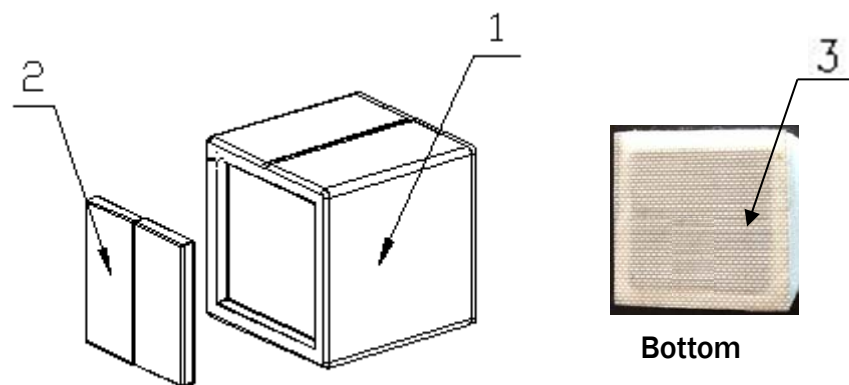
No.	Part No.	Code	Name	Qty
1	P140-164-000	20611707008	Jog shell	2
2	P140-163-000	20611707009	Jog	2
3	P140-167-000	20211707008A	Axle	2
4	P140-162-000	20211707037	Decoration panel	2
5	P140-469-000	20106000318	BR	2
6	P140-165-000	20211707013	BR bracket	2
7	P140-168-000	20211707038	Axle sleeve	2
8	P140-166-000	20211707029	Support plate	2
9	P140-169-000	20211707030	Coder bracket	2
10	P140-514-000	20311707006A	Control panel plate	2
11	P140-515-001	20311707007B	Control panel side plate	4

### 9.6 Water proof assy.



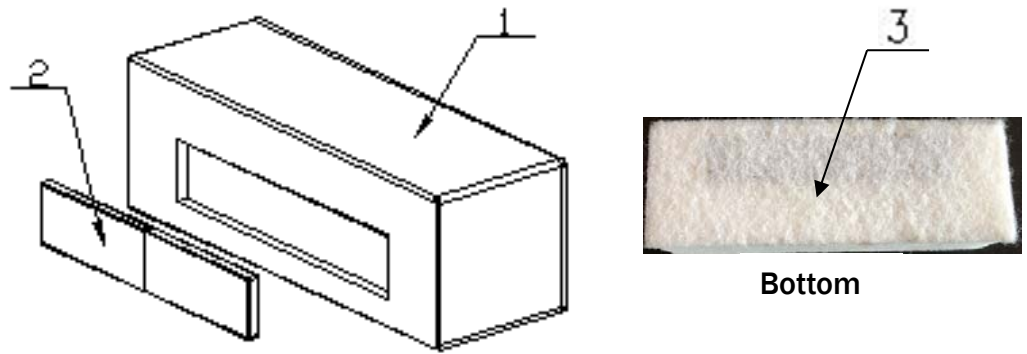
No.	Part No.	Code	Name	Qty
1	P140-172-000	20611707007	Inside pad B	2
2	P140-171-000	20611707006	Inside pad A	2
3	P140-173-000	20611707004	Outside pad A	2
4	P140-174-000	20611707005	Outside pad B	2
5	P140-170-000	20211707014	Water proof plate	1

### 9.7 Ball assy.



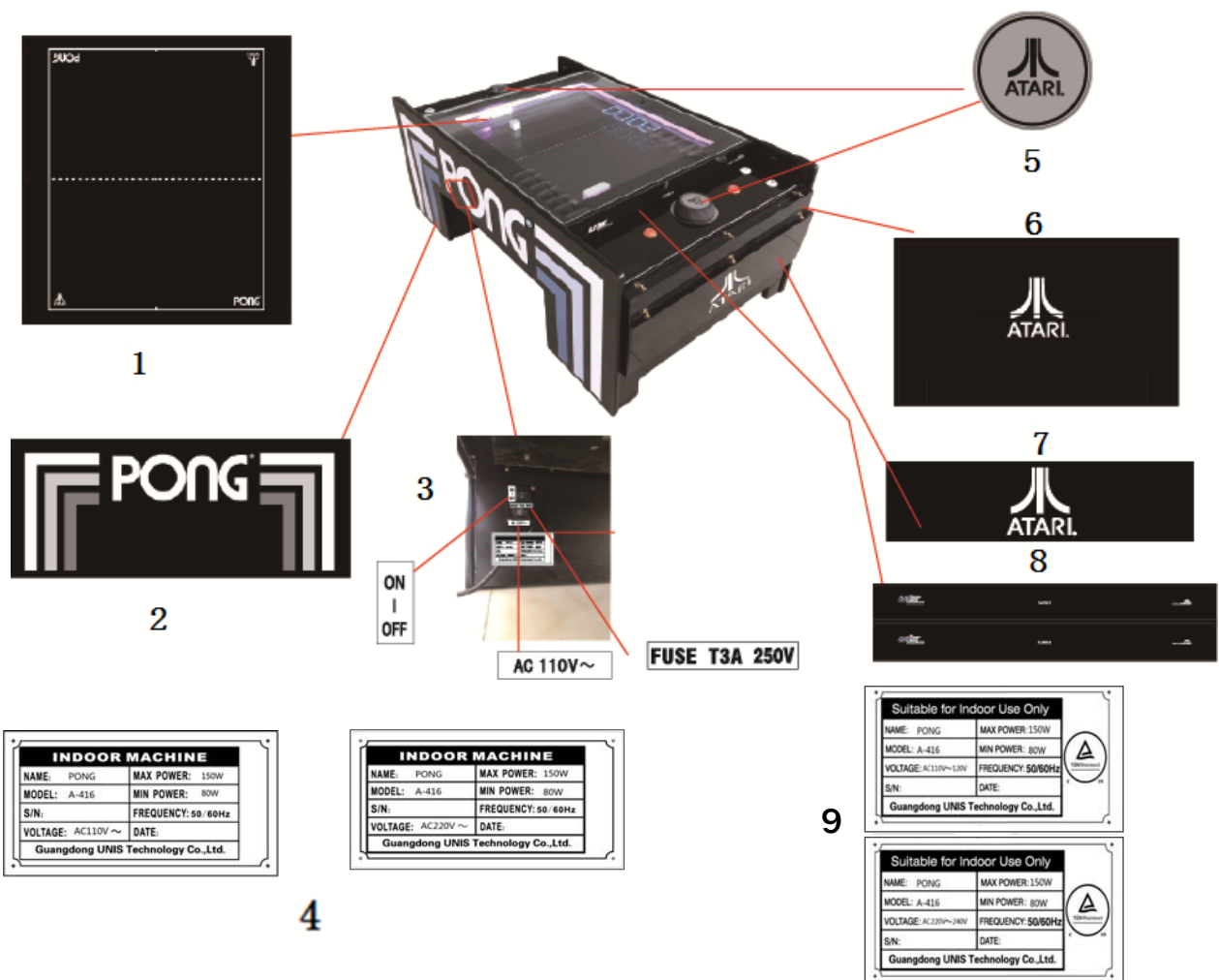
No.	Part No.	Code	Name	Qty
1	P140-111-000	20611707012A	Ball	1
2	P140-467-000	23502000044	Magnet	2
3	P140-473-000	40203020002	Teflon tape	1

9.8 Pedal assy.

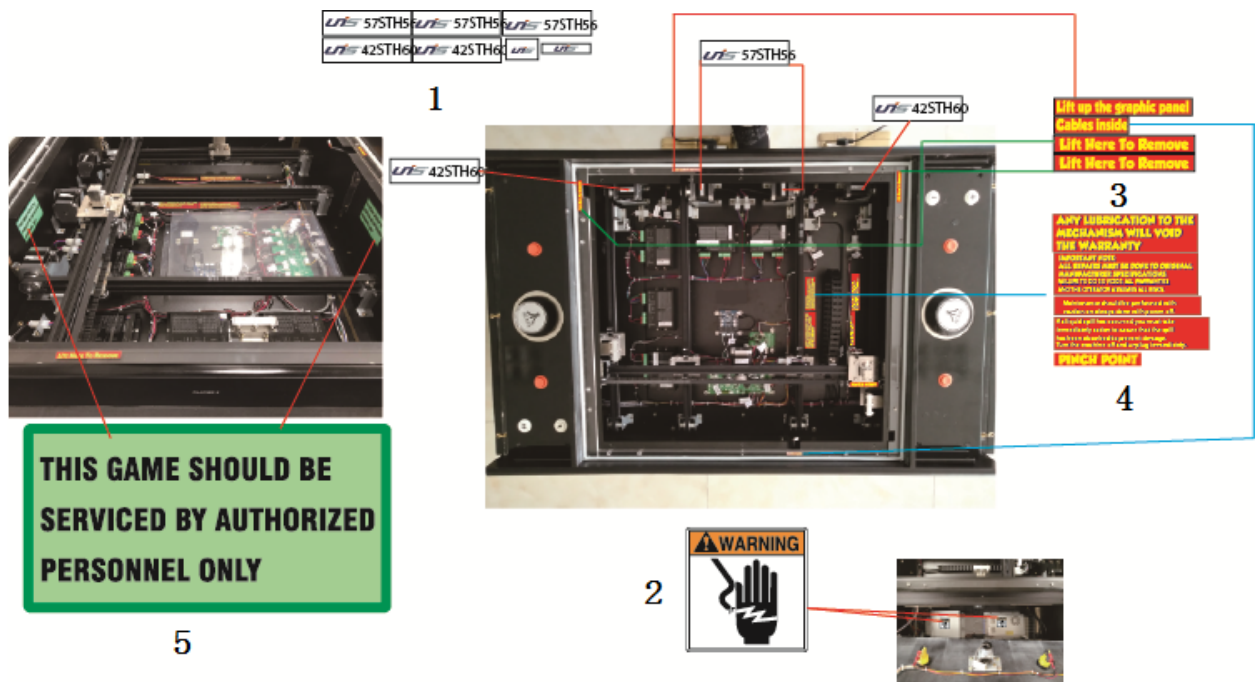


No.	Part No.	Code	Name	Qty
1	P140-114-000	20611707013A	Pedal	2
2	P140-465-000	23502000041	Magnet	4
3	P140-115-000	20611707020A	Wood felt pad	2

### 9.9 Decals



No.	Part No.	Code	Name	Qty
1	P140-701-000	20511707001B	Play field decal	1
2	P140-705-000	20511707005	Side decal	2
3	P140-712-000	25600000017	Power SW label	1
	P140-715-000	25600000071	110V label	1
	P140-716-000	25600000073	Fuse label	1
4	P140-707-000	20511707008	110V nameplate	1
	P140-717-000	20511707013	220V nameplate	1
5	P140-702-000	20511707002	ATARL Logo	2
6	P140-703-000	20511707003B	Front decal	2
7	P140-704-000	20511707004B	Control panel decal	2
8	P140-711-000	20511707012B	Logo decal	2
9	P140-718-000	20511707014	TUV 110V nameplate	1
	P140-719-000	20511707015	TUV 220V nameplate	1



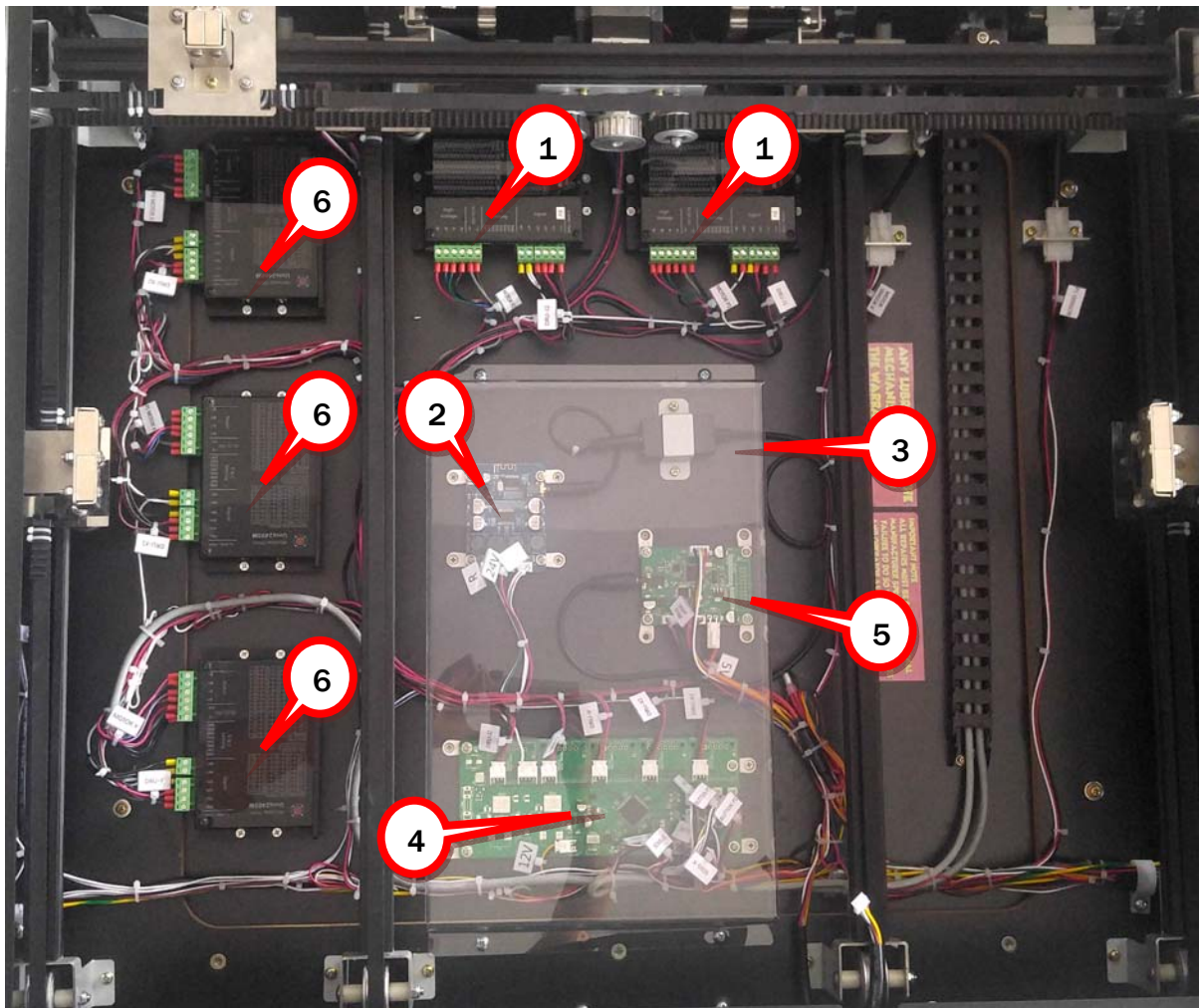
No.	Part No.	Code	Name	Qty
1	P140-706-000	20511707007B	Components label	1
2	P140-713-000	25600000036	Warning label	2
3	P140-710-000	20511707011A	Service label	1
4	P140-708-000	20511707009B	No lubrication label	1
5	P140-714-000	25600000042	Service label 1	2

### 9.10 Electrical components

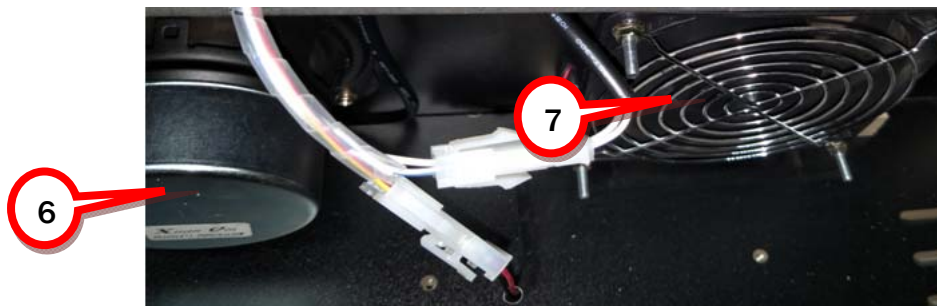
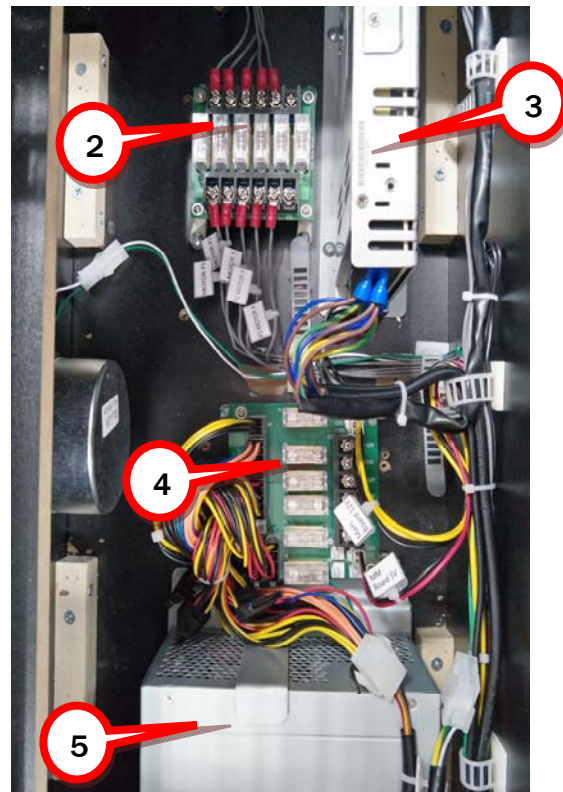
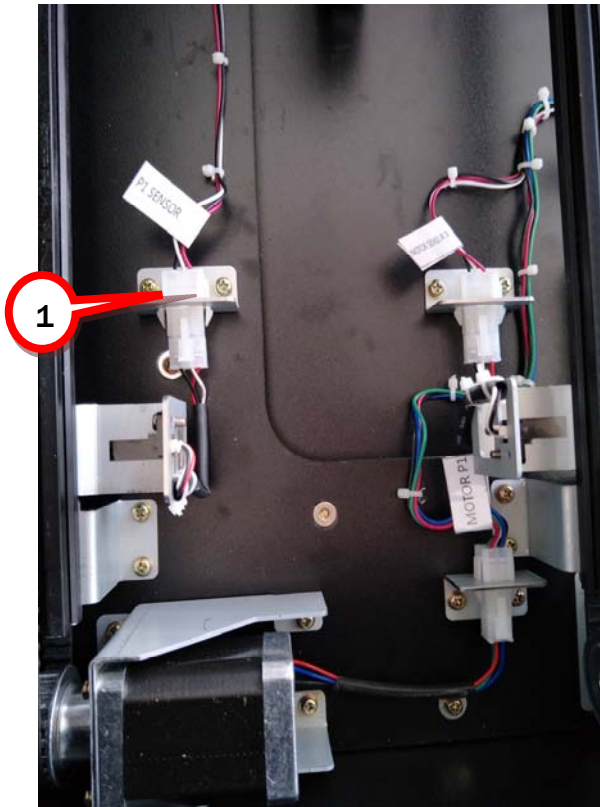


No.	Part No.	Code	Name	Qty
1	P140-409-000	23407030001	Coder	2
2	P140-412-000	22401170004	Orange button	4
	P140-401-000	22604000006	Micro SW	4
3	P140-410-000	22401170002	White button 1P	2
	P140-411-000	22401170003	White button 2P	2
	P140-401-000	22604000006	Micro SW	4
4	P140-418-000	22002020001	Light strip	1
5	P140-421-001	29711707002B	Display board	1
6	P140-414-000	22201010001	Light slot 1	2
7	P140-415-000	22201010002	Light slot 2	2
8	P140-426-000	21603030002	USB charger	1



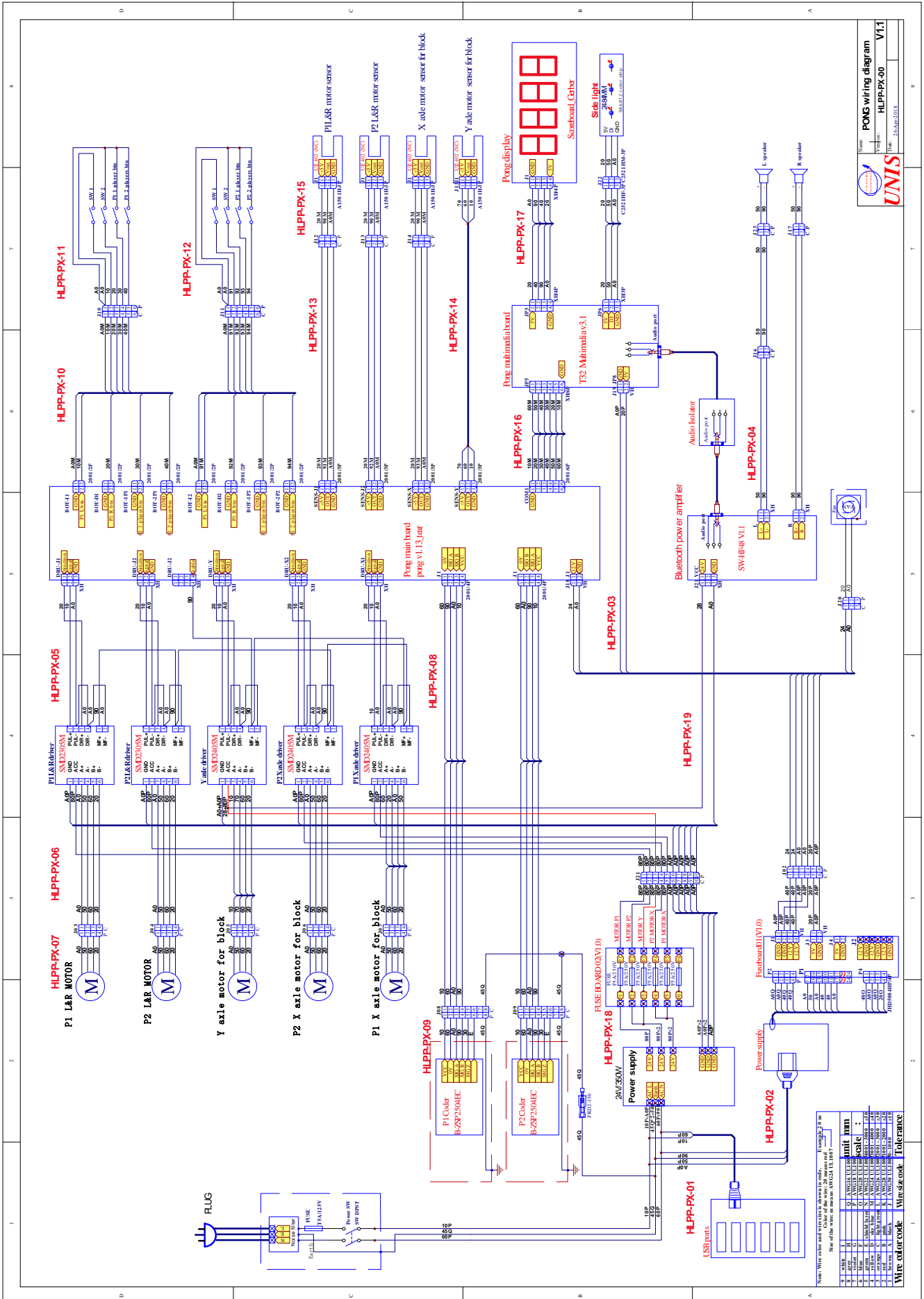


No.	Part No.	Code	Name	Qty
1	P140-457-000	23407010006	Motor driver	2
2	P140-406-000	22803010008	Bluetooth amplifier board	1
	P140-408-000	23305000008	Audio cable	1
3	P140-424-000	22807000002	Audio isolator	1
4	P140-422-001	29711707003B	Main board	1
	P140-403-000	21901000010	Fuse	1
5	P140-420-001	29711707001B	Multimedia board	1
6	P140-456-000	23407010007	Motor driver	3



No.	Part No.	Code	Name	Qty
1	P140-405-001	21503000055	Sensor SW	4
2	P140-428-000	21714000148	Fuse board	1
3	P140-413-000	21602000105	Power supply	1
	P140-403-000	21901000010	Fuse	3
4	P140-427-000	29711605001	Short circuit board	1
5	P140-404-000	21602000001A	Power supply	1
	P140-402-000	23301018004	Power cord	1
	P140-426-000	21603030002	USB charger	1
6	P140-416-000	22801000085	Speaker	2
7	P140-417-000	22702010025	Fan	1
	P140-423-000	22702000010	Fan net	1

# 10. WIRING DIAGRAM




**PONG wiring diagram**  
 Version: H1PP-PX-00  
 V.1.1  
 Date: 2018/02/18

Note: Wire color and size of wire should be checked according to the table below.

Size of the wire in mm or AWG (UL 1009)

Wire color code	Wire size (mm)	Wire size (AWG)	Wire tolerance
Blue	0.2	30	±0.01
Black	0.2	30	±0.01
Red	0.2	30	±0.01
Green	0.2	30	±0.01
Yellow	0.2	30	±0.01
White	0.2	30	±0.01
Brown	0.2	30	±0.01
Purple	0.2	30	±0.01
Pink	0.2	30	±0.01
Grey	0.2	30	±0.01
Orange	0.2	30	±0.01
Light Blue	0.2	30	±0.01
Light Green	0.2	30	±0.01
Light Yellow	0.2	30	±0.01
Light Purple	0.2	30	±0.01
Light Pink	0.2	30	±0.01
Light Grey	0.2	30	±0.01
Light Orange	0.2	30	±0.01
Light Light Blue	0.2	30	±0.01
Light Light Green	0.2	30	±0.01
Light Light Yellow	0.2	30	±0.01
Light Light Purple	0.2	30	±0.01
Light Light Pink	0.2	30	±0.01
Light Light Grey	0.2	30	±0.01
Light Light Orange	0.2	30	±0.01

**WE ARE HERE TO ASSIST**  
**For parts and service**



**Have Questions? Contact us!**

**UNIS SERVICE CENTER**

Tel: 972-241-4263

Fax: 214-919-4918

Email: [service@unisusasupportcenter.com](mailto:service@unisusasupportcenter.com)

## **Warning Statement**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.