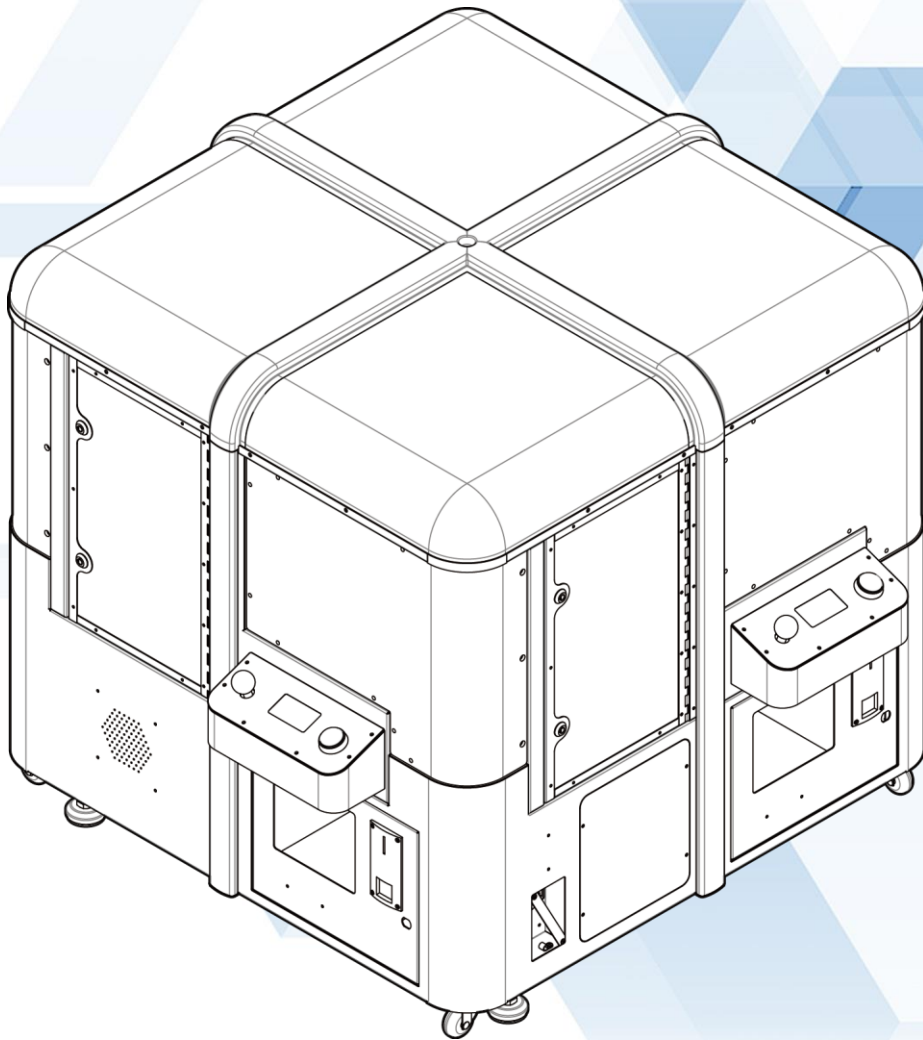


# USER'S MANUAL

## CRANE MACHINE Cubic 4 Catcher



MANUAL VERSION : F12H-SAJ-E-VB1.0  
F12H-M01E

ISSUE DATE : 2019.10.16

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# SAFETY NOTICE

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## 1 SAFETY NOTICE

---

- a. Please read carefully with enclosure of “Warranty”.
- b. Please read carefully with enclosure of “Maintenance”.
- c. Please check and maintain the machine regularly, DO NOT use any synthetic detergents to clean the machine.
- d. Places where the ground is sloping, uneven or there is strong vibration.
- e. Avoid direct sunlight machine placed in place in case the internal parts damaged.
- f. Avoid machine in high dust, high humidity, high temperature environment, so as to avoid damage to machine parts.
- g. Machine does not have waterproof, limited to indoor use, do not place water & beverages in the machine.
- h. DO NOT climbing or stand above the machine in any time, to avoid a threat to personal safety.
- i. Any casualties which caused by inappropriate behavior and dangerous acts, the Company shall not be responsible.
- j. This appliance is not for children and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
- k. Do not use this appliance near bathtubs, showers, basins or other vessels containing water.
- l. After using this appliance should be cleaned to avoid the accumulation of grease and other residues.
- m. Children should be supervised to ensure that they do not play with the appliance.
- n. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

## 2 TRANSPORTATION AND MOVING

---

- a. Before moving the machine, make sure to unplug it from the mains.
- b. Turn off the power as notice before unplug from the mains, inappropriate handling will cause damage to the machine.

## 3 POWER NOTICE

---

- a. Before power connecting, verified the voltage is correct. 110V, 220V or 240V
- b. DO NOT touch the plug with damp hands to avoid electric shock.
- c. When installing the device, should ensure a smooth footing.

## 4 ORDER IN POWER ON

---

Plug in and turn on the power.

## 5 ORDER IN POWER OFF

---

Turn off the power and unplug

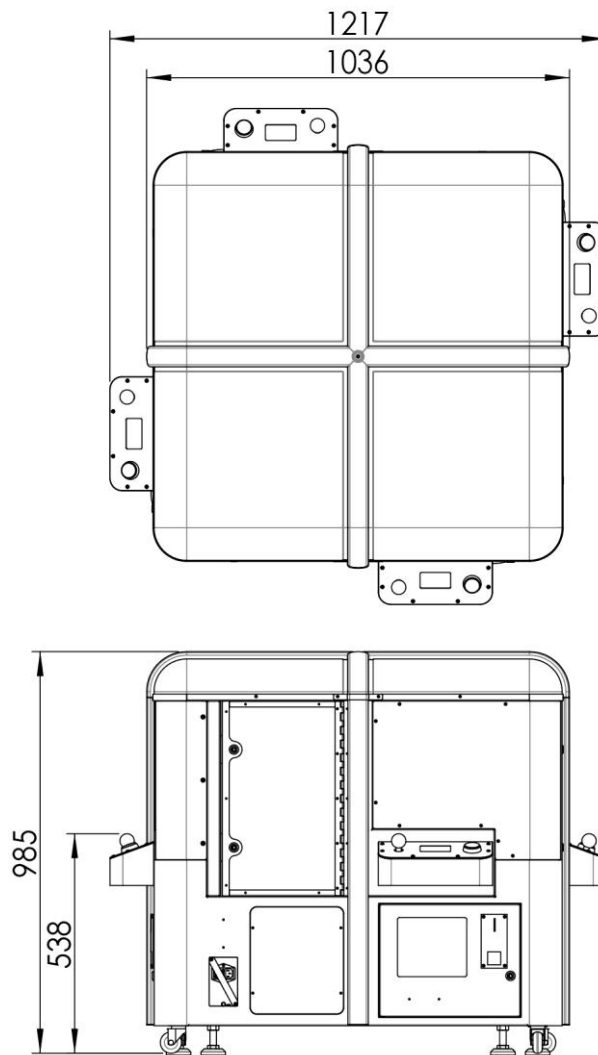
 Wait for 10 seconds to reboot

# ● ABOUT THE MACHINE

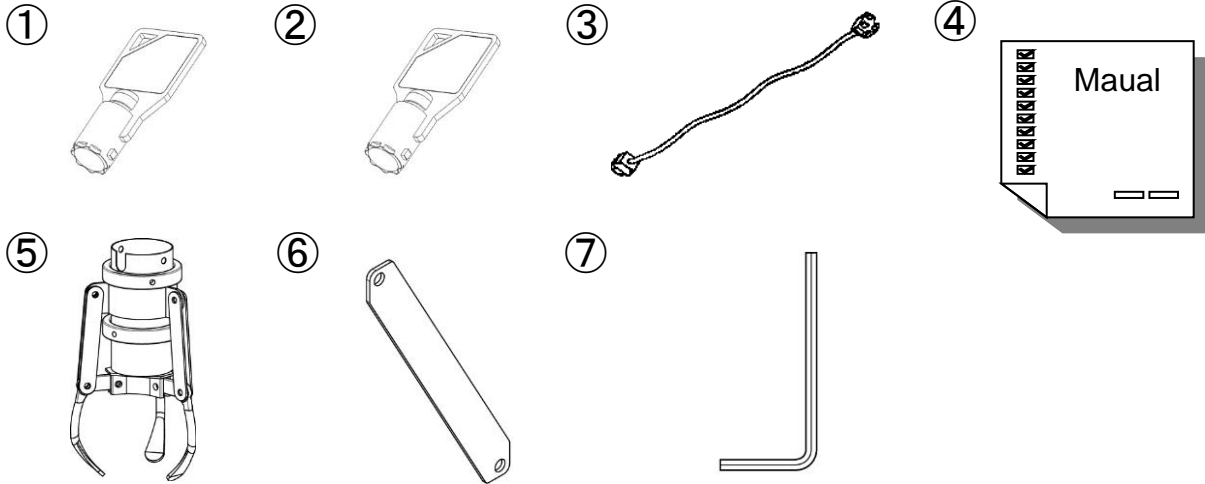
## 1 SPECIFICATION

a. Voltage & Frequency	AC100V (50 / 60 Hz)
b. Dimension	(W) 1217 x (D) 1217 x (H) 985 mm
c. Weight	155 kg
d. User	4 people
e. Environment	Weather Protected Environment
f. Temperature	0°C~40°C
g. Avg. Power Consumption	128W
h. Max. Power Consumption	430W

## 2 DIMENSION



### 3 LIST OF COMPONENTS

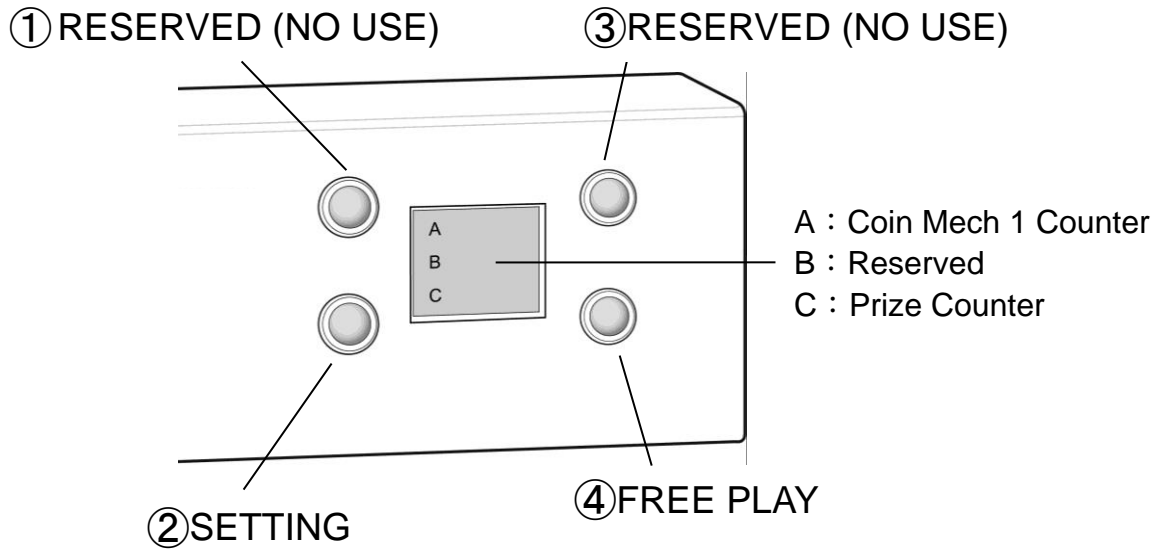


NO.	SEGA NO.	Q / U	FEILOLI NO.	SEGA PART NAME	SPEC
1	TSBF A01C000248A	2	A01-C000248A	CASH KEY	#8460
2	TSBF A01C000073A	4	A01-C000073A	FRONT KEY	#3123
3	TSBF A01G000203A	1	A01-G000203A	PLUG FORM ACCORDING AREA.	
4		1		MAUAL	
5	TSBFH0300B0029A	1	H03-00B0029A	SMALL CROW	
6	TSBFA12HC040034A	1	A12HC040034A	INLET PLOTECT	
7		1	TB0012	TORX SCREW WRENCH (T20H)	

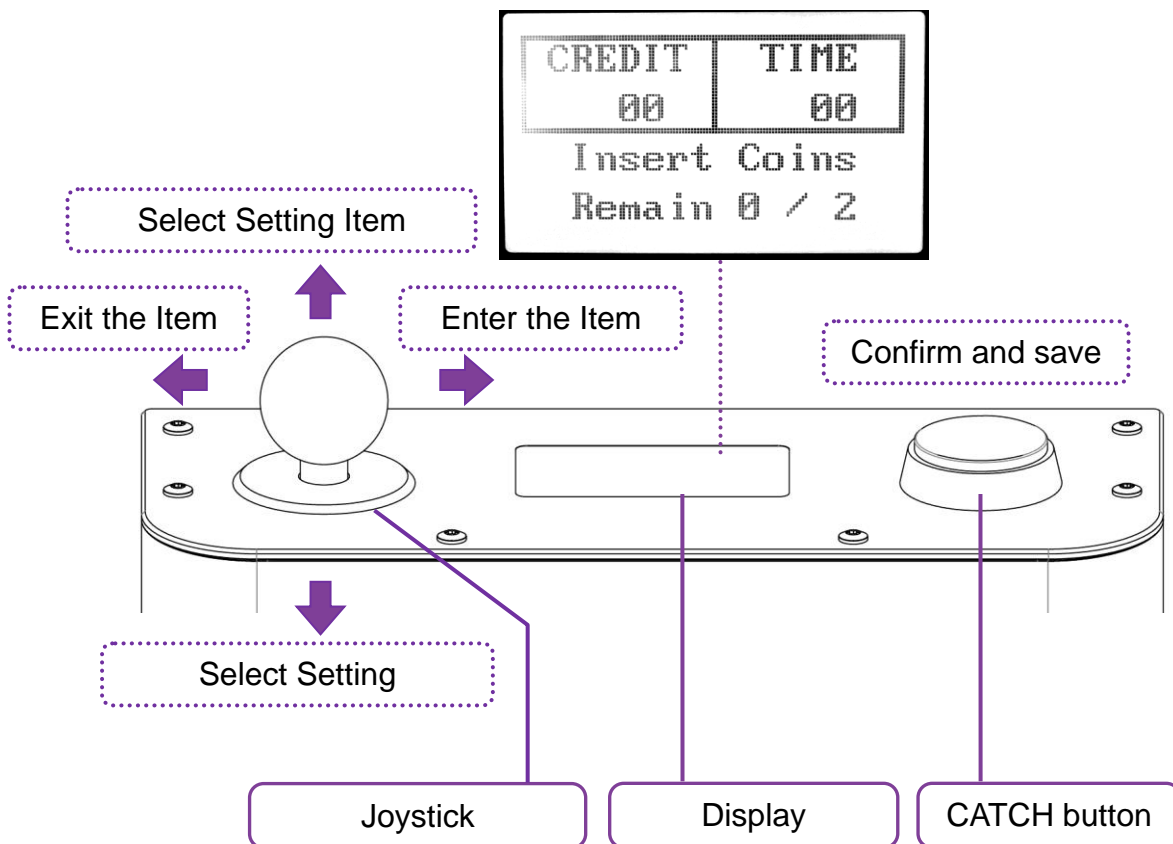
# ◆ SETTING

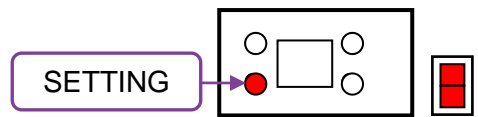
## 1 System Setting

### ➤ Electronic Counter



### ➤ Maintenance Tray





## 2 To Enter Setting Menu :

- (1) When the machine is in stand-by mode, enter SETTING button to enter setting menu.
- (2) 6 main setting items in setting menu :

>>A : Setting
>>B : Clamp Power
>>C : Accounts
>>D : Auto Play
>>E : Motor Speed
>>F : Test

Joystick :

UP or DOWN - select items.

RIGHT – enter the item.

LEFT - Exit

### 1. >Setting

A : Setting :

>>A1 : Coin->Credit
>>A2 : Game time
>>A3 : Win rate
>>A4 : Tilt
>>A5 : Clamp Catch
>>A6 : Coin Save
>>A7 : Play T- Win (Play Till Win)

> A1 : Coin-> Credit :

A1 : Coin->Credit
>> Coin->Credit
>>Coin Bonus

Joystick :

UP or DOWN - select items.

RIGHT - enter the item.

LEFT - Exit

> A11 : Coin-> Credit :

Coin->Credit
↑ : +     ↓ :-     →Next
1~10 Coin(s) =
= 1~10 Credit(s)

COIN :

Joystick [Right] / [Left] → Select.

Joystick [Up] / [Down] → Adjust value.

As inserted coins reached setting value, it comes "BONUS , CREDIT+1"

[CATCH] → Save & Return to Setting MENU.

> A12 : Coin Bonus :

Coin Bonus
↑ : +     ↓ :-     ☀→Exit
0~10 coin(s) = ( 0= No Bonus coin)
Bonus 1 Coin

BONUS CREDIT :

Joystick [Up] / [Down] → Adjust value.

[CATCH] → Save & Exit.

A2 : Game time :

A2 Game time
↑ : +     ↓ :-     ☀→Exit
= 30 sec

Joystick [Up] / [Down] → Adjust value.

[CATCH] → Save & Exit.

Range : 5 ~ 60 seconds.



### A3 : Win rate :

(The explanation below is for winning once per 100 games. Only valid for games by inserting coins) ◦

A3 : Win rate		
↑ :+	↓ :-	→Next
= 100		
>>MODE: Random / Fixed		

Joystick [Up] / [Down] → Adjust value

Joystick [Right] / [Left] → Select

Range : 1~900

MODE for win game: Random / Fixed.

[CATCH] ☀ → Save & Exit

※When win rate value or MODE has been changed, the bank values (C1) will be reset.

Random: When bank values (C1) >0 or (C1) <= (A3), it will provide win game anytime.

Fixed: Win game will only be provided when bank values (C1) >= win rate value (A3).

---

### A4 : Tilt

A4 : Tilt	
↑ ↓ :Change	☀ ->Exit
= ON / OFF	

Tilt ON / OFF Setting

Joystick[Up]/ [Down] → Change setting.

[CATCH] → Save & Exit.

---

### A5 : Clamp Catch Position : Claw catching setting

Enable to catch by button during claw falling

\*Default Setting : At Bottom ◦

A5 : Clamp Catch	
↑ ↓ :Change	☀ ->Exit
= At Air / At Bottom	

Joystick[Up]/ [Down] → Change setting.

AT AIR – Available to catch in before claw reaches the bottom.

AT BOTTOM—Catch only when claw reach the bottom.

[CATCH] → Save & Exit.

A6 : Coin Save :

A6 : Coin Save	
↑ ↓ :Change	☀ ->Exit
=Save / Clear	

Joystick[Up]/ [Down] → Change setting.  
Save : Save inserted coins (credits)  
Clear: Coins (credits) will be reset when reboot  
[CATCH] → Save & Exit.

---

A7 : Play Till Win :

A7 : Play Till Win	
↑ ↓ :Change	☀ ->Exit
=YES / NO	

Joystick[Up]/ [Down] → Change setting.  
YES : Provide free play until win when accumulated credits reached win rate setting  
NO : Provide free play once when accumulated credits reached win rate setting  
[CATCH] → Save & Exit.

---

A8 : Volume Adjustment :

A8 Volume Adj.	
↑ :+    ↓ :-    ☀ →Exit	
= 1~10	

Joystick [Up] / [Down] → Adjust value.  
[CATCH] → Save & Exit.  
Range : 1~10.

---

A9 : Link Play :

A9 : Link Play	
↑ ↓ :Change	☀ ->Exit
=Need / Do not need	

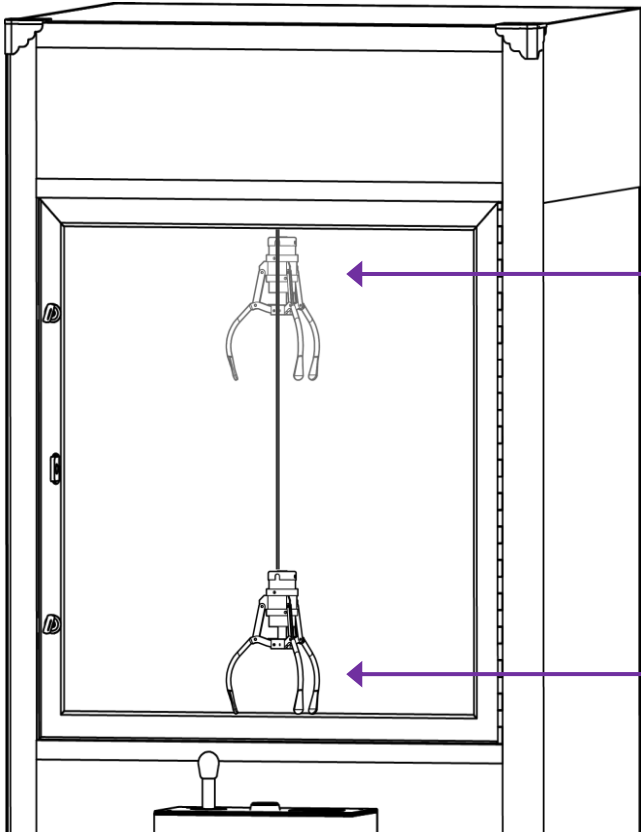
Joystick[Up]/ [Down] → Change setting.  
Need : Link to host and start the game  
Do not need : Don't link to host and start the game  
[CATCH] → Save & Exit.

>B : Clamp Power : Claw Catching Voltage

>>B1 : Strong-V

>>B2 : Weak-V

>>B3 : UP- Height



B2 : Hold Weak-V

Low voltage remains for catching:  
The voltage remains when claw is  
reached top and moving to prize  
output hole.

B3 : Pick up - Height

High voltage is getting lower to  
low voltage as claw is rising.  
The higher B3 value is, the  
higher height for claw remaining  
in high voltage when rising.

B1 : Pick up Strong-V

High voltage for catching: High  
voltage for claw catching in  
bottom.

**B1 : Strong-V : (High voltage for catching)**

B1 : Strong-V
20.0V ~ 48.0V
↑ :+    ↓ :-    ☀→Exit
= 48.0V

Joystick [Up]/ [Down] → Change setting

Range: 20V~48V

[CATCH] ☀ → Save & Exit

It will save the setting and exit automatically if operator doesn't change anything for 30 seconds.

---

**B2 : Weak-V : (Low voltage remains for catching)**

B2 : Weak-V
0.0V ~ 30.0V
↑ :+    ↓ :-    ☀→Exit
= 10.0V

Joystick [Up]/ [Down] → Change setting

Range:0V~30V

[CATCH] ☀ → Save & Exit

It will save the setting and exit automatically if operator doesn't change anything for 30 seconds.

---

**B3 : UP- Height : (The height for claw rising in high voltage) :**

B3 : UP- Height
1 ~ 20(Hi) (1 ~ 20)
↑ :+    ↓ :-    ☀→Exit
= 10

Joystick [Up]/ [Down] → Change setting

Range:1~20 ,

1 : Lowest ; 20 : Highest

[CATCH] ☀ → Save & Exit

> C : Accounts (アカウント) :

C : Accounts
C1>Win Rate Bank
C2>CoinPlay Cou.(counter)
C3>Gift Out Cou. (counter)
C4>Reset All Data

C1 : C1:Win Rate Bank :  
( example : 0 ) ◦

C1 : Win Rate Bank
Counter
= 0
"0"= push ☀-> 2 sec

Win Rate Bank : the value increase 1 for every play by inserting coins, and will be reset after winning

Joystick → No use

Press [CATCH] once → Exit

Press [CATCH] once for 2 seconds → Reset value & Exit

C2 : CoinPlay counter : ( Counts for plays by inserting coins )  
( value 31 is as the explanation )

C2 : CoinPlay Cou.(counter)
Counter
= 31

Total Coin Game: counts once as per coin inserted.

Joystick → No use.

Press [CATCH] once → Return to Accounts MENU.

C3 : Gift Out counter : ( Prize payout counts )  
( value 17 is as the explanation ) °

C3 : Gift Out Cou. (counter)
Counter
= 17

Joystick → No use.

Press [CATCH] once → Return to Accounts MENU.

---

C4 : Reset All Data :

C4 : Reset All Data
>>No -->Exit
>>Yes -->Save

Joystick [Up] / [Down] → Select items

Reset the counters of total coins and prize payout

>>No : Exit

>>Yes : Save

Press [CATCH] once → Return to Accounts MENU.

---

2. >D : Auto Play:

>D: Auto Play
>>Business
>>Free Play
>>Machine Test

Joystick[Up]/ [Down] → Change setting.

>>Business : Disable free play mode ( Operation mode ).

>>Free Play : Enable free play mode.

>>Machine Test : To enter auto test mode. The mode is for QC purpose of manufacturer only.

[CATCH] → Save & Exit.

### 3. >E : Motor Speed Adjustment :

>E : Motor Speed
E1>Forward Speed
E2>Backward Sp.(Speed)
E3>Left Speed
E4>Right Speed
E5>Down Speed
E6>Up Speed
E7> ALL Speed

Joystick [Up] / [Down] → Select items  
Joystick [Right] → Enter  
Joystick [Left] → Exit

#### E1 : Forward Speed

E1 Forward Speed
↑ :+    ↓ :-    ☀ → Test
= 50%

Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%, change the value by per 10%)  
30% : Slowest  
60% : Fastest  
[CATCH] → Save & Enter to test mode

Test mode :

E1 Forward Speed
>>Joystick Test
= 50% Test

Joystick [Up] / [Down] → To make motor moving forward or backward  
[CATCH] → Return to Motor Speed Adjustment MENU.

## E2 : Backward Speed

E2 Backward Sp.(Speed)
↑ :+    ↓ :-    ☀→Test
= 50%

Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%, change the value by per 10%)  
30% : Slowest  
60% : Fastest  
[CATCH] → Save & Enter to test mode

Test mode :

E2 Backward Sp.(Speed)
>>Joystick Test
= 50% Test

Joystick [Up] / [Down] → To make motor moving forward or backward  
[CATCH] → Return to Motor Speed Adjustment MENU.

---

## E3 : Left Speed

E3 Left Speed
↑ :+    ↓ :-    ☀→Test
= 50%

Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%, change the value by per 10%)  
30% : Slowest  
60% : Fastest  
[CATCH] → Save & Enter to test mode

Test mode :

E3 Left Speed
>>Joystick Test
= 50% Test

Joystick [Right] / [Left] → To make motor moving left or right  
[CATCH] → Return to Motor Speed Adjustment MENU.



#### E4 : Right Speed

E4 Right Speed
↑ :+    ↓ :-    ☀→Test
= 50%

Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%, change the value by per 10%)  
30% : Slowest  
60% : Fastest  
[CATCH] → Save & Enter to test mode

Test mode :

E4 Right Speed
>>Joystick Test
= 50% Test

Joystick [Right] / [Left] → To make motor moving left or right  
[CATCH] → Return to Motor Speed Adjustment MENU.

---

#### E5 : Down Speed

E5 Down Speed
↑ :+    ↓ :-    ☀→Test
= 50%

Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%, change the value by per 10%)  
30% : Slowest  
60% : Fastest  
[CATCH] → Save & Enter to test mode

Test mode :

E5 Down Speed
>>Joystick Test
= 50% Test

Joystick [Up] / [Down] → To make claw rising or falling  
[CATCH] → Return to Motor Speed Adjustment MENU.

## E6 : Up Speed

E6 Up Speed
↑ :+     ↓ :-     ☀→Test
= 50%

Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%, change the value by per 10%)  
30% : Slowest  
60% : Fastest  
[CATCH] → Save & Enter to test mode

Test mode :

E6 Up Speed
>>Joystick Test
= 50% Test

Joystick [Up] / [Down] → To make claw rising or falling  
[CATCH] → Return to Motor Speed Adjustment MENU.

---

## E7 : ALL Speed Setting

E7> ALL Speed set
>>SET= 30%~60%
>>No -->Exit
>>Yes ->Save

Setting Mode : → Joystick [Right]  
Joystick [Up] / [Down] → Adjust value.  
(Range : 30%~60%)  
[CATCH] → Confirm the value

Joystick [Up] / [Down] → Select No/ Yes.  
No : Return to MENU ◦  
Yes : All motors in same speed

[CATCH] → Exit

#### 4. >F : Test

F : Test
>>F1 : Gift Sensor
>>F2 : Coin Test

Joystick [Up] / [Down] → select items.

Joystick [Right] → enter the item.

Joystick [Left] → Return to MENU ◦

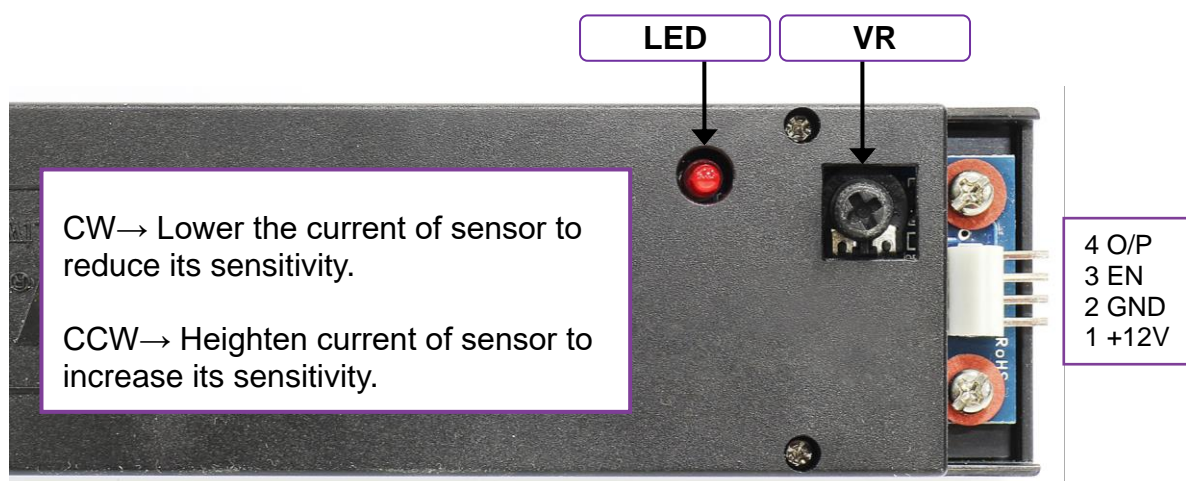
#### F1 : Gift Sensor test

Step 1 :

F1 Gift Sensor test
>>Sensor VR Adj.
LED=OFF
<< OK >>

Sensor Adjustment: Please adjust the sensor in this test

- (1) Check the LED on sensor. If it is on, make sure that no any obstruction remaining in prize chamber.
- (2) Adjust VR by screwdriver. Turn the VR clockwise to the end (lowest value) and the LED supposes to be off. If not, it is probably caused by sensor failure or improper black sticker inside prize chamber.
- (3) Adjust VR again. Turn it counterclockwise (increase value) until LED is on.
- (4) And turn it clockwise again until LED is off and then turn it clockwise a little more.
- (5) As the adjustment has been done, test sensitivity of the sensor by some items during the game.



[CATCH] → Enter to step 2

Step 2 :

F1 Gift Sensor test
>>[CATCH]-->Exit
LED=ON
<< OK >>

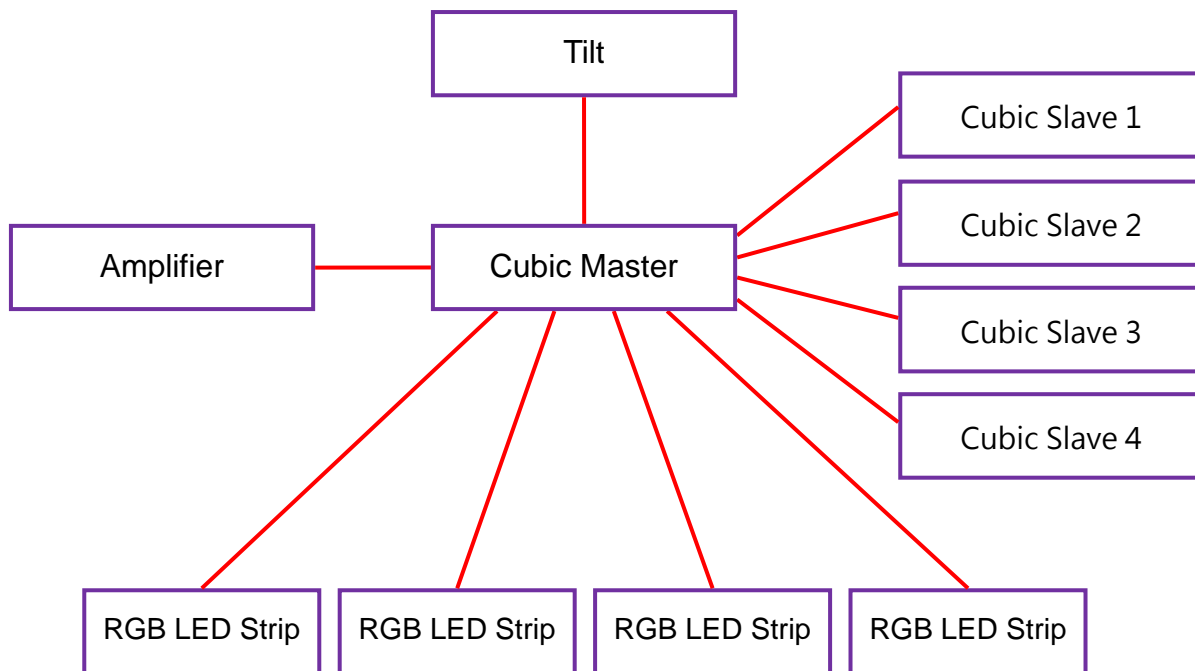
- (1) Check the LED is on. If not, it might be caused by wiring connection problem or sensor error.
- (2) Both step 1 and 2 should be all ok.

F2 : Coin Test

>F2 : Coin Test
~ Insert Coins ~
Coins=0

It counts once on "Counter" when inserting a coin.  
And it will not count on electronic counter.  
Joystick [Left] or [CATCH] → Exit

### 3 LINK MAIN PCB SETTING :

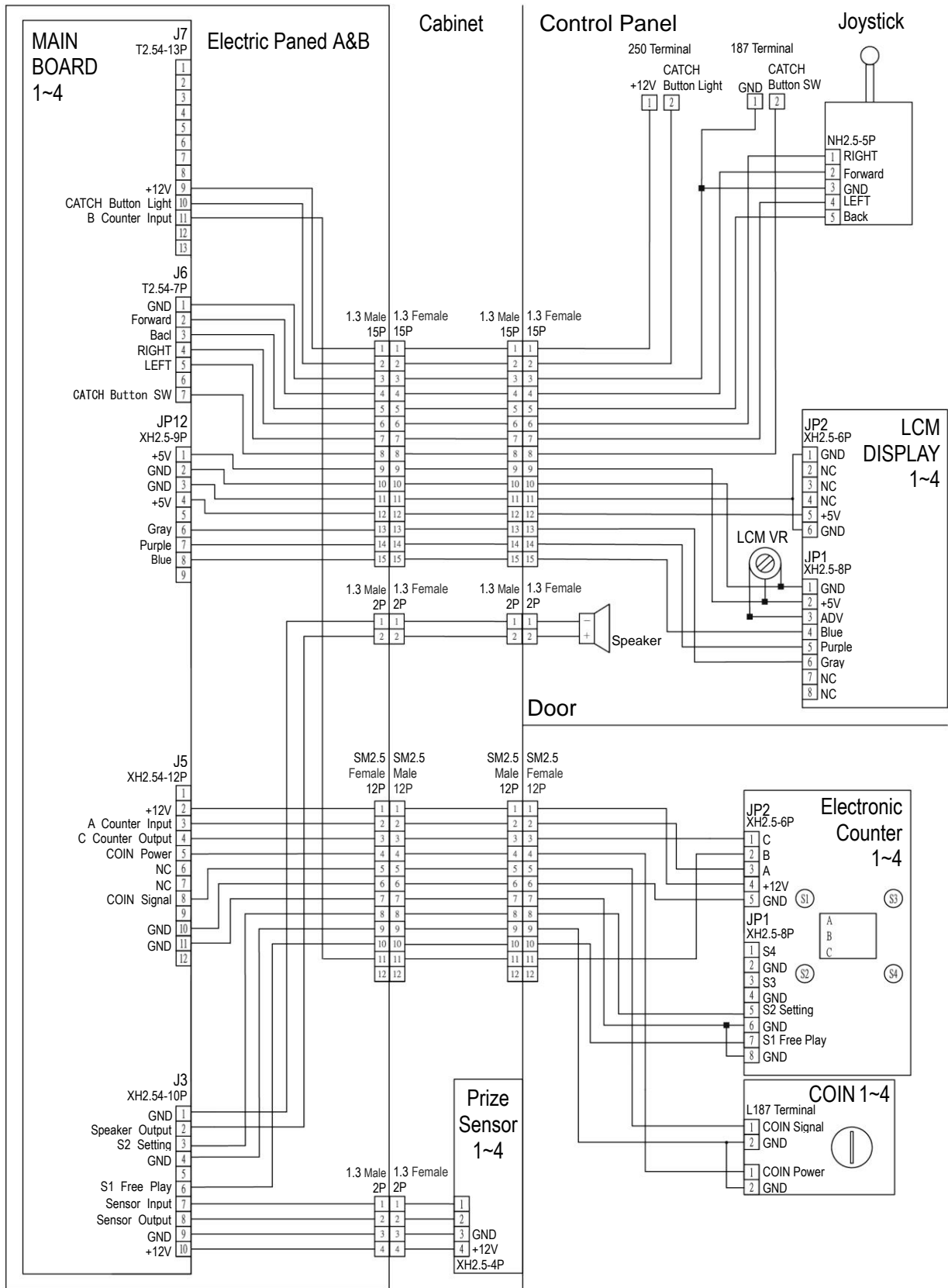


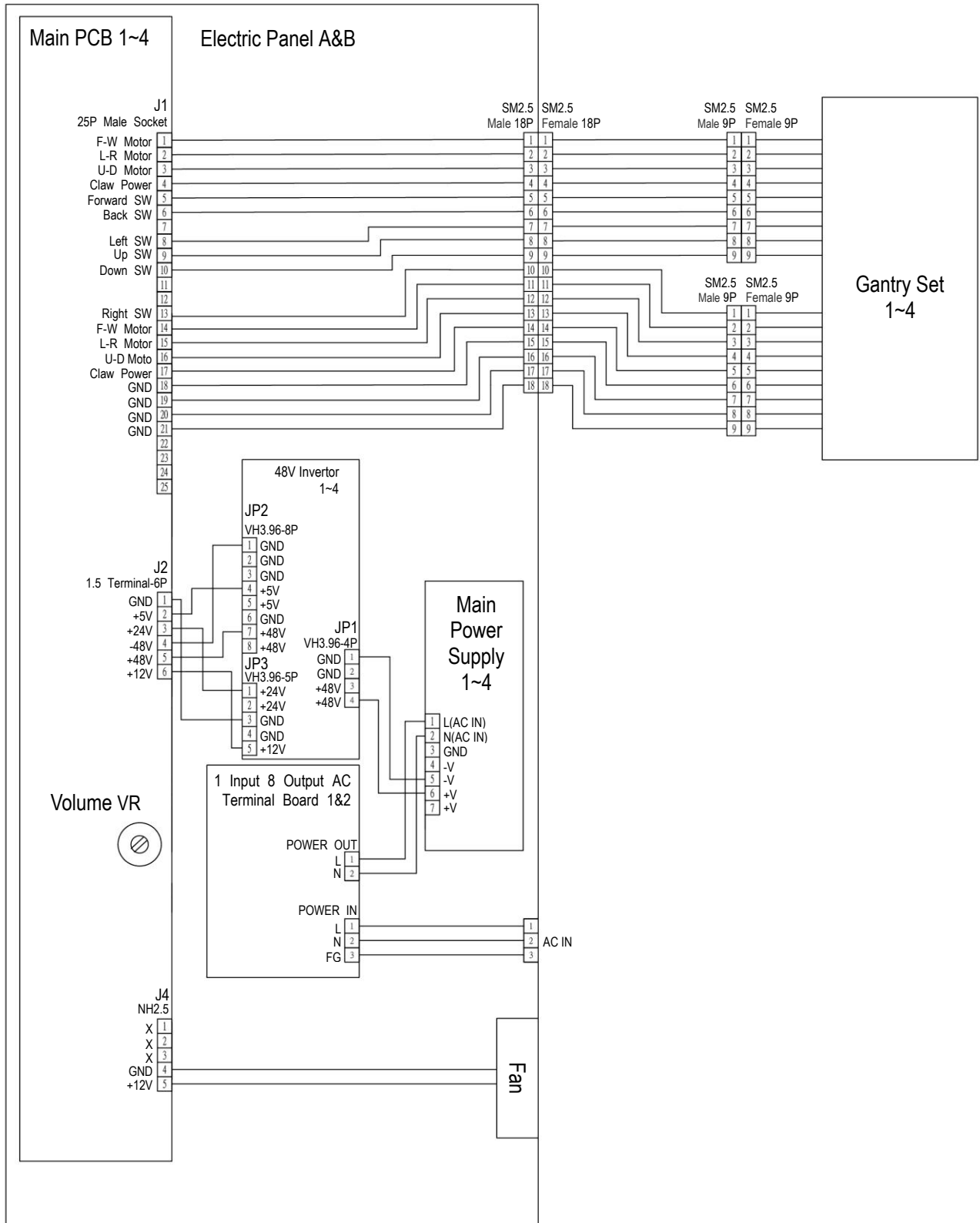
#### DIP-SW

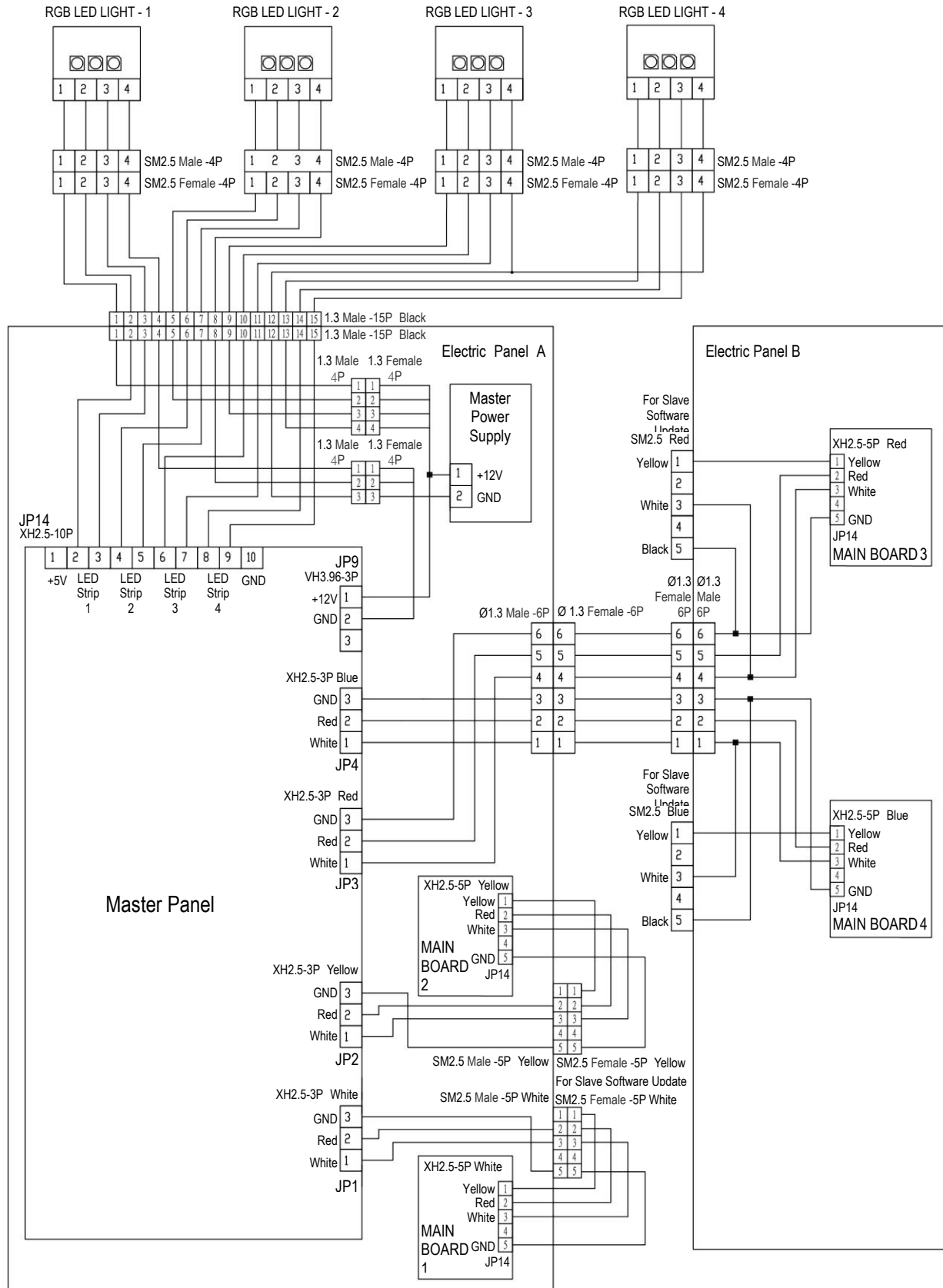
FUNCTION	PIN	1	2	3	4
DEMO MUSIC	OFF	OFF			
	ON	ON			
DEMO MUSIC INTERVAL TIME	0s		OFF	OFF	
	30s		OFF	ON	
	60s		ON	OFF	
	90s		ON	ON	

※Please reboot the machine when DIP switch setting has been changed.

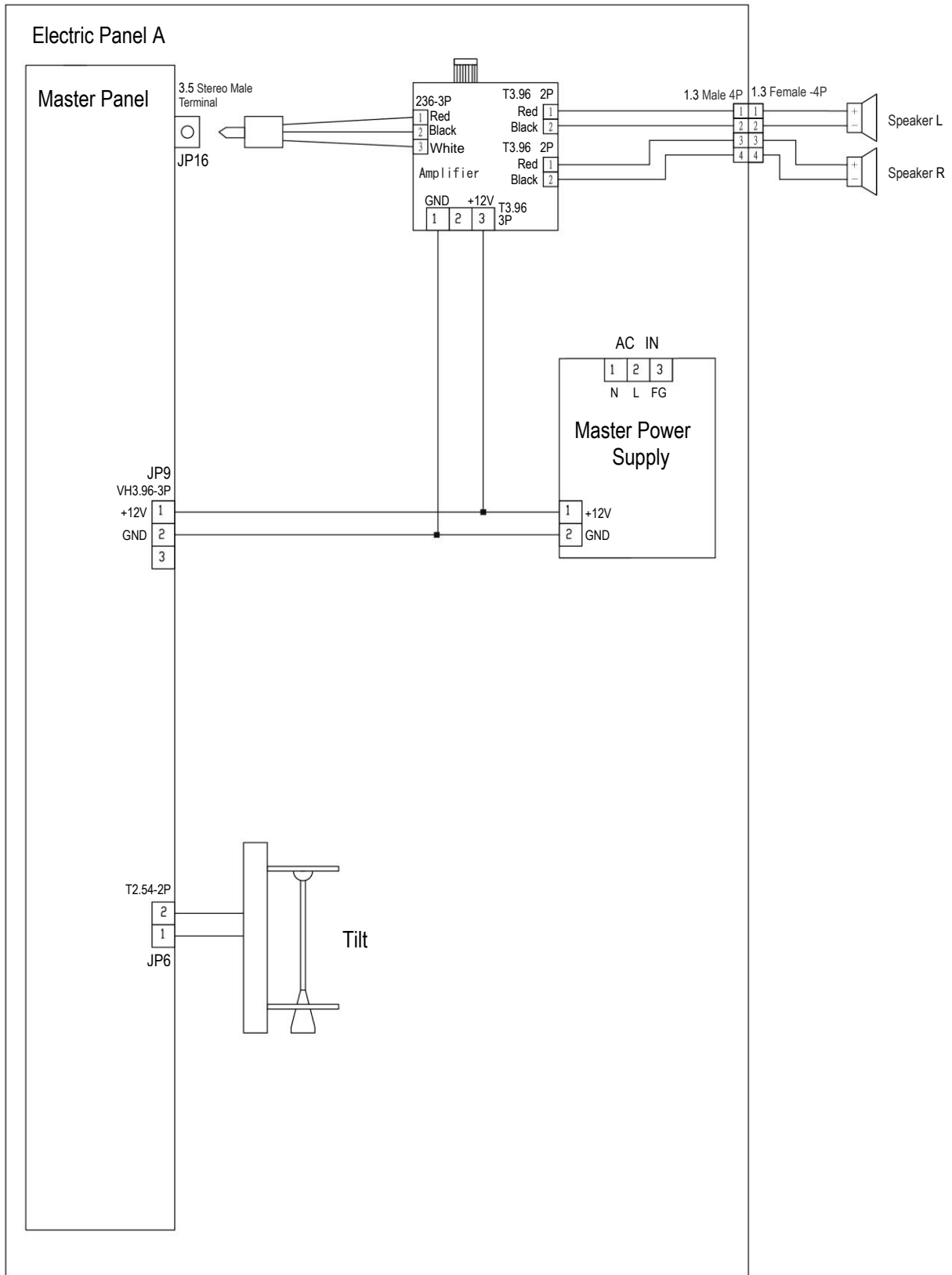
# ◆ WIRE HARNESS DIAGRAM



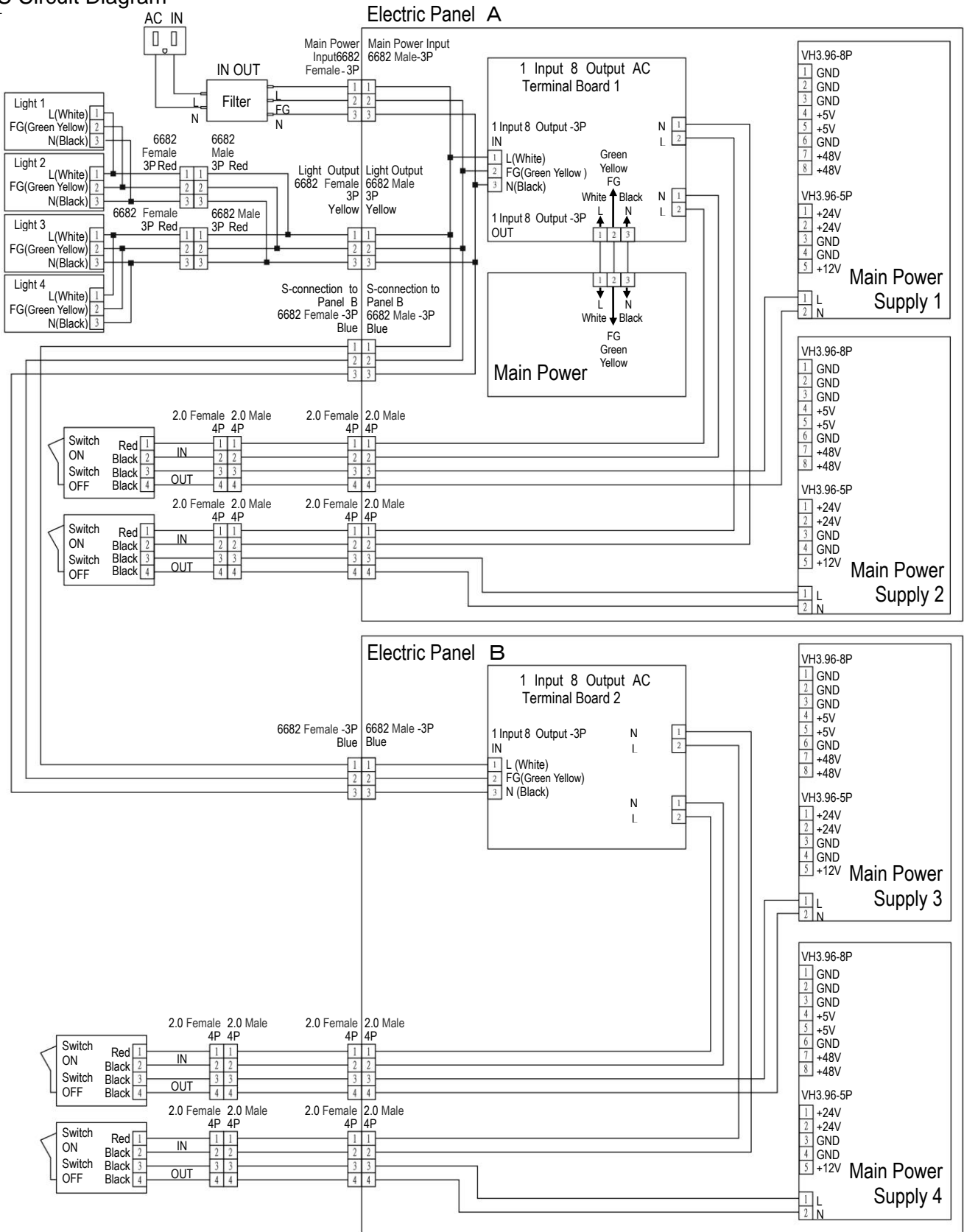








# AC Circuit Diagram



# ◆ TROUBLESHOOTING

## 1 Error Code

NO.	ERROR ITEM	SOLUTION
01	COIN COUNTER ERROR	(1) Check wiring (2) Replace counter
02	PRIZE COUNTER ERROR	(1) Check wiring (2) Replace counter
03	COIN SELECTOR ERROR	Check NC/NO SW on coin selector, it should be NO
04	PRIZE SENSOR ERROR	(1) Adjust sensor VR (2) Replace sensor
05	PCB DATA ERROR	Enter to setting menu to re-set all values
06	PCB MEMORY IC ERROR	Replace PCB
07	MOTOR UP ERROR	(1) Check UP SW (2) Check fuse "F1" on PCB
08	MOTOR DOWN ERROR	(1) Check DOWN SW. (2) Check fuse "F1" on PCB
09	MOTOR LEFT ERROR	(1) Check LEFT SW. (2) Check fuse "F1" on PCB
10	MOTOR RIGHT ERROR	(1) Check RT SW. (2) Check fuse "F1" on PCB
11	MOTOR FORWARD ERROR	(1) Check FORWARD SW. (2) Check fuse "F1" on PCB
12	MOTOR BACKWARD ERROR	(1) Check BACKWARD SW. (2) Check fuse "F1" on PCB
13	TILT ERROR	TILT ERROR

When the machine alarms error code, it will reboot automatically after alarming for 3 minutes. If the machine alarms again within 1 hour after rebooting, it will not reboot again. And it needs troubleshooting. But if the machine alarms again after 1 hour, the machine will reboot as it supposes to be after 3 minutes.

