

BALL MADNESS

Operator Manual V1.1



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1. Read safety information before using

1.1. Machine specification

- 1. Rated power supply: AC110-220V 50/60Hz (According to nameplate which stick on the machine)
- 2. Size: W2300×D1660×H2600mm
- 3. Weight: About 500 Kg
- 4. Rated power consumption: 1200W

1.2. Safety instruction

Instructions to the Owner

If you delegate the work for installing, moving, transporting, operating, servicing the machine to other people, ensure that these people read the relevant sections of this operation manual carefully before starting work, and observe the corresponding precautions.

1.2.1 Risk Level

The safety and property damage precautions on the machine labels and in this Operation Manual are classified according to their risk level, as follows.

▲WARNING: These risks that cannot be avoided may result in serious personal or casualty.

▲CAUTION: These risks that cannot be avoided may result in mild personal injury or other property damages.

1.2.2 Definition of “Technician”

This Operation Manual is designed for arcade personnel. However, the sections marked “Must be performed by a technician” in the Table of Contents are written for technicians. These tasks must be performed by technicians only.

◆Technician: A person involved in design, manufacture, inspection or service at an amusement device manufacturer, or a person involved routinely in the service or management (such as repair) or amusement devices and who has specialist knowledge of electricity, electronics or mechanical engineering equivalent to or higher than a technical high school graduate. Than a technical high school graduate

1.2.3 Critical Safety Precautions



●Should an abnormality occur, turn off the power switch immediately to stop operations. Then, be sure to disconnect the power cord plug from the outlet. Operating the machine while the abnormality persists may result in a fire or accident.

●This machine includes important parts used to ensure the safety of players and bystanders. Operating the machine while these “important parts for ensuring player and bystander safety” are broken, damaged or deteriorated, or with defective installation may result in an injury to the players or bystanders. If you discover an abnormality, replace the affected part immediately. To order parts, contact your distributor.

- Dust accumulating on the power cord plug may result in a fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in a fire or burns.
- Damage to the power cord may result in a fire, electric shock or electrical leakage. Be sure to observe the following.
 - Keep the power cord away from heaters.
 - Do not twist the power cord.
 - Do not forcibly bend the power cord.
 - Do not alter the power cord.
 - Do not pull the power cord. (Always unplug by holding the plug and not the power cord.)
 - Do not bundle the power cord.
 - Do not place objects on the power cord.
 - Do not allow the power cord to be caught between the machine and other devices or the wall.
 - Do not do anything else that might damage the power cord.
- Do not expose the power cord and power cord plug to water. It may result in electric shock or electrical leakage.
- Do not touch the power cord plug with wet hands. It may result in electric shock.
- The power capacity of the machine is AC 220V, maximum current consumption 5A. To prevent fire and electric shock, use indoor wiring that conforms to these power supply specifications.
- Use a power supply voltage range of AC 220V. Using a voltage outside this range may result in a fire or electric shock. However, to ensure that the machine operates in the optimum condition, keep the voltage at AC 220V as much as possible.
- To ensure safe use of the machine, be sure to perform the per-operation inspection. Omitting these inspections or service may result in an accident.
- Use the consumables and service parts (including screws) that are specified. To order parts, contact your distributor.
- Do not modify the machine without permission. Do not perform any operations that are not described in this Operation Manual. Modifying the machine may create unforeseen hazards.
- If you decide to transfer ownership of this machine, be sure to provide this Operation Manual with the machine.
- Warning –Please disconnect the unit from the power supply during maintenance and when replacing parts.
- Do not use a water gun to clean this machine.

1.2.4 Machine Warning Labels



• The warning labels attached to the machine contain important information for ensuring safety. Be sure to observe the following.

• To ensure that the warning labels attached to the machine are always clearly visible, install the machine in an appropriate location with ample illumination and keep the labels clean at all times. Make sure that the labels are not hidden by other machines or objects.

• Do not remove or alter the warning labels.

• If a warning label becomes excessively dirty or damaged, replace it with a new one. To order warning labels, contact your distributor.

1.3. Package Contents

1.3.1 Packaging List

NO.	Name	N.W(KG)	G.W(KG)	Packing size(W x D x H)	Qty
1	Player 1 (Left cabinet)	200	252	1320x1160x2200mm	1
2	Player 2 (Right cabinet)	200	252	1320x1160x2200mm	1
3	Marquee	97	173	2310x1450x830mm	1

1.3.2 List of Accessories bag

NO.	Description	Code	Unit	Qty
1	Key 1	3172	PCS	4
2	Key 2	3157	PCS	4
3	Serial communication cable	1.5M	PCS	1
4	Light remote control		PCS	1
5	Main lead		PCS	2
6	hexagon socket pan	M5x10	PCS	12
7	hexagon socket pan	M6x12	PCS	14
8	hexagon socket pan	M6x30	PCS	4
9	hexagon socket truss head screw	M4x8	PCS	8
10	hexagon socket truss head screw	M4x6	PCS	20
11	Lid Nut	M6	PCS	8
12	Lid Nut	M4	PCS	8
13	Spacer	M4	PCS	8
14	Connector cover		PCS	2
15	Lock plate		PCS	8
16	Operator Manual V1.1		PCS	1

1.3.3 Package Details

■ Player 1 (Left cabinet)



■ Player 2 (Right cabinet)



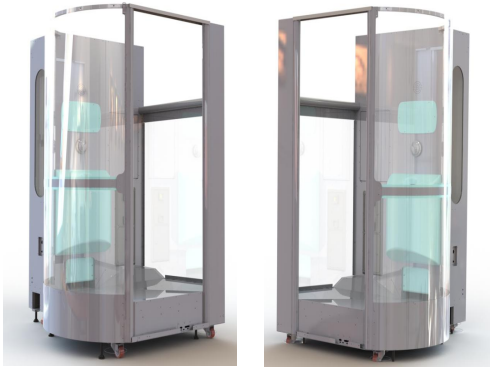
■ Marquee



2. Machine instructions

2.1. Installation notes

2.1.1. Unpack the packing material of each part of the machine



Main cabinet



Marquee



Step x 2set



Left blower box



Right blower box



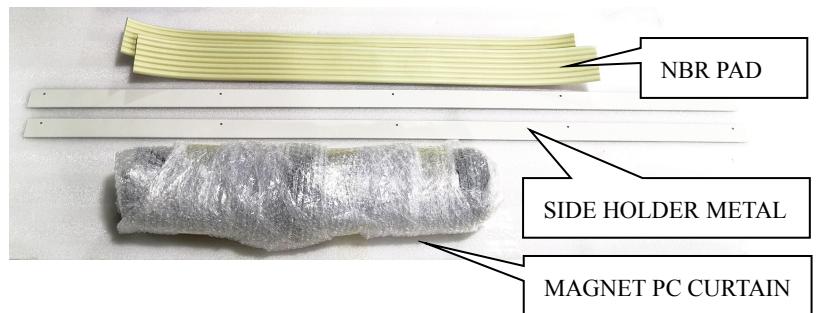
Balls x 1000PCS
700pcs for operating
(350pcs per side*2 sides)
300pcs for spares



Accessories bag

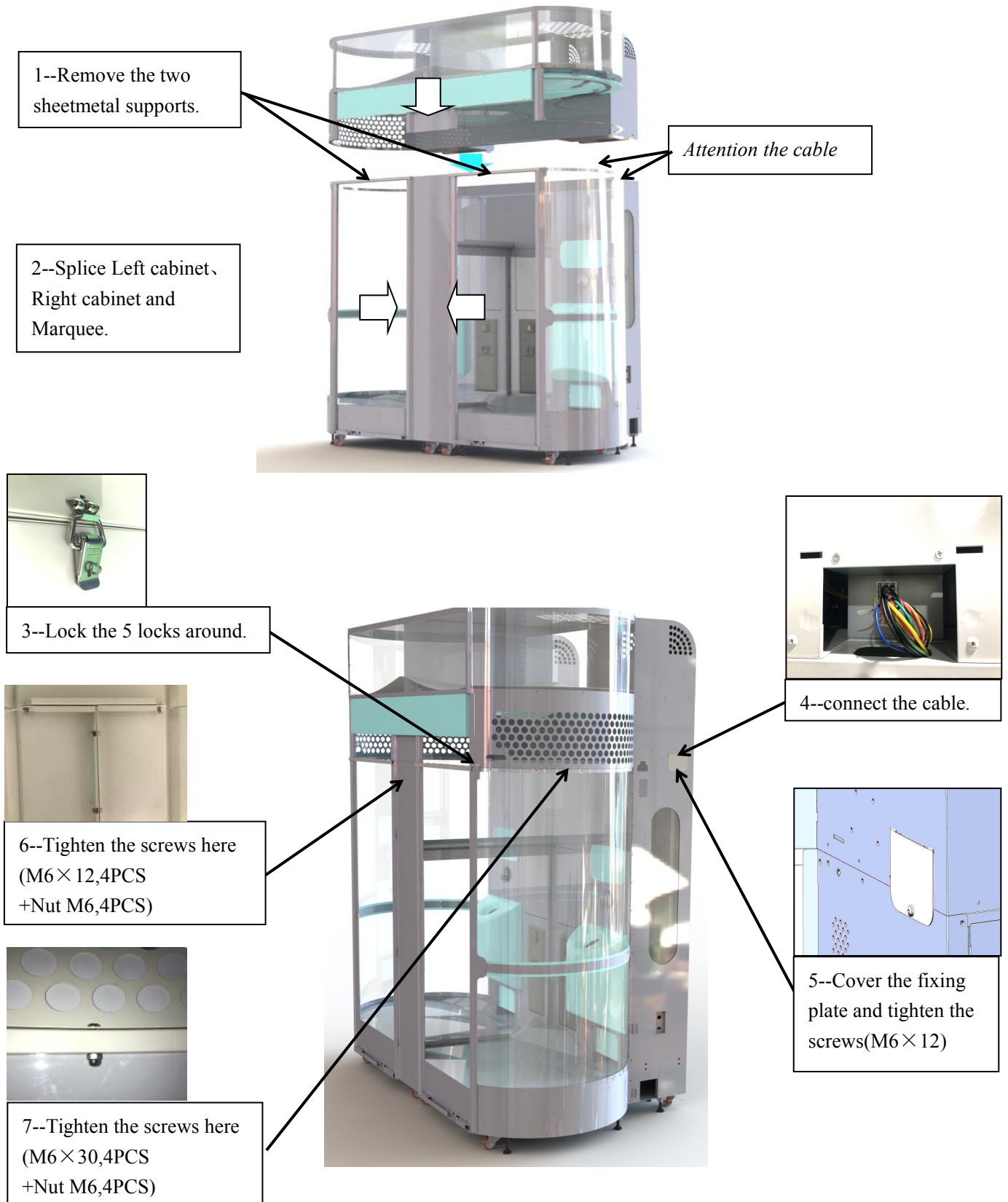


Curtain x 2set
<Elastic curtain version>

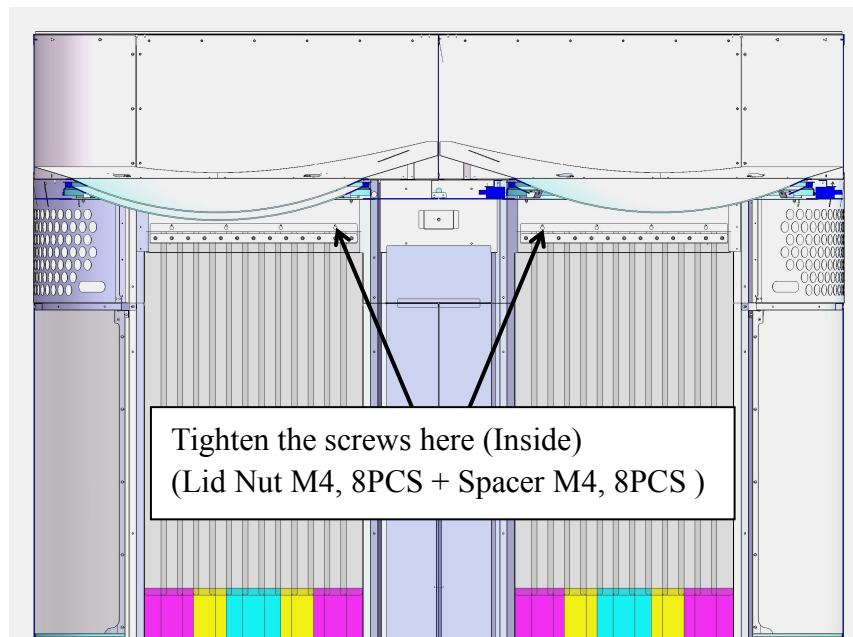
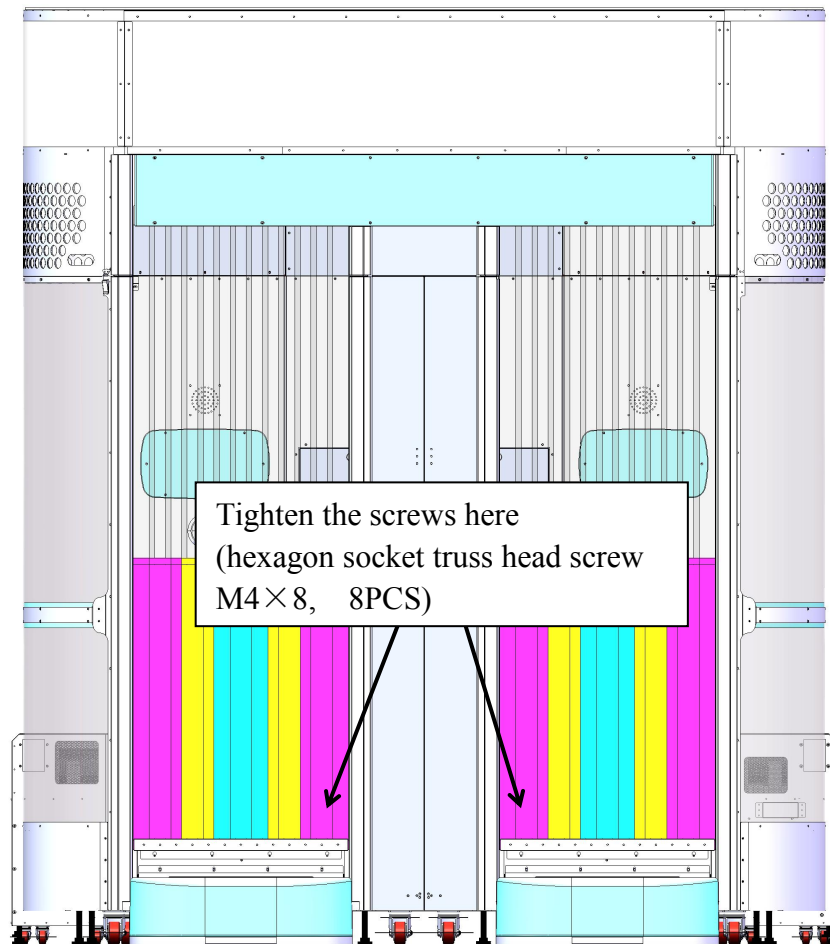


Curtain x 2set
<Magnetic curtain version>

2. 1. 2. Install the marquee on the top side of main body as below photo.



2. 1. 3. Install the Curtain (Elastic curtain version).

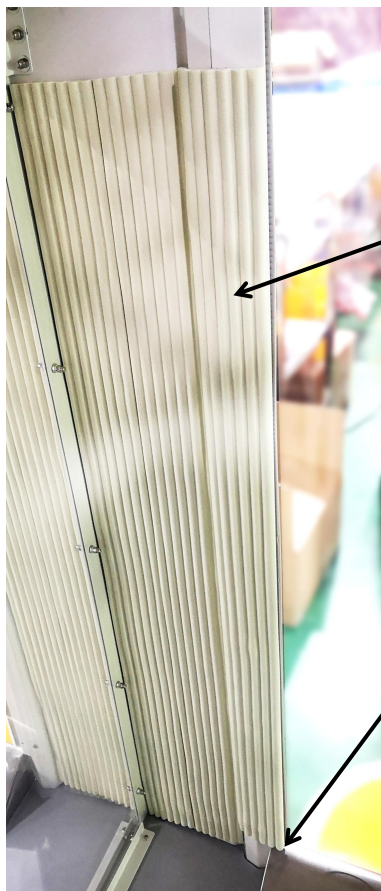


2. 1. 4. Install the Curtain (Magnetic curtain version).



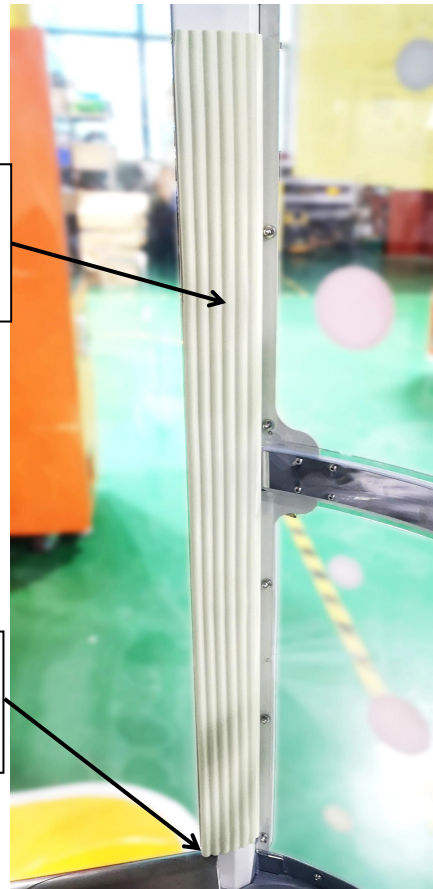
Tighten the screws here (Inside)
(Lid Nut M4, 8PCS + Spacer M4, 8PCS)

Use side holder metal to fix the curtain on both sides .
(hexagon socket truss head screw M4x6, 20PCS)

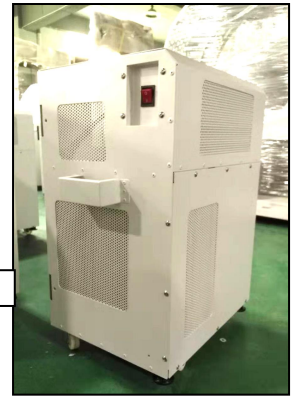


Stick NBR pad onto the metal holder.
(both sides)

PAD SLIGN AT THE BOTTOM OF METAL



2. 1. 5. Install the blower's component to the main cabinet and connect the communication cable.



1--Connect the connection between the blower ASSY and the main cabinet.



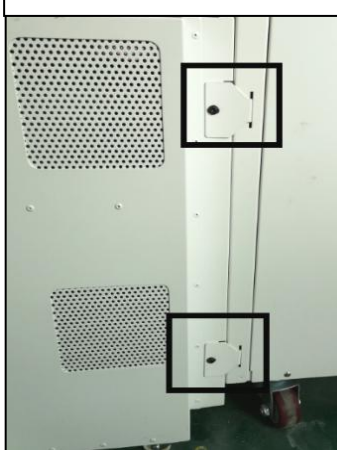
2--Connect the cable between blower ASSY and main cabinet ASSY



3--Insert the metal hook into the main cabinet.



4-Fix the hook and blower ASSY by bolts (M6x12,2PCS)



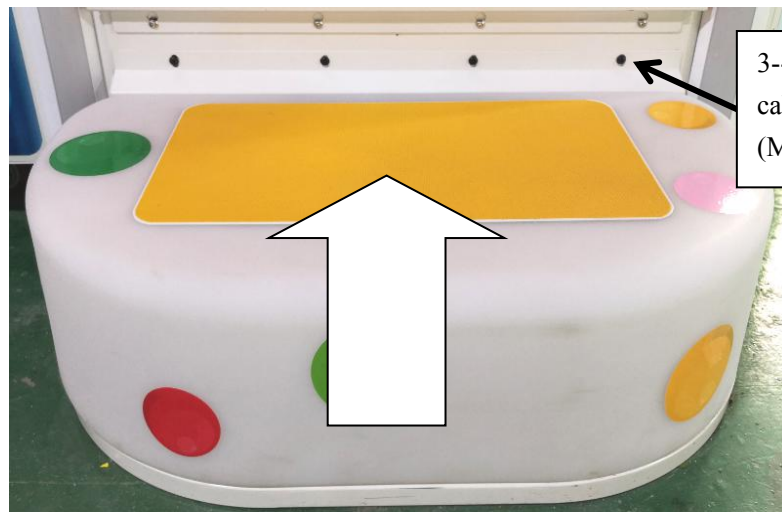
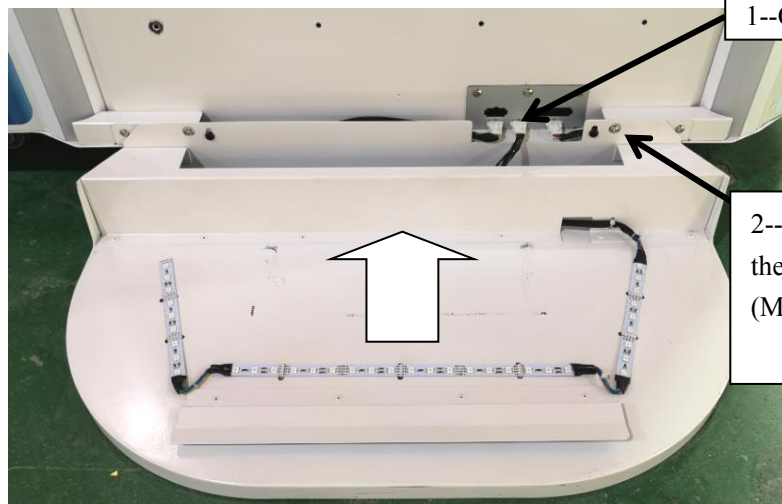
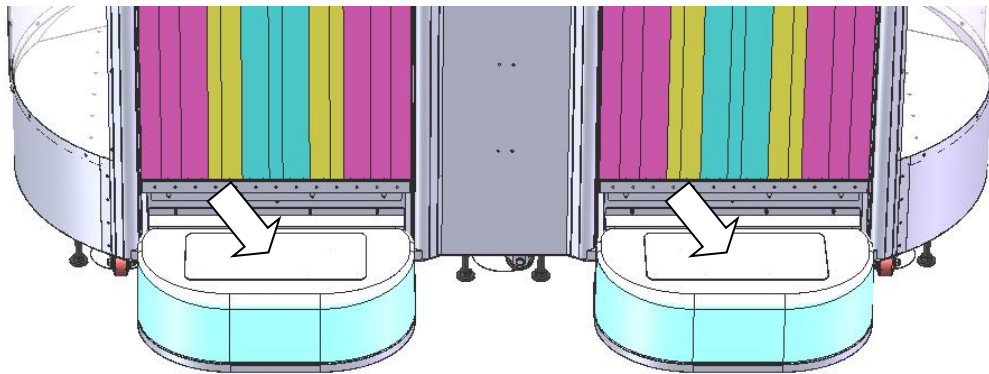
5-Handle the same for other side



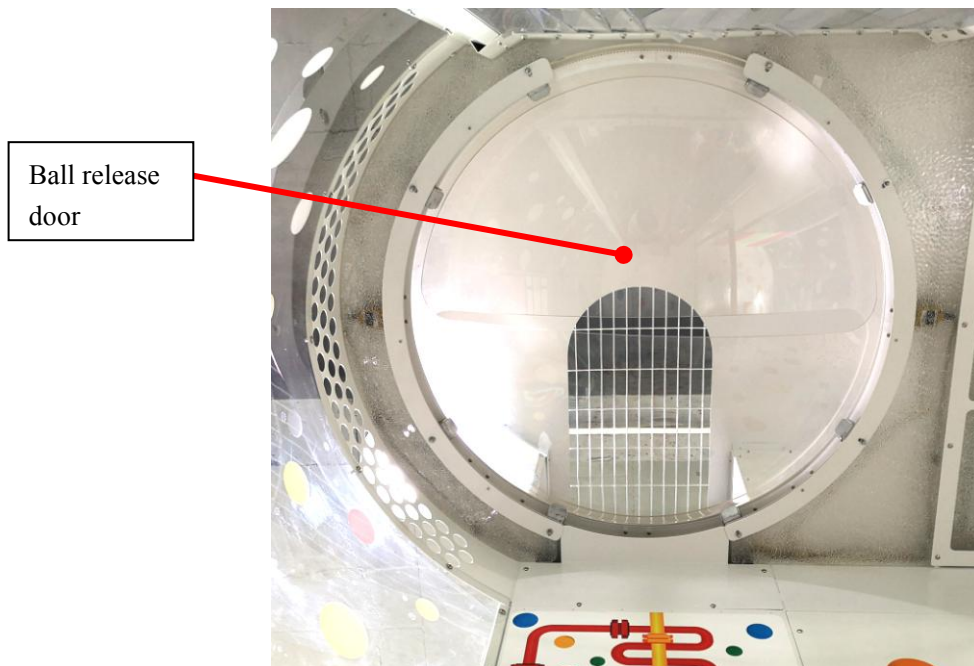
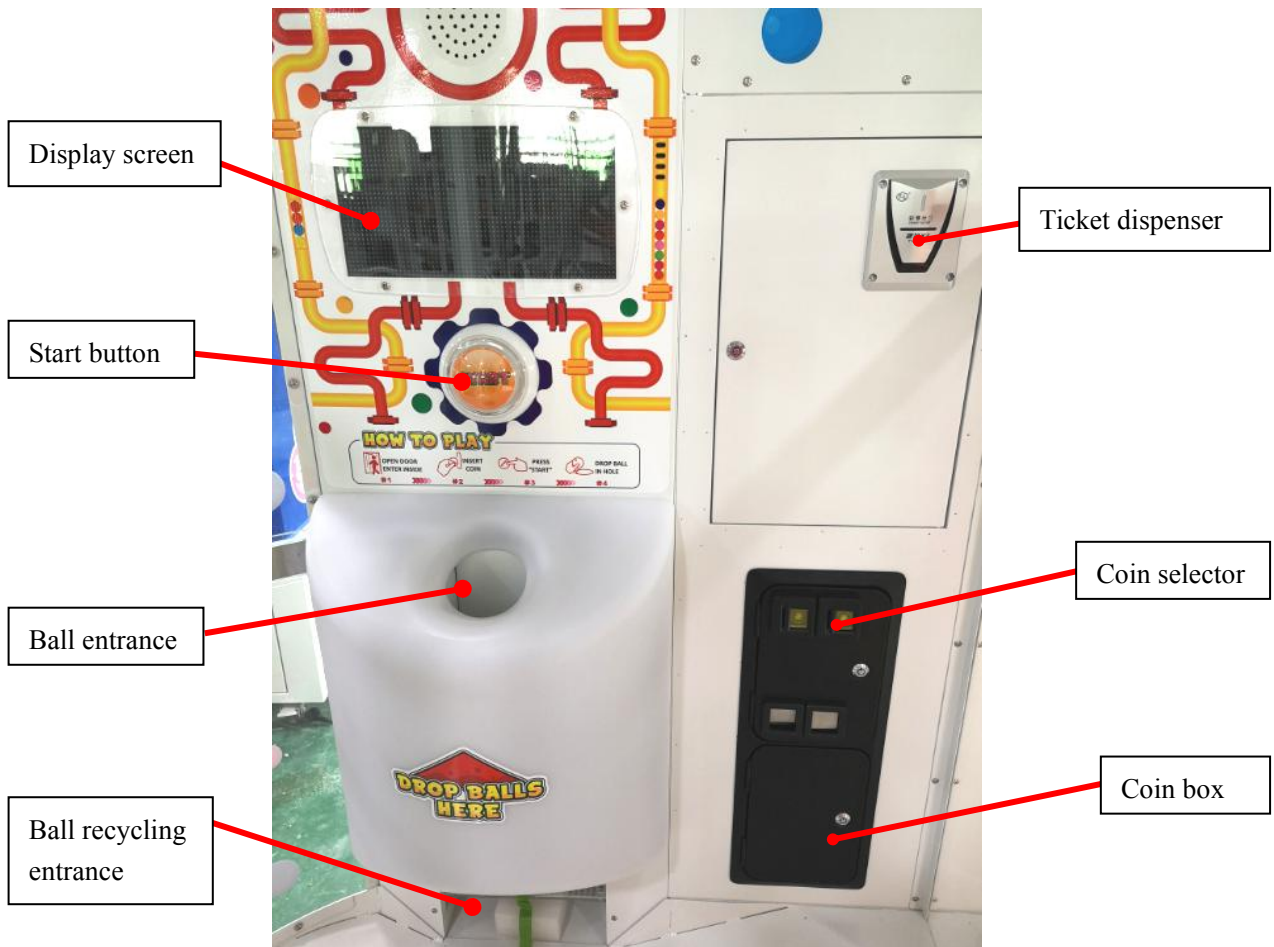
6-connect the communication cable.



2. 1. 6. Fix the steps with the main cabinet as follows:



2.2. Play instruction



A—Single player Mode

1. Open the colorful curtain and enter into house carefully.
2. Insert the coins ,the machine will be ready soon.
3. When display screen show “DOWN ARROW”, Press “START BUTTON” to start the game.
4. The ball release door open automatically; colorful balls are falling down for game play. At the same time, the bottom ball collect door also start to work.
5. Player insert the balls into ball entrance to get points, the relevant points will display on the screen.
6. Game over when time finish, then the goal will not be graded.
7. Player will get the tickets according to their points.
8. The balls in the play area will be collected by the game automatically, then back to standby mode.

B—Two player Mode

1. After the first player insert coins before pressing START BUTTON, the second player insert the coins too, Display screen will be shown as below photo, press START BUTTON to entrance to PK mode.



2. Game play is the same with single player mode.
3. After game over, the higher points player will be the winner and might win additional tickets.
4. If any problem on communication between two sides, the DISPLAY SCREEN will display “!”, Two play Mode will be stop, the game will be reminded as single player mode.

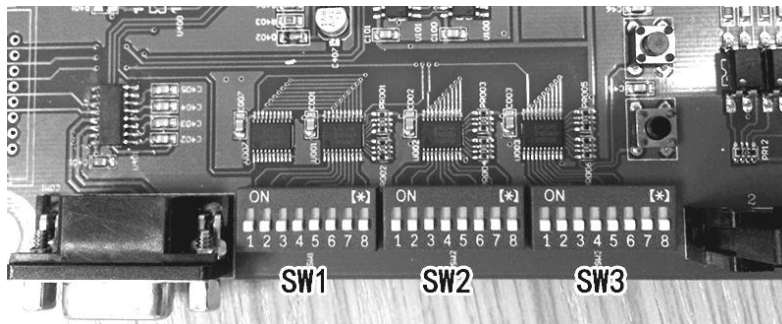
2.3. Game considerations

1. This game is only suitable for children standing at 80-175cm.
2. Children need to be accompanied by adults to play games.
3. Don't let the child get into the back of the recycling ball. Don't put your hand into the goal.
4. It cannot enter 3 or more people at the same time, in case of accident.
5. Children feel uncomfortable, please stop the game.
6. Operator should clean the game daily to bring the player a comfortable game area.
7. Operator should set the same game setting for two sides (Game time etc.)
8. This game should be operated by 350 pieces of balls per side (cabinet).

3. Machine setting & Test instructions

3.1. Dip switch setting

DIP SWITCH “SW1, SW2, SW3” on the mother board, as below:



SW1 :

Item	Coin(s) per credit			Memory	Language	Demo music	Clear balls during standby	Clear balls after game
	1	2	3					
Free play	OFF	OFF	OFF					
1 Coin/Credit	ON	OFF	OFF					
2 Coins/Credit	OFF	ON	OFF					
3 Coins/Credit	ON	ON	OFF					
4 Coins/Credit	OFF	OFF	ON					
5 Coins/Credit	ON	OFF	ON					
6 Coins/Credit	OFF	ON	ON					
7 Coins/Credit	ON	ON	ON					
Clear credit/Owning ticket				OFF				
Save credit/Owning ticket				ON				
Japanese					OFF			
English					ON			
With demo music						OFF		
Without demo music						ON		
Remain balls during standby							OFF	
Clear balls during standby							ON	
Remain balls after game over								OFF
Clear balls after game over								ON
Default setting	ON	OFF	OFF	OFF	ON	ON	ON	ON

SW2 :

Item	Points per ball			Winner tickets			Speed of collecting ball		
	1	2	3	4	5	6	7	8	
1 Point/Ball	OFF	OFF	OFF						
2 Points/Ball	ON	OFF	OFF						
3 Points/Ball	OFF	ON	OFF						
4 Points/Ball	ON	ON	OFF						
5 Points/Ball	OFF	OFF	ON						
10 Points/Ball	ON	OFF	ON						
15 Points/Ball	OFF	ON	ON						
20 Points/Ball	ON	ON	ON						
0 Ticket				OFF	OFF	OFF			
1 Ticket				ON	OFF	OFF			
2 Tickets				OFF	ON	OFF			
5 Tickets				ON	ON	OFF			
10 Tickets				OFF	OFF	ON			
20 Tickets				ON	OFF	ON			
30 Tickets				OFF	ON	ON			
50 Tickets				ON	ON	ON			
Keep collecting balls								OFF	OFF
Collect balls per 3 seconds								ON	OFF
Collect balls per 5 seconds								OFF	ON
Keep closing								ON	ON
Default setting	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	

▲ Speed of collecting ball:

Means the time of collecting balls from floor to marquee, for example “COLLECT BALLS PER 5” mean every 5 second, the Ball recycling entrance will open once to collecting balls back to marquee.

SW3:

Item	Points per ticket					Master/slave device	7	8
	1	2	3	4	5			
Without ticket	OFF	OFF	OFF	OFF	OFF			
1	ON	OFF	OFF	OFF	OFF			
2	OFF	ON	OFF	OFF	OFF			
3	ON	ON	OFF	OFF	OFF			
4	OFF	OFF	ON	OFF	OFF			
5	ON	OFF	ON	OFF	OFF			
6	OFF	ON	ON	OFF	OFF			
7	ON	ON	ON	OFF	OFF			
8	OFF	OFF	OFF	ON	OFF			
9	ON	OFF	OFF	ON	OFF			
10	OFF	ON	OFF	ON	OFF			
11	ON	ON	OFF	ON	OFF			
12	OFF	OFF	ON	ON	OFF			
13	ON	OFF	ON	ON	OFF			
14	OFF	ON	ON	ON	OFF			
15	ON	ON	ON	ON	OFF			
16	OFF	OFF	OFF	OFF	ON			
17	ON	OFF	OFF	OFF	ON			
18	OFF	ON	OFF	OFF	ON			
19	ON	ON	OFF	OFF	ON			
20	OFF	OFF	ON	OFF	ON			
21	ON	OFF	ON	OFF	ON			
22	OFF	ON	ON	OFF	ON			
23	ON	ON	ON	OFF	ON			
24	OFF	OFF	OFF	ON	ON			
25	ON	OFF	OFF	ON	ON			
26	OFF	ON	OFF	ON	ON			
27	ON	ON	OFF	ON	ON			
28	OFF	OFF	ON	ON	ON			
29	ON	OFF	ON	ON	ON			
30	OFF	ON	ON	ON	ON			
31	ON	ON	ON	ON	ON			
Set as slave						OFF		
Set as master						ON		
Default setting	ON	OFF	ON	OFF	OFF	1P = ON 2P = OFF	OFF	OFF

▲ Host and slave device:

We should set the left side of the machine as Host device (ON) , and right side as Slave device (OFF) so these two players can communicate...

3.2. Test instructions

3.2.1. Setting Panel Description



- UP / TEST: Click in the standby state to enter the test program; Press the flip page in the test program
- DOWN / SERVICE: On standby, click the free game once; Click on the next page in the test program
- ENTER/CLEAN: Tap in the test program to select or ENTER, Hold 3 seconds to clean the balls by standby mode.
- REPAIR: Tap it after feeding the tickets.

3.2.2. Display screen instruction during testing mode



GAME MODE、PLAY TIME INSTRUCTION

SOFT - NOMAL - HARD (Mode cycle)

*Details refer 3.2.3



Testing of Bottom Ball collect door

OPEN/CLOSE

Press“ENTER”button, the BALL COLLECT DOOR keep open and close, and Display screen will show“OPEN”“CLOSE” to check the sensor. ON means be detected, OFF means haven’t been detected.



Testing of TOP BALL RELEASE DOOR switch

Press“ENTER” button, BALL RELEASE DOOR start to turn(the second press will turn back), Display screen will show “OPEN”“CLOSE”to check the switch. ON means be detected, OFF means haven’t been detected.



Test of BLOWER

Press“ENTER”button, BLOWER start to work. Press button again will stop.Any ball going through or stop from bottom ball collecting door, “SEN” will display “ON”.



Test of SCREEN

Press “ENTER” button,screen alternates red and green lines that move from top to bottom. Observe if the line is continuous and the color is normal,thus judging whether the lattice screen is normal.



Test of LED LIGHTS

Press “ENTER” to display alternately:

- R: ON → The LED lights is red;
- G: ON → The LED lights is green;
- B: ON → The LED lights is blue;
- M: ON → The light on ball entrance is white.



Test of TICKET OUTPUT

Press “ENTER” button, ticket dispenser will payout one ticket.



Test of START BUTTON LAMP

Press “ENTER” button,the start button lights up,and then presses it again to turn off.



Test of SOUND

Press “ENTER” button,the screen displays the segment number and starts playing the segment.



Browse all input signal states

Each letter represents an input signal,red is “OFF” and green is “ON”.

The corresponding signal name of each letter is shown in the table below:

A	Signal of coin selector 1	I	Close detection switch-Recycle ball	Q	“ENTER” button
B	Signal of coin selector 2	J	Detection sensor of recycle ball	R	*
C	Ticket dispenser repair button	K	*	S	*
D	Ticket dispenser feedback signal	L	Score sensor	T	*
E	“Start ”button	M	*	U	*
F	Close detection sensor-Drop ball (N.O)	N	*	V	*
G	Open detection sensor-Drop ball (N.O)	O	“UP” (TEST) button	W	*
H	Open detection switch-Recycle ball	P	“DOWN” (SERVICE) button	X	*



Browse dialing switch status

Each letter represents an input signal, red means “OFF” and green means “ON”.

H represents the 1-8 bits of SW1;

I-P represents the 1-8 bits of SW2;

Q-X represents the 1-8 bits of SW3.



Restore factory Settings

Press “ENTER” button.Restore game mode,and clear all saved coins,tickets,the highest score,etc. After restore factory Settings,the screen displays “OK”.



VERSION

Displays the current version number



SAVE AND EXIT

3. 2. 3. Detailed explanation of game mode and game time setting



← GAME MODE

← GAME TIME

← JUDGE TIME

← PASS SCORE

Press “ENTER”,he selection to be set will turn red.Press “UP” or “DOWN” to adjust the mode or value.Press“ ENTER” again to confirm and complete the setting.

GAME MODE:

1- NOMAL MODE

During normal mode,the game starts with a ball drop.After the judge time,if the palyer’s score reaches the set value of passing score,an additional ball drop will be awarded.(This mode is recommended)

Adjustable item:TIME、 J-TIM、 P-SC.

2- SOFT MODE

During soft mode,the ball is dropped only once after the game starts in any case.

Adjustable item:TIME

3- HARD MODE

During hard mode,the ball continues to fall after the start of the game.the top door will not be closed until 30 seconds left in the game

Adjustable item:TIME

TIME:

You can choose 50seconds, 60seconds, 70seconds ,80seconds, 90seconds and 100seconds.

JUDGE TIME:

Judge time is the number of seconds after the start of the game to determine whether the player has passed the score

You can choose 10seconds,20seconds, 30seconds, 40seconds ,50seconds, 60seconds and 70seconds.

PASS SCORE:

Pass score means the score you get during judge time for winning the chance of dropping calls again. The passing scores setting including : AWY,10,20,30,40,50,60,70,80,90,and 100.

4. Fault & Resolution

4.1. Fault code description and fault handing

ERROR CODE	ERROR DESCRIPTION	FAULT ANALYSIS AND TREATMENT
Error 1	Software version update	The version has been updated.Restart the machine to remove the alarm.
Error 2	Data error	Internal data error. 1、 Restore factory Settings. 2、 Replace the motherboard.
Error 3	Coin selector Error	1、 Check whether the Blocked coin in coin selector and take it out if there is. 2、 Check whether the SW1 switch of coin selector is in NC,if so,dial to NO. 3、 Replace the coin selector.
Error 4 (TI CKET IS EMPTY)	Ticket dispenser error / Out of ticket	The ticket is out,waiting to be added.The screen displays “SURP:xxx”to indicate the remaining tickets. 1、 Add ticket again,press the repair button next to the lottery machine,ticket can be output. 2、 If the device is not set to issue a ticket, the alarm can be set off by restoring the factory setting.
Error 5	Bottom door “OPEN” sensor error /Bottom motor error	1、 Check the bottom door for foreign matter sticking; 2、 Enter the bottom door test,check the bottom door motor is working normally.If the motor doesn't turn,change the motor;If there is no “ON” signal,adjust、 lock or replace the sensor.
Error 6	Bottom door “CLOSE” sensor error /Bottom motor error	1、 Check the bottom door for foreign matter sticking; 2、 Enter the bottom door test,check the bottom door motor is working normally.If the motor doesn't turn,change the motor;If there is no “OFF” signal,adjust、 lock or replace the sensor.
Error 7	Top door “OPEN” sensor error /Top motor error	1、 Check the top door for foreign matter sticking; 2、 Check for loose belts and couplings; 3、 Enter the top door test,check the top door motor is working normally.If the motor doesn't turn,change the motor;If there is no “ON” signal,adjust the gap between the sensor and door or replace sensor.
Error 8	Top door “CLOSE” sensor error /Top motor error	When this error occurs during the game, the machine will pause the game and try to fix it automatically before continuing the game.If the machine cannot be repaired automatically,the following treatment is required: 1、 Check the top door for foreign matter sticking; 2、 Check for loose belts and couplings; 3、 Enter the top door test,check the top door motor is

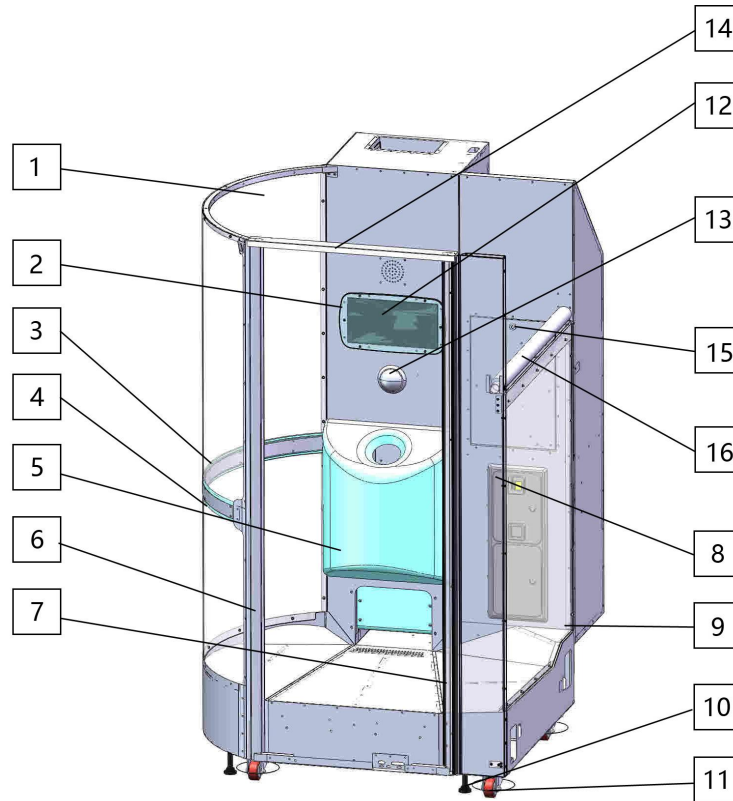
ERROR CODE	ERROR DESCRIPTION	FAULT ANALYSIS AND TREATMENT
		working normally.If the motor does't turn,change the motor;If there is no "OFF" signal,adjust the gap between the sensor and door or replace sensor.
Error 9	Ball chute/ball pipe (KL0002451) jam	1、 Check if there is any foreign matter stuck in the ball pipe and remove if there is; 2、 Empty the ball pipe ,enter the "browse all inputs" test,check whether there are green items in L、 M、 N, and change the corresponding sensor if there are. 3、 Check if the position of sensors moved away if issue remains.. 4、 Check the wiring if issue remains. 5、 Check the main board/mother board if issue remains.

4.2. Other fault analysis and treatment

- 1.The ball is stuck so frequently that the wind cannot blow it into the bin.
 - A-Check whether the weight of the ball exceeds 8g or not.
 - B-Check whether the voltage of the site is too low.
 - C-Check whether the fan inlet and outlet are blocked,if yes,clean up.
 - D-Check if the fan has accumulated and clean up if there is.
- 2.After each game,the blower has been working for a period of time.
 - A-Check if there is ball lingering in the end of the game ,if there is,reduce the ball or increase the game time.
 - B-Check the bottom door's test sensor whether there is debris or dust.If there is,clean it up.
- 3.Lattice screen confused or irregular flashing
 - A-Check whether the wire is loose,if yes,plug the wire set.
 - B-Replace the display screen.
- 4.Unable to enter double PK mode,and "!" on screen
 - A-One side of the machine is in shutdown state or fault,if any, please use after repair.
 - B-Check the communication cables on both sides to see if they are loose.If so,please lock them tightly.
 - C-Check the "SW3-6"on both motherboards.The normal state is :left is"ON" ,and right is"OFF"
 - D-Check that the game parameters on both sides are consistent.
- 5.No winner wan shown after PK mode;the winner haven't more tickets.
 - A-Check that the game parameters on both sides are consistent.In the case of inconsistency,it is impossible to conduct a double PK.

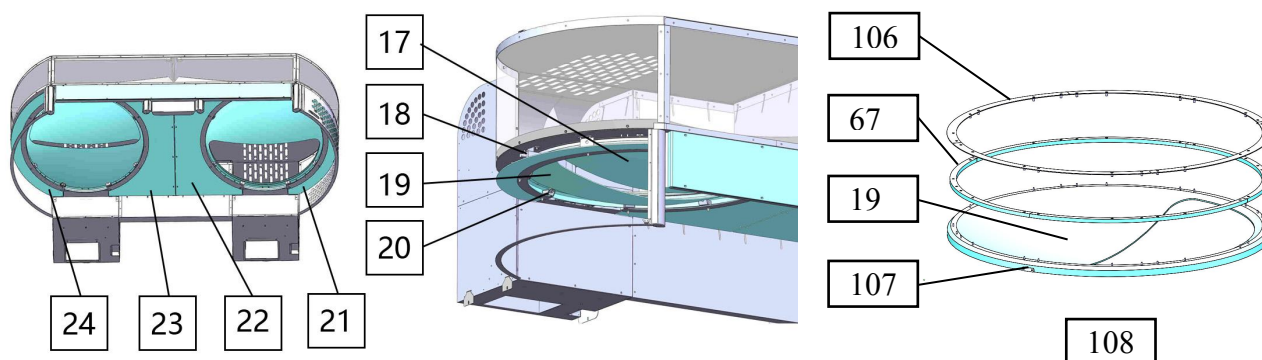
5. Machine parts analysis diagram and parts list

Left & Right cabinet:

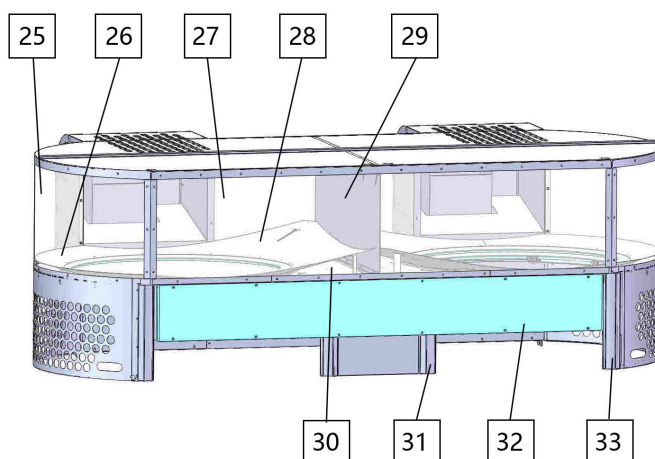


NO.	Part Number	Part Name	Specifications
1	KL0002391	Main frame coaming (The left and right are the same.)	Transparency PC
2	KL0000890	Display screen panel	Transparency PMMA
3	KL0000842	LED Stay A	Transparency PMMA
4	KL0001132	LED Stay B	Transparency PMMA
5	YB0000221	Goal post	White PE
6	SJ0002391	Main frame right aluminum strip	1763mm
7	SJ0002381	Main frame left aluminum strip	1763mm
8	MI0000150	Coin selector	Single coin selector
9	KL0002381	Center baffle	Transparency PC
10	YS0000060	Foot screw	M16*Y100
11	YS0000010	2.5"Omnidirectional caster	73*45,H92mm
12	MX0000600	Display screen panel	3.75two-tone,p4.75
13	MA0000380	Start button	Φ120,12v,Colorful LED
14	SH0019080	Shipping brackets	SPCC
15	YQ0000010	The front door lock	3172
16	TD0000390	Sponge tube	Inside 32mm * outside 43mm * long 1m,orange

Marquee:

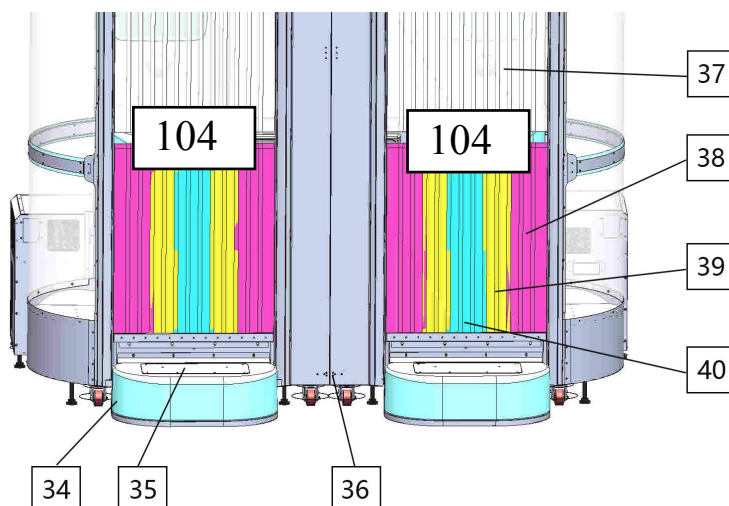


NO.	Part Number	Part Name	Specifications
17	YB0000252	Ball drop fixed gate	White ABS
18	MA0000370	Sensor	TL-N10ME2;NPN:NC
19	YB0000242	Ball drop turn gate	White ABS
20	ZC0000400	Bearing	606zz
21	KL0000873	Scatter plate of LED	Acrylic
22	KL0002411	Scatter plate of LED-CR	Acrylic
23	KL0002401	Scatter plate of LED-CL	Acrylic
24	KL0001113	Scatter plate-L of LED	Acrylic
67	KL0000883	Goal reinforcement	PMMA; 4pcs/set
106	SH0011161	Reinforcing plate	SPCC; White; 4pcs/set
107	SH0007381	Induction sheet	SUS430; 10x35mm
108	AY0000120	Ball drop turn gate ASSY	Include[19][67][106][107]

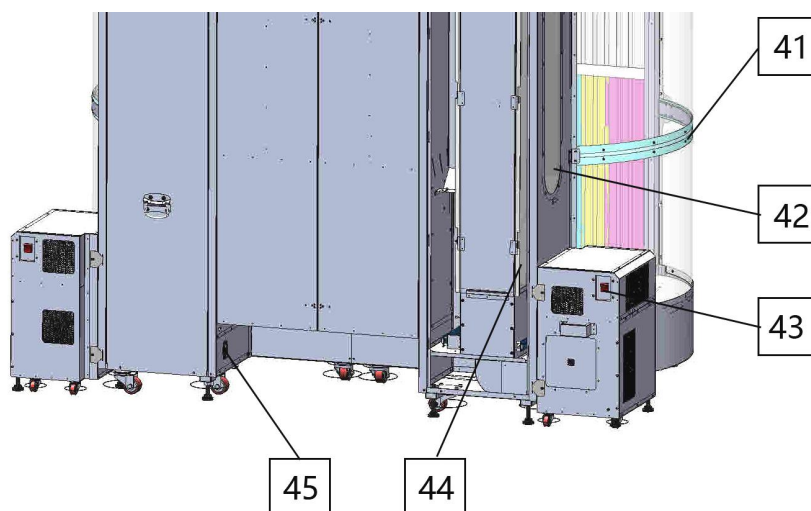


NO.	Part Number	Part Name	Specifications
25	KL0002471	Coaming of the top	Transparency PC
26	KL0003420	Ball house cant B	Transparency PC
27	KL0003400	Top rear PC board	Transparency PC
28	KL0003410	Ball house cant A	Transparency PC
29	KL0002482	The top center baffle	Transparency PC
30	KL0002461	Top former PC board	Transparency PC
31	SJ0002371	Aluminum strip inside upper frame	135mm
32	KL0002431	Main frame board	Transparency PMMA
33	SJ0002361	Aluminum strip outside upper frame	335mm

Main cabinet:

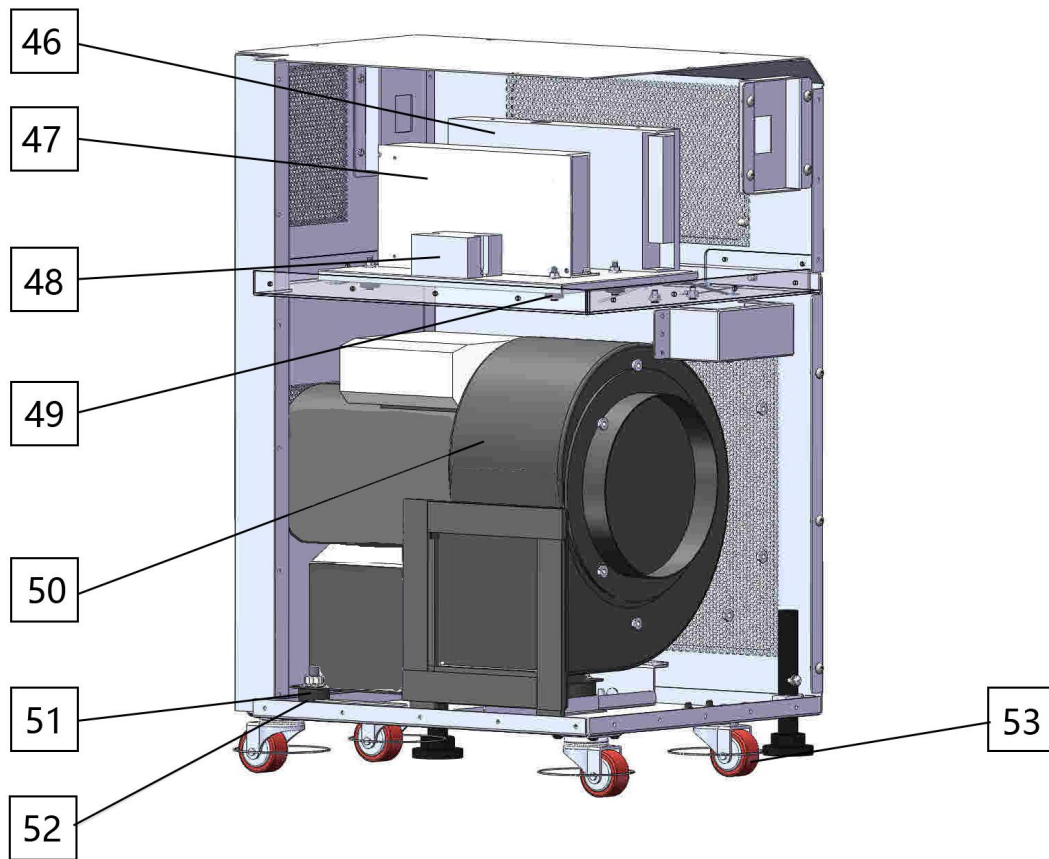


NO.	Part Number	Part Name	Specifications
34	YB0000980	Step-JP(<i>Elastic curtain version</i>)	White PE
35	TD0000350	Rubber mat(<i>Elastic curtain version</i>)	PEVA,200mm
36	ME0000750	Stainless buckle	NRH,5104B(Lock hole)
37	KL0002501	Curtain (<i>Elastic curtain version</i>)	Transparency PVC
38	HE0000700	Curtain of red (<i>Elastic curtain version</i>)	60mm Elastic
39	HE0000720	Curtain of yellow (<i>Elastic curtain version</i>)	60mm Elastic
40	HE0000730	Curtain of green (<i>Elastic curtain version</i>)	60mm Elastic
104	AY0000110	FABRIC STRIPS SET	Include [37][38][39][40] & Bracket. 2sets/game



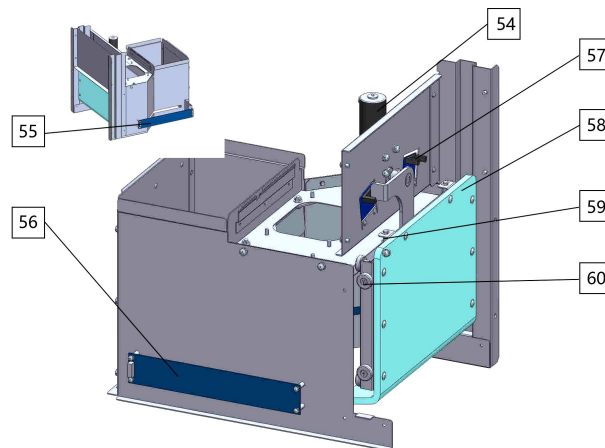
NO.	Part Number	Part Name	Specifications
41	KL0001141	Trim strip of inside	PMMA
42	KL0000901	Side window panel	Transparency PMMA
43	MK0000080	Power switch	Red light boat switch
44	KL0002451	Ball pipe	Transparency PMMA
45	MK0000570	Filter	10A,CW2C-10A-T

Blower box:

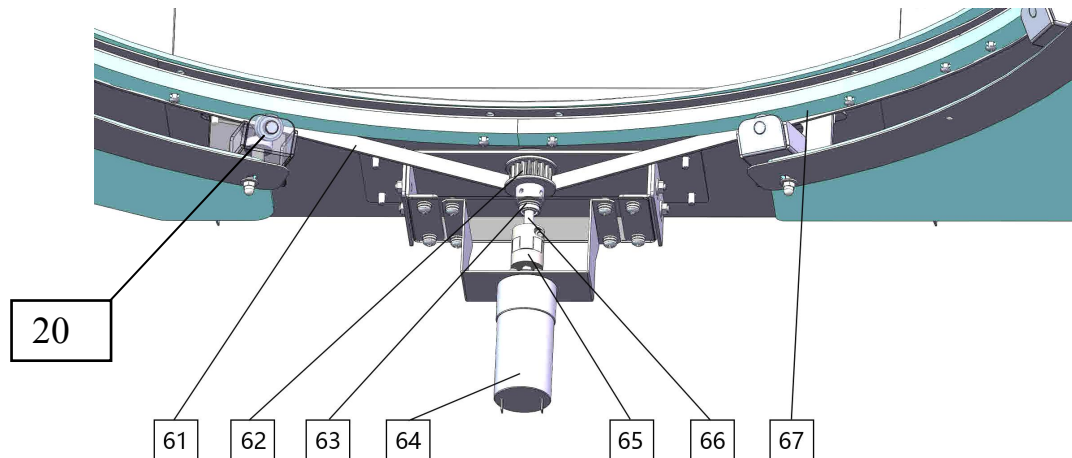


NO.	Part Number	Part Name	Specifications
46	MH0000300	12V power supply box	LRS-200-12
47	MH0000240	Switching power	RD-125A, 5V-12V double lines
48	MA0000350	Solid state relay	CDG1-1DA40
49	HE0001330	Rubber damping cushion	VD15*15*M4
50	MA0000621	Blower	CY160,550w, 220V,
51	HE0001340	Rubber damping cushion	VD25*20*M8
52	SJ0002610	Blower foot cushion	White POM
53	YS0000180	1.5"Omnidirectional caster	Mounting hole36x28

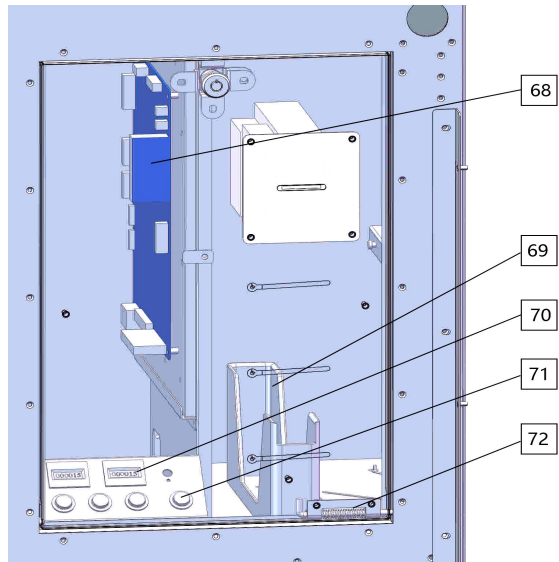
Inside of cabinet:



NO.	Part Number	Part Name	Specifications
54	MA0000160	Gate opening motor	634JX31ZY12V33RPM
55	MX0000920	Correlation type sensor detection-Receiving	IR-16A
56	MX0000930	Correlation type sensor detection-Emitting	IR-16B
57	MX0000020	Sensor detection substrate	MY4035.PCB
58	KL0000913	Ball gate baffle	Transparency PMMA
59	LA0000250	Gate buffer spring	0.8x10x15, Five laps, Stainless
60	HE0000120	D19 nylon bearing roller	M6, DR19-C1L6

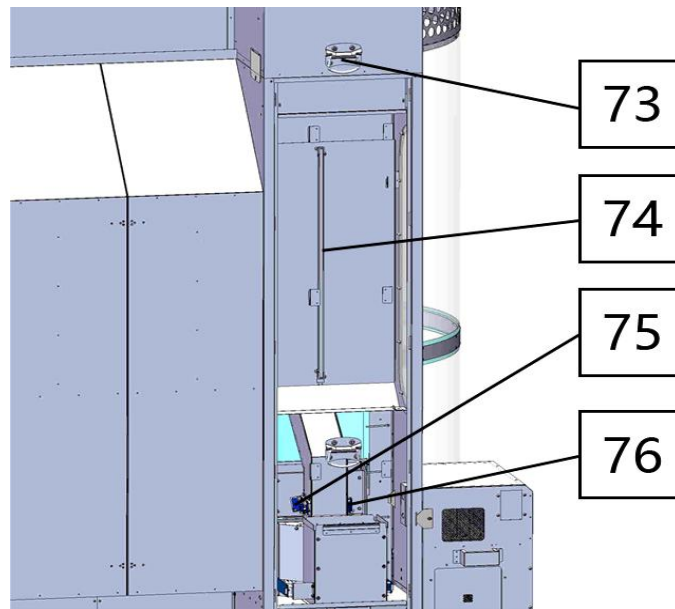


NO.	Part Number	Part Name	Specifications
61	YE0000270	Belt	XL-W10-2670mm
62	YE0000260	synchronous wheel	XL17
63	ZC0000140	Bearing	F686zz
64	MA0000360	Continuous current motor	12V, 250RPM
65	YE0000300	Coupling	D19,L25,Hole6*6
66	SJ0001690	Axle	6.0mm
67	KL0000883	Goal reinforcement	PMMA
20	ZC0000400	Bearing	606zz

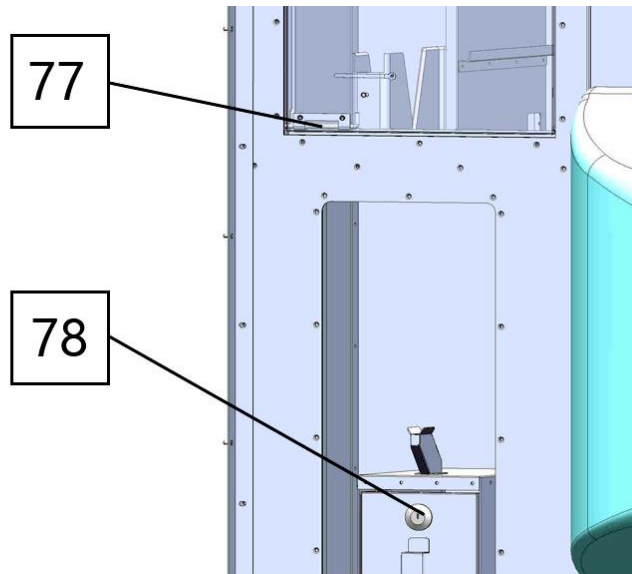


NO.	Part Number	Part Name	Specifications
68	MX0000180	Motherboard	MY MAIN PCB V002.3B
69	YB0000010	Ticket box	White plastic
70	ML0000010	Counter	DC 12V 6
71	MB0000070	Press button	M16
72	HE0000310	Right of the L-spring latch	90mm,Install of metal,right

Outside of cabinet:

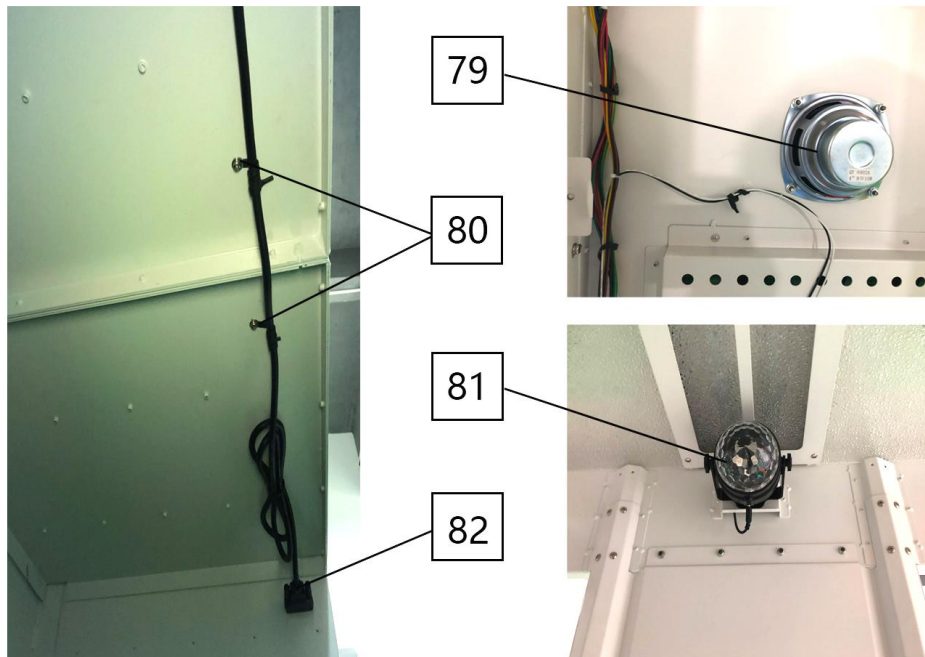


NO.	Part Number	Part Name	Specifications
73	HE0000070	Fold the handle	
74	ME0000340	LED Lamp	L=700mm,highlight,with aluminum slot
75	MX0000580	Receiving of sensor	MY4025A
76	MX0000590	Emitting of sensor	MY4025B

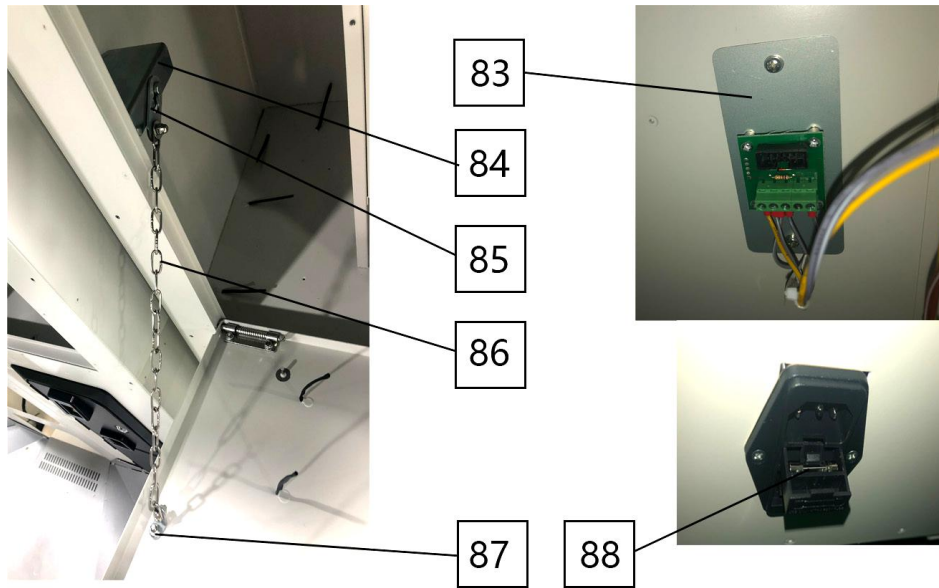


NO.	Part Number	Part Name	Specifications
77	HE0000210	L-spring latch	90mm,left
78	YQ0000030	Cash box lock	3157

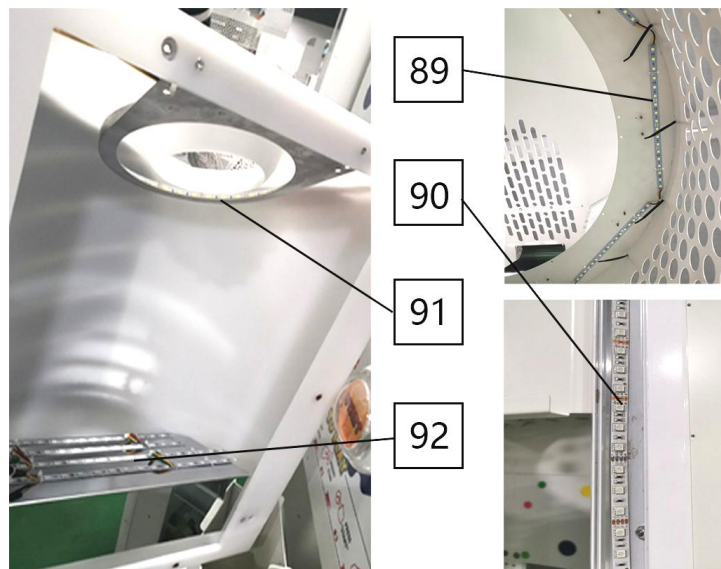
Sound and light parts:



NO.	Part Number	Part Name	Specifications
79	MK0000010	Speaker	4 inches, 8 ohms, 15 watts;85*85
80	SH0005570	L90 Cable ties	SECC
81	MA0001110	Magic ball	5V
82	MA0001210	Serial communication line	1m

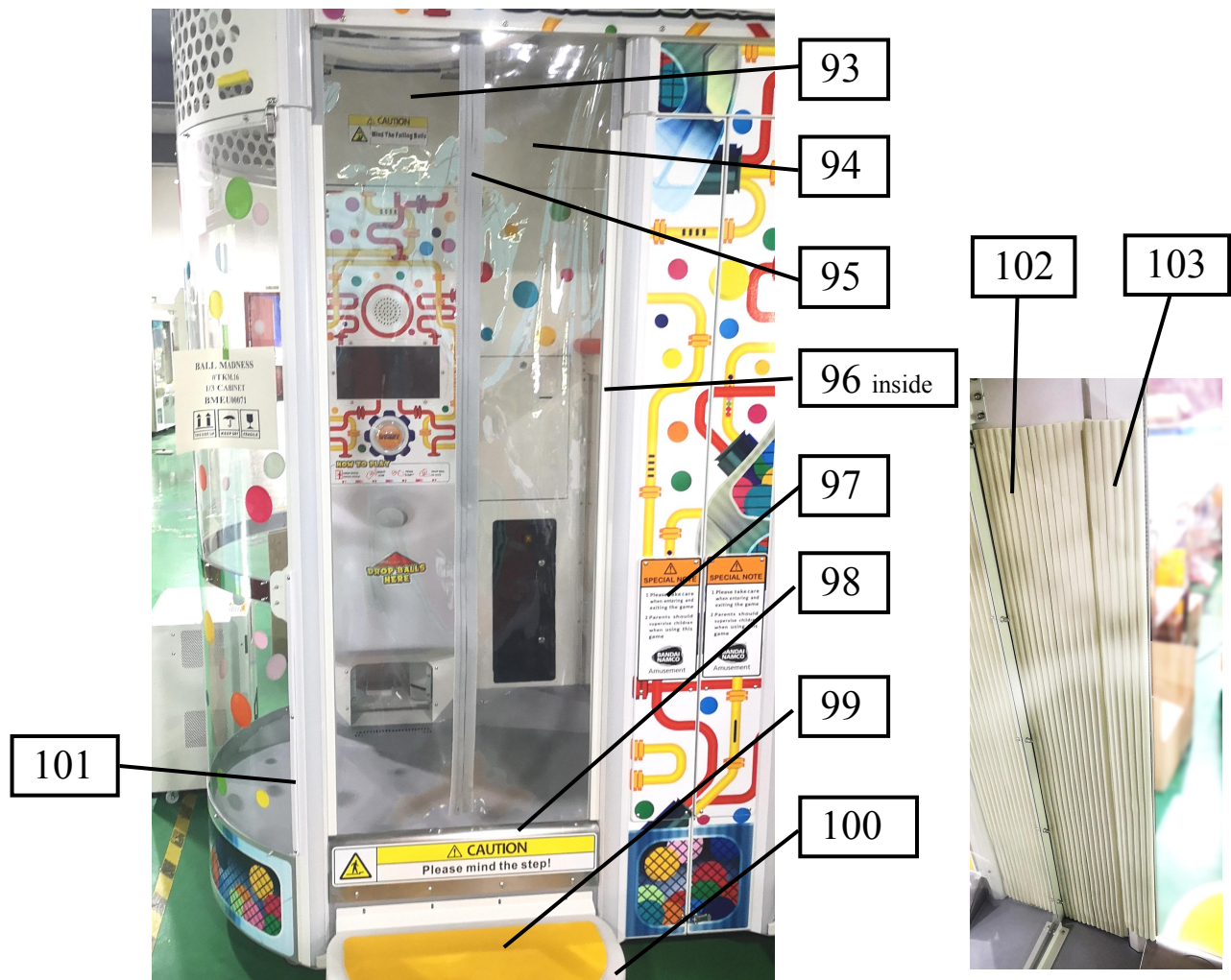


NO.	Part Number	Part Name	Specifications
83	SH0020370	972N Mounting Plate	SECC
84	SH0020360	Chain bracket	Q235
85	SH0013531	Chain fixing frame	SECC
86	HE0001300	Chain	2.0,Stainless
87	SH0013630	Front case chain buckle	SECC
88	MA0000900	Fuse	Littelfuse 218 Series, 5×20 mm, T5A@250VAC



NO.	Part Number	Part Name	Specifications
89	ME0000920	Highlight LED tough lamp bar	White,Don't take aluminum slot
90	ME0000480	Three-color LED soft lamp bar	10mm
91	ME0000490	White soft lamp bar	10mm
92	ME0000740	Three-color LED tough lamp bar	RGB Three-color LED aluminum tough lamp bar

Magnet curtain (Magnet curtain version)



Magnet curtain version ONLY			
NO.	Part Number	Part Name	Specifications
93	HE0002210	Left magnet curtain of one set	300x1670mm
94	HE0002220	Right magnet curtain of one set	300x1670mm
95	AY0000090	Magnet curtain set. With [93][94]&Bracket	2sets/game
96	SH0024321	SIDE HOLDER METAL	The other side are the same
97	KL0006380	Side door protect board-Big	140x600mm
98	SH0024361	Front door metal	SUS430,with sticker
99	TD0000351	Rubber mat	PEVA,240*540mm
100	YB0000981	Step-JP	White PE
101	KL0006390	Side door protect board-Small	10x620mm
102	HE0002230	NBR PAD-Long	80x1010mm
103	HE0002240	NBR PAD-Short	80x950mm

6. Machine maintenance and replace sensors

6.1. Machine maintenance

Even if the machine is running normally, in order to keep the machine operating in the best condition and for a longer period of use, please carry out the following routine inspection and maintenance (once a month)

1. Check whether the foot stand supports the machine properly
2. Check whether the wind unit is loose and whether there is debris accumulation in the air inlet
3. Clean fan blade dust regularly
4. Check the lock of the ball barn for looseness
5. Check whether the screws fixing each part are loose
6. Check whether the connectors are loose and whether the terminals are detached.

Precautions for maintenance:

1. During maintenance, please cut off the power supply to prevent the operator or others from getting hurt, electric shock, etc
2. When doing any work not mentioned in this manual, please be sure to consult the after-sales service center of the company
3. Consumables and repair parts please use our designated products
4. Even if the main power supply is cut off, the power board and the display are still in high temperature and high pressure state, in case of burns, electric shock risk. Please be careful not to touch it

▲ Operator should clean the game daily to bring the player a comfortable game area.

6.2. How to replace sensors.



1. Remove the four hexagonal caps with a socket wrench and remove the semicircle gusset plate .



2. Remove the two screws with an cross screwdriver



3. Remove the five screws of the cover plate.



4. Take off the cover plate.

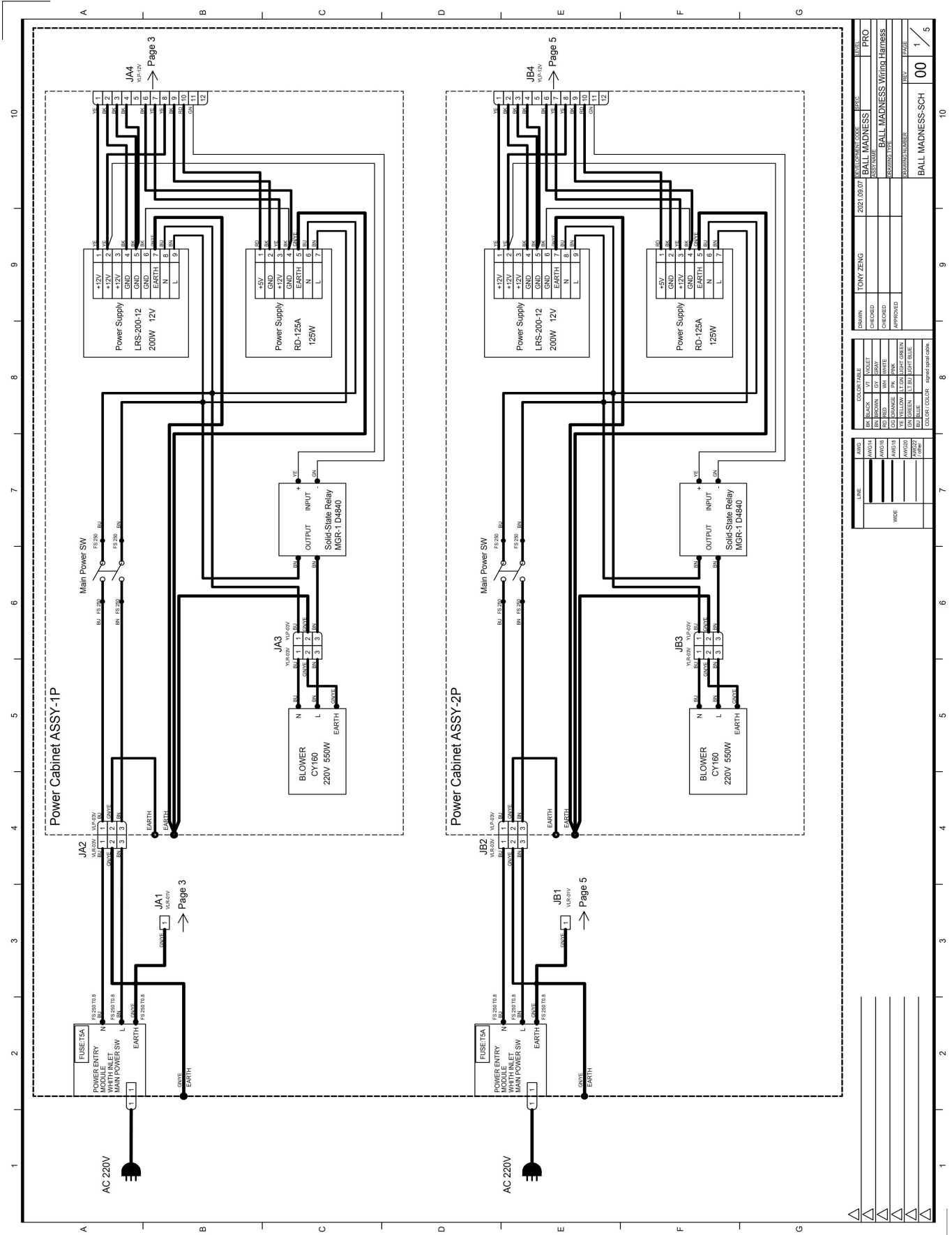


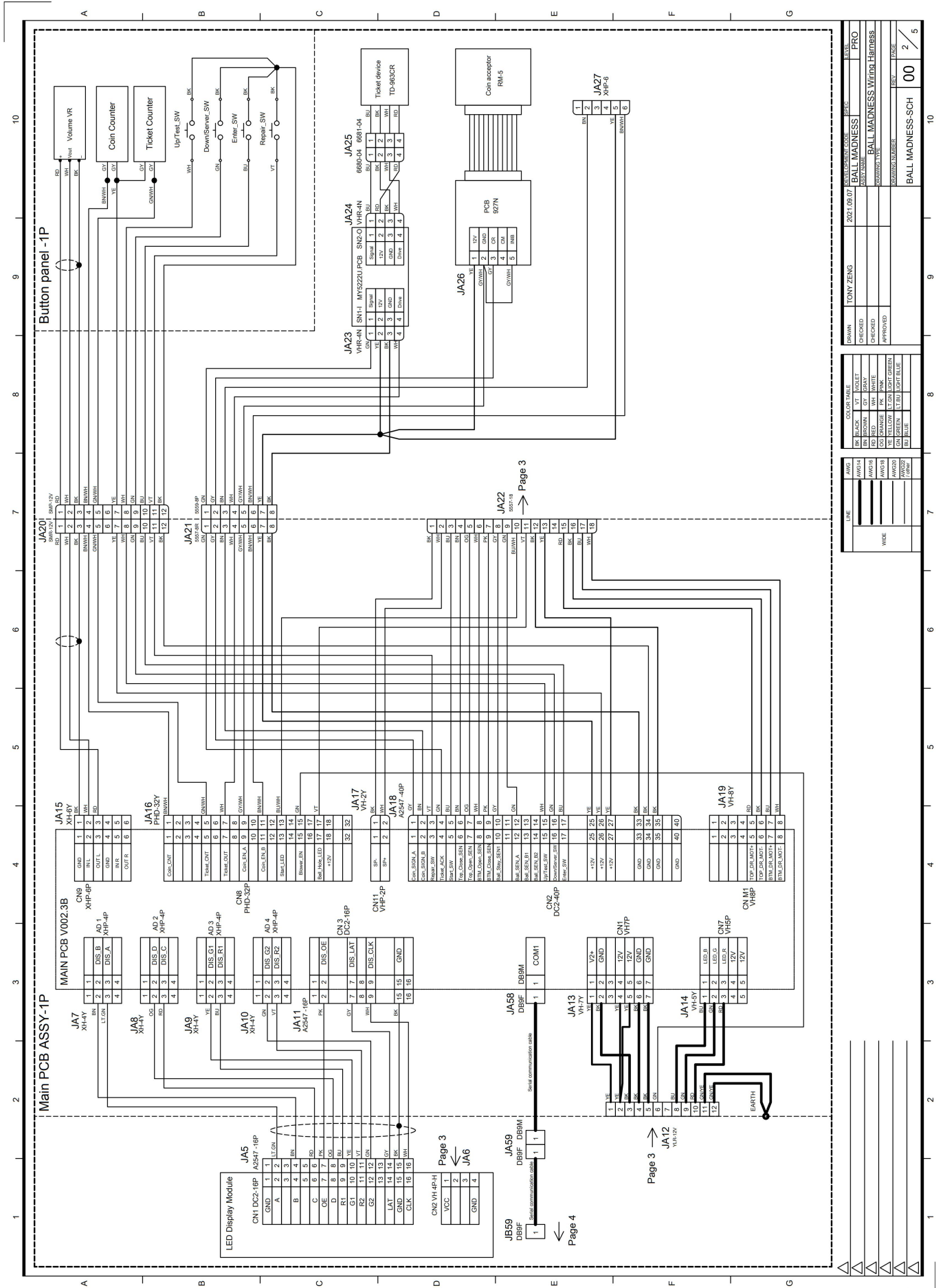
5. Locate the sensor cable, open the tie and take out the cable and replace it with a new one .



6. Reinstall cover plate, according to the original steps.

6.3. Wiring schematic



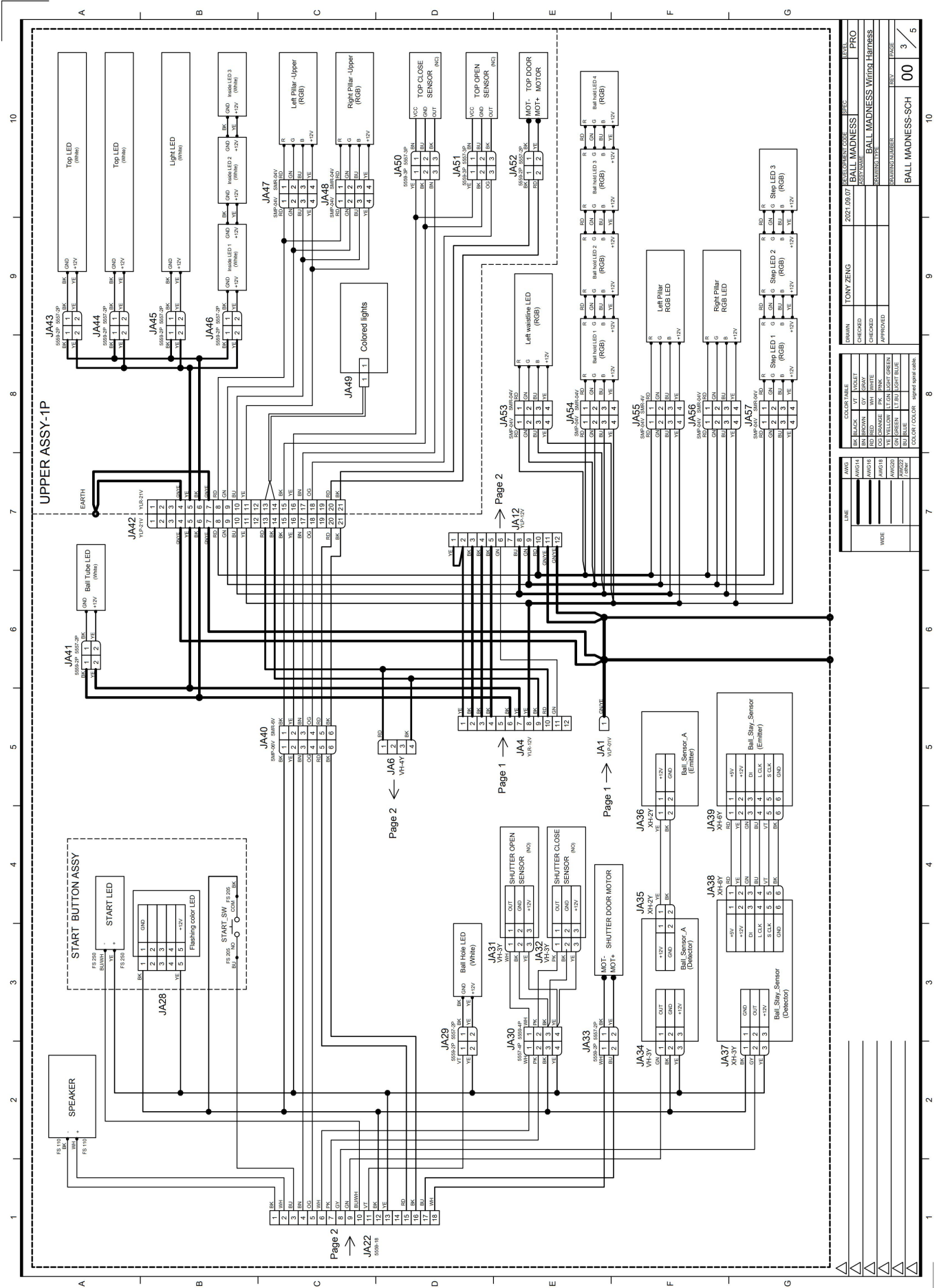


REVISION CONTROL			
REV	DESCRIPTION	DATE	BY
00	BALL MADNESS SCH	2024.08.07	TONY ZENG
01	BALL MADNESS PRO		

CHECKED		
DRAWN	CHECKED	APPROVED

COLOR TABLE	
BF BLACK	VT VIOLET
BE BROWN	WM WHITE
CG CHANCE	PK PINK
YE YELLOW	LG LIGHT GREEN
GR GREEN	LB LIGHT BLUE
BU BLUE	PL PURPLE

LINE	AWK	AWK-14	AWK-18	AWK-19	AWK-20	AWK-21	AWK-22
1	AWK-14	AWK-14	AWK-18	AWK-19	AWK-20	AWK-21	AWK-22
2	AWK-18	AWK-18	AWK-19	AWK-20	AWK-21	AWK-22	AWK-23
3	AWK-19	AWK-19	AWK-20	AWK-21	AWK-22	AWK-23	AWK-24
4	AWK-20	AWK-20	AWK-21	AWK-22	AWK-23	AWK-24	AWK-25
5	AWK-21	AWK-21	AWK-22	AWK-23	AWK-24	AWK-25	AWK-26
6	AWK-22	AWK-22	AWK-23	AWK-24	AWK-25	AWK-26	AWK-27
7	AWK-23	AWK-23	AWK-24	AWK-25	AWK-26	AWK-27	AWK-28
8	AWK-24	AWK-24	AWK-25	AWK-26	AWK-27	AWK-28	AWK-29
9	AWK-25	AWK-25	AWK-26	AWK-27	AWK-28	AWK-29	AWK-30
10	AWK-26	AWK-26	AWK-27	AWK-28	AWK-29	AWK-30	AWK-31



LINE	AWD	COLOR TABLE	VT	INLET	PRO
AWD14	VT	BLACK	VE	UT	PRO
AWD15	VT	BROWN	VE	UT	PRO
AWD16	VT	ORANGE	VE	UT	PRO
AWD17	VT	YELLOW	VE	UT	PRO
AWD18	VT	GREEN	VE	UT	PRO
AWD19	VT	BLUE	VE	UT	PRO
AWD20	VT	Other	VE	UT	PRO

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

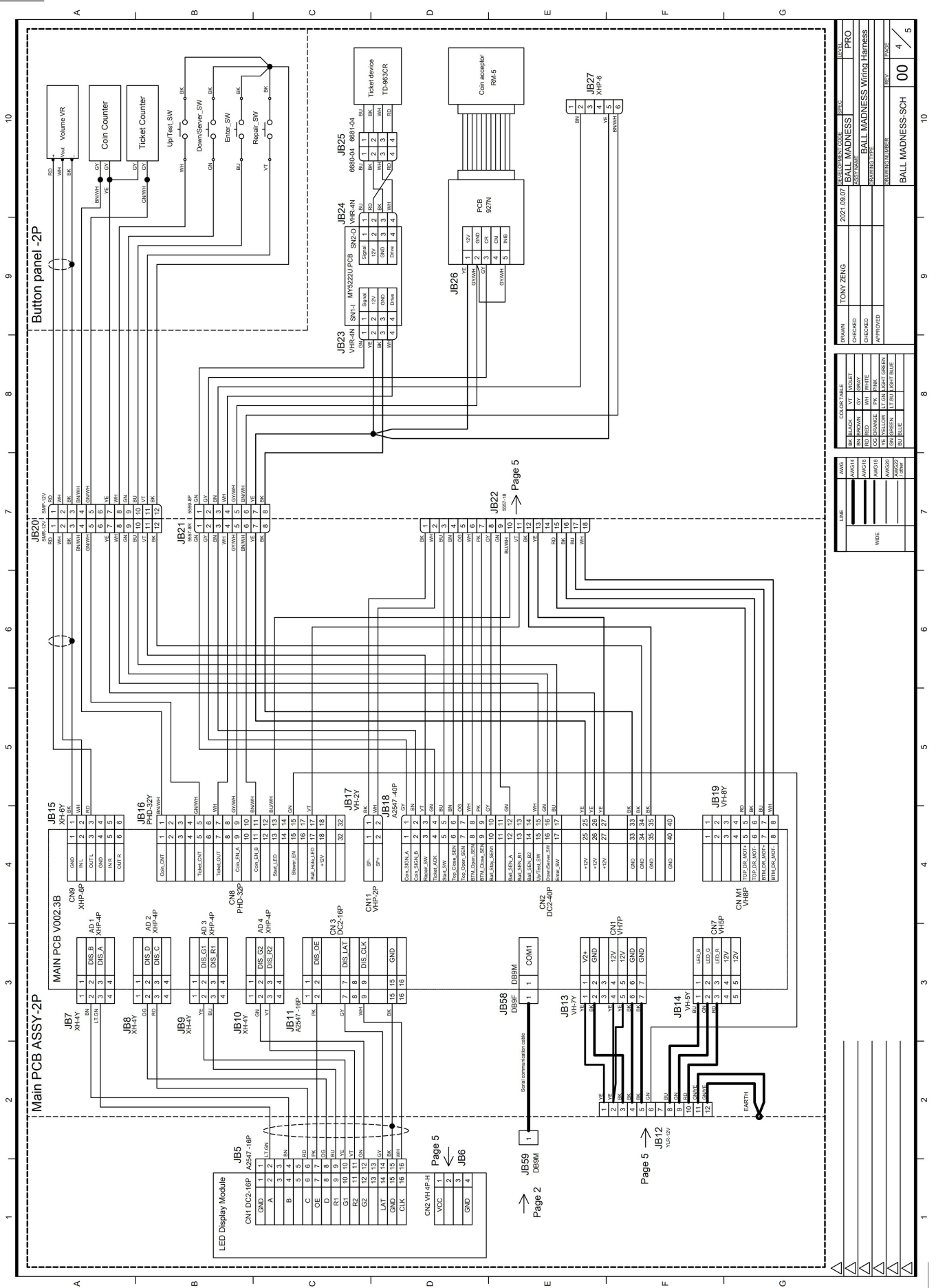
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AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other

AWD	AWD14	AWD15	AWD16	AWD17	AWD18	AWD19	AWD20
AWD	VT	BLACK	BROWN	ORANGE	YELLOW	GREEN	BLUE
AWD	VT	Other	Other	Other	Other	Other	Other



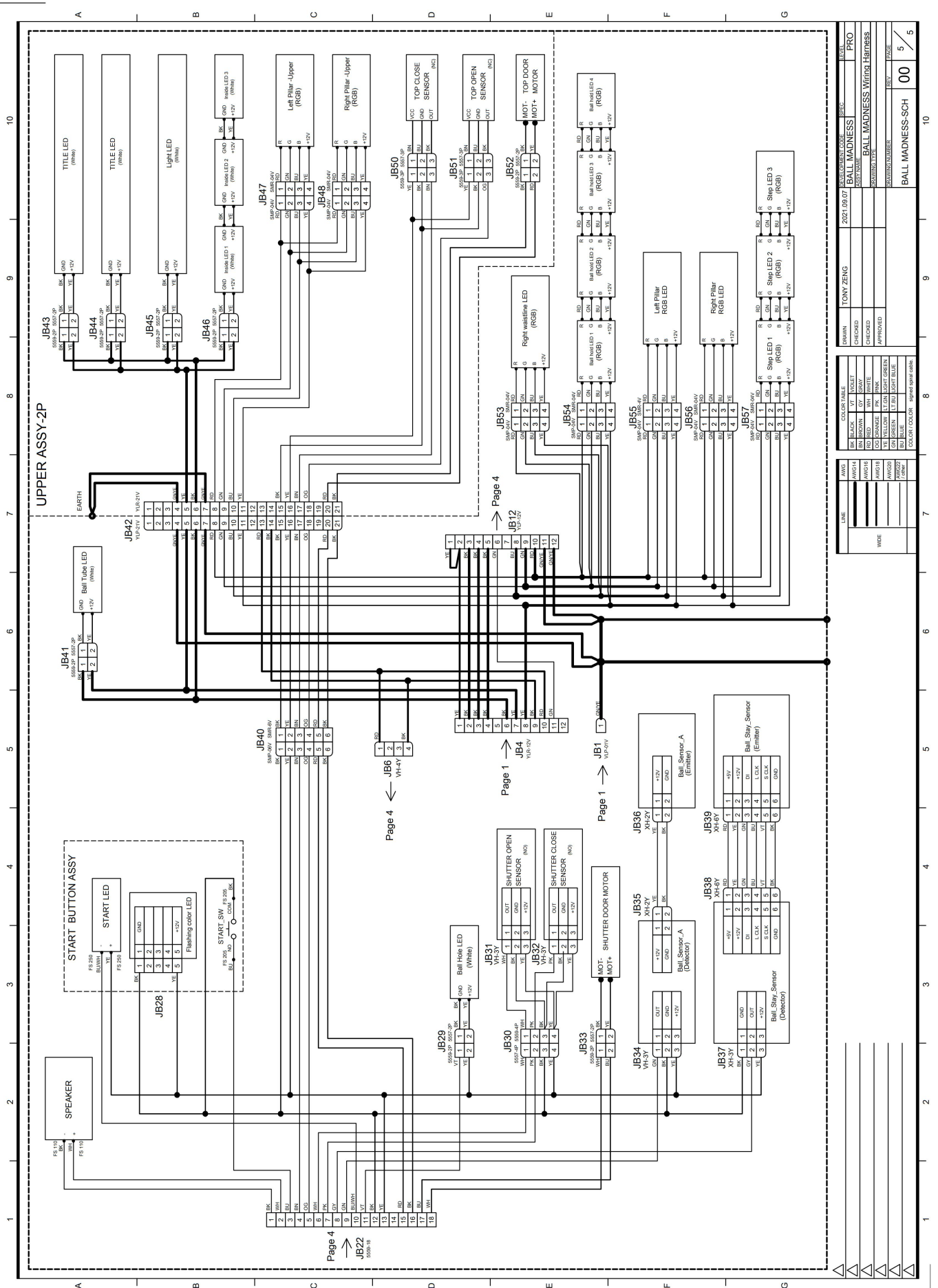
LINE	AWD	AWG	COLOR	TABLE	DRAWN	2021.09.07	DEVELOPMENT/LOGIC	PRO
	AWG14	1.5	BLACK	VT	TONY ZENG	BALL MADNESS	BOARD TYPE	BALL MADNESS Wiring Harness
	AWG16	2.0	BROWN	GY			BOARD NUMBER	00
	AWG18	2.5	ORANGE	PK				4
	AWG20	3.0	YELLOW	LT				5
	AWG22	3.5	GREEN	LT				6
	AWG24	4.0	RED	LT				7
	AWG26	4.5	PURPLE	LT				8
	AWG28	5.0	BLUE	LT				9
	AWG30	5.5	WHITE	LT				10

LINE	AWD	AWG	COLOR	TABLE	DRAWN	2021.09.07	DEVELOPMENT/LOGIC	PRO
	AWG14	1.5	BLACK	VT	TONY ZENG	BALL MADNESS	BOARD TYPE	BALL MADNESS Wiring Harness
	AWG16	2.0	BROWN	GY			BOARD NUMBER	00
	AWG18	2.5	ORANGE	PK				4
	AWG20	3.0	YELLOW	LT				5
	AWG22	3.5	GREEN	LT				6
	AWG24	4.0	RED	LT				7
	AWG26	4.5	PURPLE	LT				8
	AWG28	5.0	BLUE	LT				9
	AWG30	5.5	WHITE	LT				10

Page 5

Page 5

Page 5



LINE	AWG	COLOR	TABLE
BK	BLACK	VT	VALETT
BL	BLUE	VT	VALETT
BR	BROWN	VT	VALETT
CF	COPPER	PK	PINK
GN	GREEN	LT	LIGHT GREEN
GR	GRAY	LT	LIGHT GRAY
OR	ORANGE	LT	LIGHT ORANGE
RD	RED	VT	VALETT
VT	WHITE	VT	VALETT
VE	Other	VE	Other

DRAWN	TONY ZENG
CHECKED	
APPROVED	

DEVELOPMENT CODE	2021.09.07
DESIGNER	TONY ZENG
REVISION TYPE	
REVISION NUMBER	

PROJECT	PRO
WIRE	
REVISION	
REVISION NUMBER	00
REVISION	5
REVISION	5

10 9 8 7 6 5 4 3 2 1