

## Table of contents

Version: 1.142 Time: 2009-03-07

<b>1. Brief instruction</b>	1
<b>2. Caution</b>	1
2-1.Notice for installation	1
2-2. Notice for Operation	1
<b>3. Accessories</b>	2
<b>4. How to play</b>	2
<b>5. Technical parameter</b>	3
<b>6. Appearance</b>	3
<b>7. Back of the machine</b>	5
<b>8. All parts structure</b>	6
8-1. Counter board	7
8-2. Coin selector	8
8-3. Power connector box	9
8-4. Main board	10
8-5. Power converts plate	11
<b>9. Operation</b>	11
9-1.switch power on	12
9-2.Attraction state	12
9-3.Play state	12
9-4.Error state	12
9-5. Test state	13
9-6.Clear Alarm for no prize	14
<b>10. Common blocks and solution</b>	15
<b>11. Appendix</b>	16
11-1. DIP connect on the main board	16
11-2. Function of DIP switch on main board	21
11-3. Error code table	23



## 1. Brief instruction

Mode **LP.DFK07 Pile Up (Ver1.142)** is a prize indoor amusement machine. It has been explored based on Mode **LP.DFK03 V1.136** Pile Up. Its play mode is simple, exciting, clear and full of challenge. Its appearance is much better: the color of screen has been changed from the glaring red in opinion of some players into the dreaming blue which is easy to the eye and gives a sense of dreaming beauty. What's more, the function, performance and the appearance of the machine have been well observed and studied. We believe that this amusement machine will bring a novel scene and an easy, pleasing amusing environment to you!

## 2. Caution

### 2-1. Notice for installation

- This machine is only for indoor use.
- After you decide the placement position, place the four corners at the bottom of the machine on the floor so that the appliance can not be moved while in operation.
- Do not take apart, make apart or move the machine arbitrarily.
- Switch off the power and unplug the power wire before you move the machine.
- Place the machine on even floor. Do not place it on any smooth place, unsteady place or place with serious vibration.
- Do not place the machine near any equipment of high temperature or equipment that easily sparkles.
- Do not place any sundries on the machine. Do not let any heavy press the power wire.
- Do not expose the circuit part of the machine for a long time.

### 2-2. Notice for Operation

- Check whether the power plug and power wire are good and whether the voltage is suitable for the machine before you switch the power on.
- Switch off the power first before you maintain or inspect the machine.
- Only qualified personnel can inspect the electricity-control device.
- Displace parts of apparatus with suitable accessories.
- Hold the plug instead of the wire to unplug the power wire.

- Do not plug or unplug the power plug with your wet hand. Do not pull or twist the power wire.
- The appliance is not suitable for installation in an area where a water jet could be used.

### 3. Accessories

Check whether the following accessories are ready before moving it in:

Manual:	1 copy
Motors:	1
LED:	2
Keys:	3 (T188 2pcs, T186 1pcs)
Power wire:	1

### 4. How to play

4-1. When there is a coin inserted the red button in the middle on the control desk flashes. Player presses it to start the game, the blocks move right and left. He then seek a chance to press the button again to stop the blocks at a certain position (time is limited. if he hasn't stopped the blocks himself in the given time, the blocks will stop at a certain position random.)

4-2. When the player gets the blocks piles up to the eleventh floor, he wins minor prize.

Both the other two square red buttons flash. The blue button on the left is CONTINUE TO PLAY button and player can press it to continue the game to strive for major prize. On the other hand, the red button on the right is SELECT PRIZE button, if player press it, the annular prize lamp will light in turn. He presses the round button in the middle to make the decision that which prize he wants. Then the machine pays out the prize according to the input signal for him.

4-3. If the player hasn't get the blocks pile up to the eleventh floor or he hasn't win major prize after he decides to strive for the major prize when he wins minor prize, blocks hang in the air and drops. Then he fails the game, and the ball out.

4-4. When player gets the blocks pile up to the highest floor, he win major prize. He can get his prize in the same way as the described way in “2”.

## 5. Technical parameter

Mode: **LP.DFK07**

Environment requirement: temperature  $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ , low radiation, low humidity, low vibration.

Dimension: 640 mm×770 mm×2000mm

Weight: **145KG**

Power supply: The voltage of the power supply should accord with the one on the back cover of the machine.

Acceptable prize weight: 0~2.5kg

Acceptable prize size:  $\leq 100 \times 100 \times 100 \text{mm}^3$

Maximum power: 300W

Player: 1

## 6. Appearance

Lamp: Has daylight lamp inside it for decoration.

Prize mechanism: It is made up of prize arm, screw stick and prize support. It rotates driven by the motor. Then the prize hanged on it will drops into the prize box.

SELECT PRIZE button: When player win a prize, he can press the button to select prize.

START/STOP button: After inserting coin, player presses the button. the lamp in the turn plate begins chasing. Player presses it once again, the lamp stops rotating, When player selects prize, he ought to press the button to

**confirm.**

**CONTINUE TO PLAY button:** When player wins minor prize, if there is no prize out or he decides to strive for major prize, press this button, the game will continues.

**Prize exit:** When player wins a prize, he can get prize from the prize box through it.

**Dollar bill acceptor cover:** Player cannot only insert coins to play the game, but also he can use dollar. When he wants to use dollar bill to play the game, he just has to clear the cover, unload the coin box inside it and install the dollar bill acceptor.

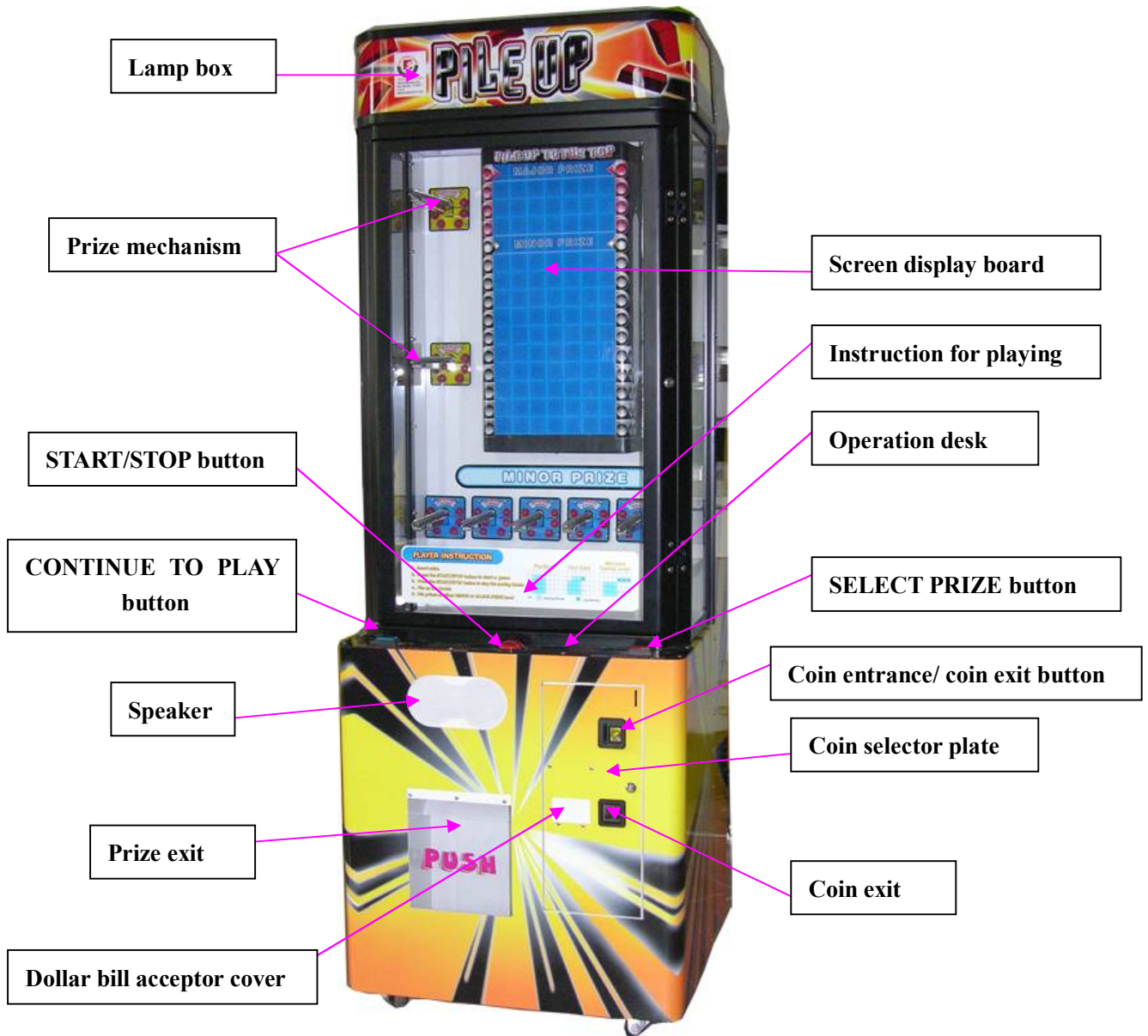
**Screen display board:** It is made up of square lamps. It is the displaying district during the whole game.

**Instruction for playing:** it is a piece of paper notifying player how to play the game. It is been put up in the glass window of the machine.

**Operation desk:** It has instruction for playing paper on it. Besides, three buttons distributes on it, the middle round one is START/STOP button and the left square blue one is CONTINUE TO PLAY button and the red right one is SELECT PRIZE button.

**Coin entrance/ coin exit button:** The left rectangle hole of the device is coin entrance. the right red square is coin exit. When the coin gets blocked, press the button, the coin drops into the coin exit.

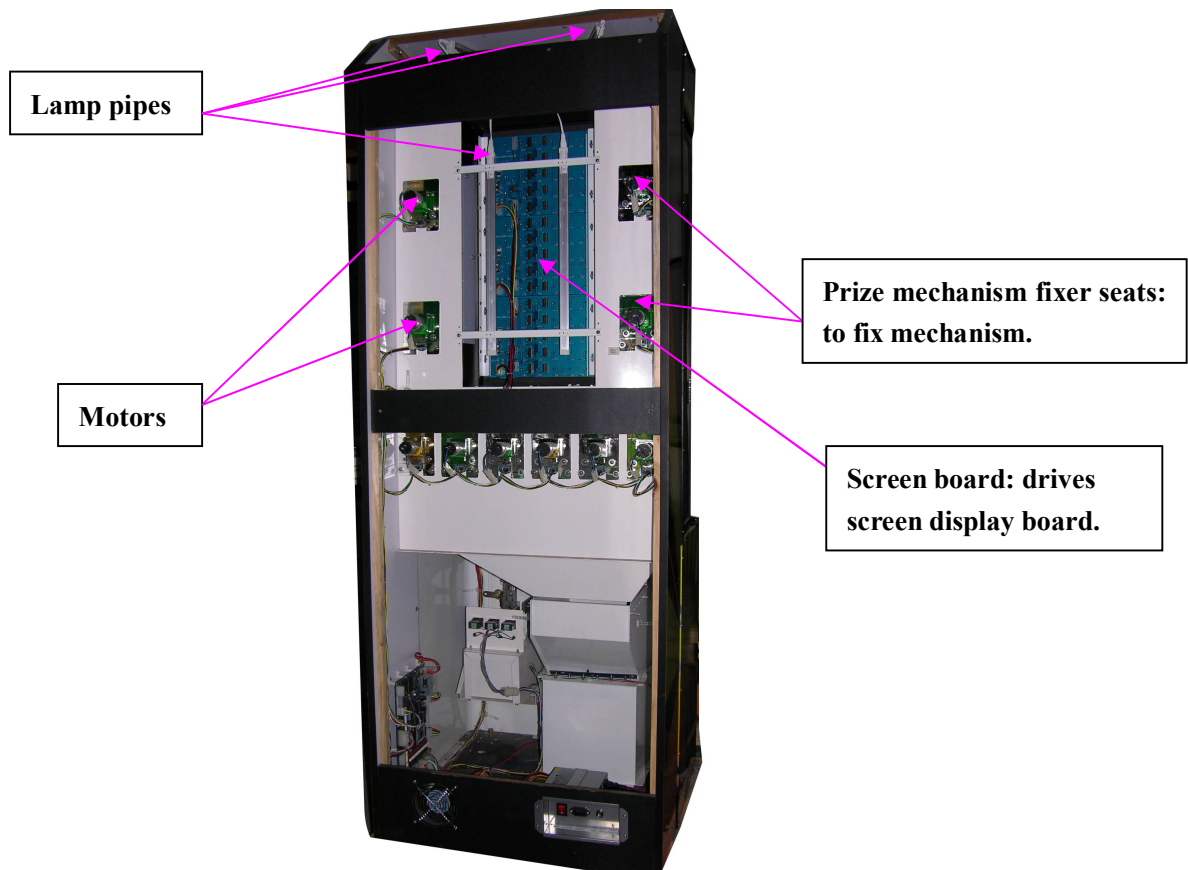
**Coin exit:** When player inserts unsuitable coin or the coin gets blocked and he press the coin exit button, the coin will drops into the coin exit. Player can get the coin back from the exit.



## 7. Back of the machine

**Lamp pipe:** To illuminate.

**Motor:** Drives prize mechanism to rotate.



## 8. All parts structure

**Main board:** Main program operation system controls all parts working.

**Power convert plate:** supplies +5V/+12V power connect.

**Power supply:** supply the whole machine with power. It has +5V, +12V AC power output.

**Power connector box:** connect the exterior power, supplies the machine with power.

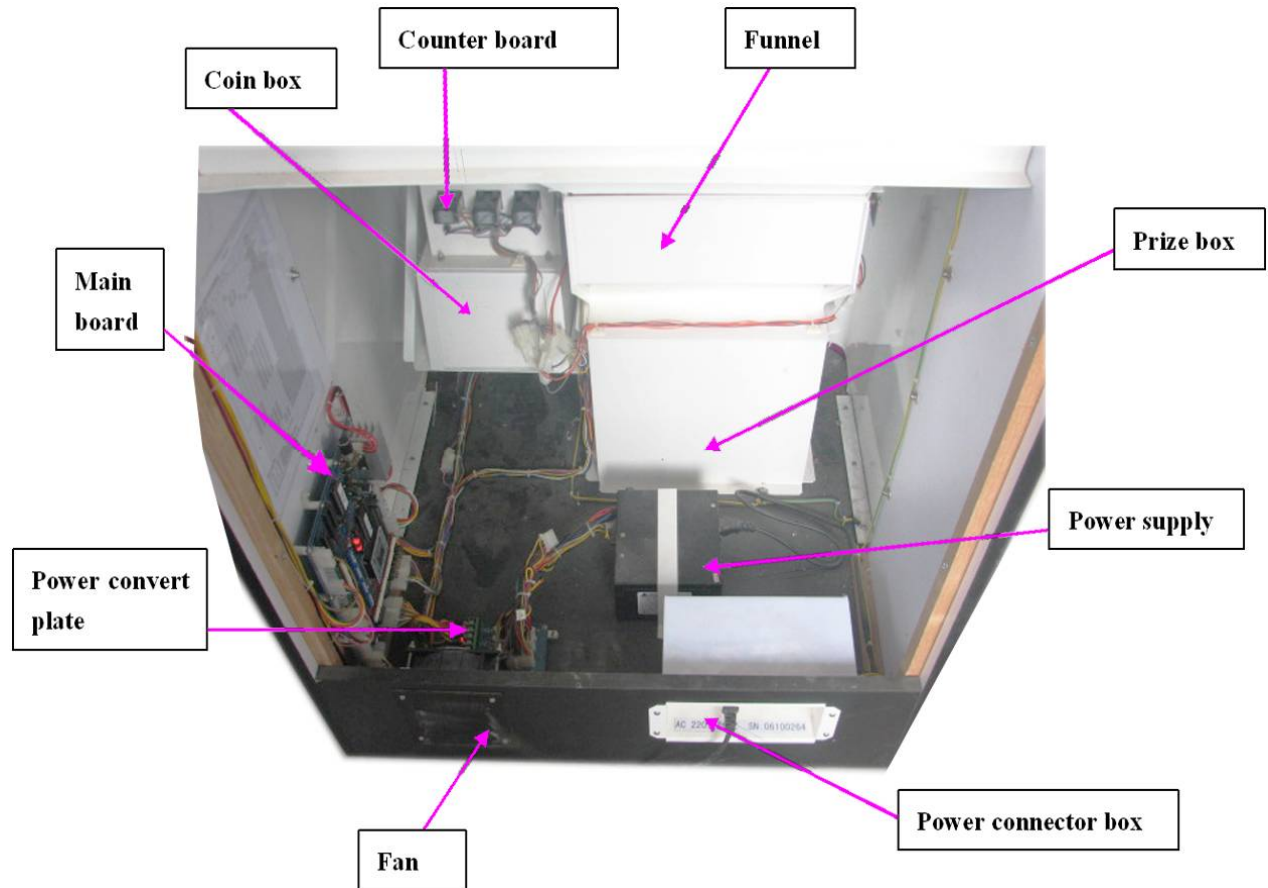
It has mode No of the machine and the suitable voltage for the machine.

**Counter board:** refers to 8-1-counter board.

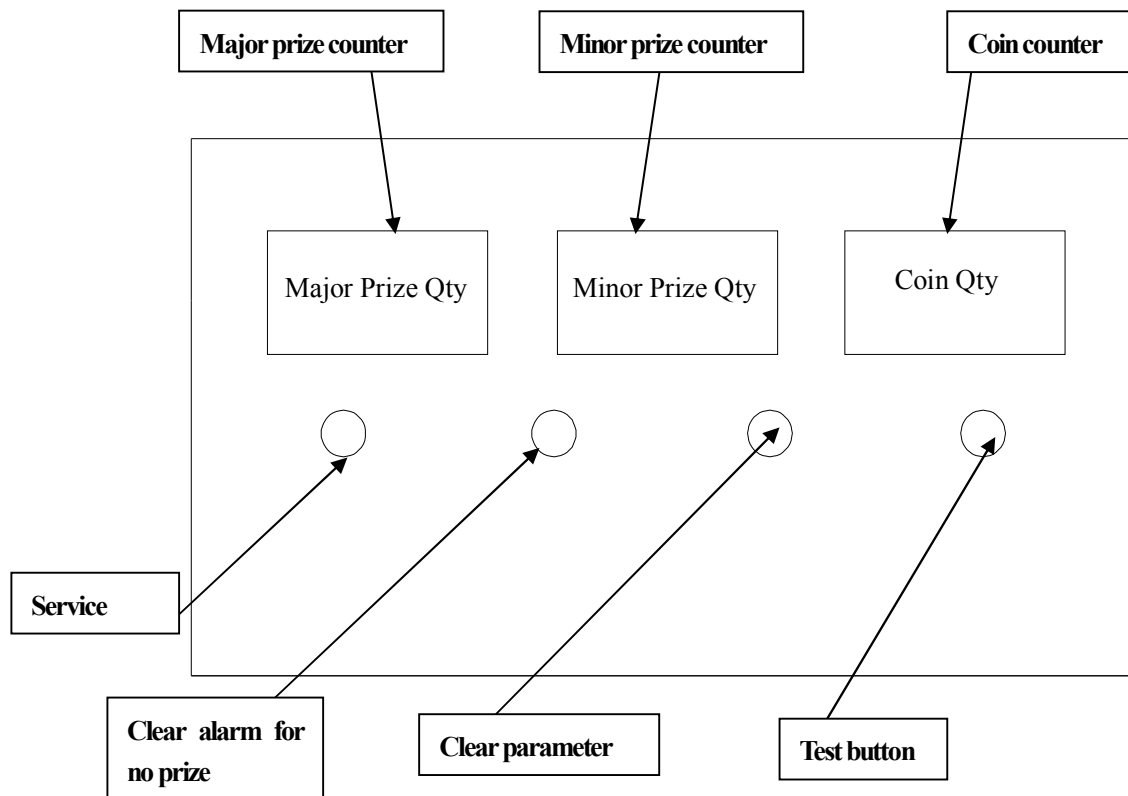
**Coin box:** Stores coins.

**Funnel:** the prize, which drops from the prize mechanism, gets through it and arrives into the prize box.





## 8-1. Counter board



Service button: press it once equals to insert one coin.

**Coin counter:** records the total number of coins since the machine has been used.

**Minor prize counter:** records the total minor prize out Qty since the machine has been used.

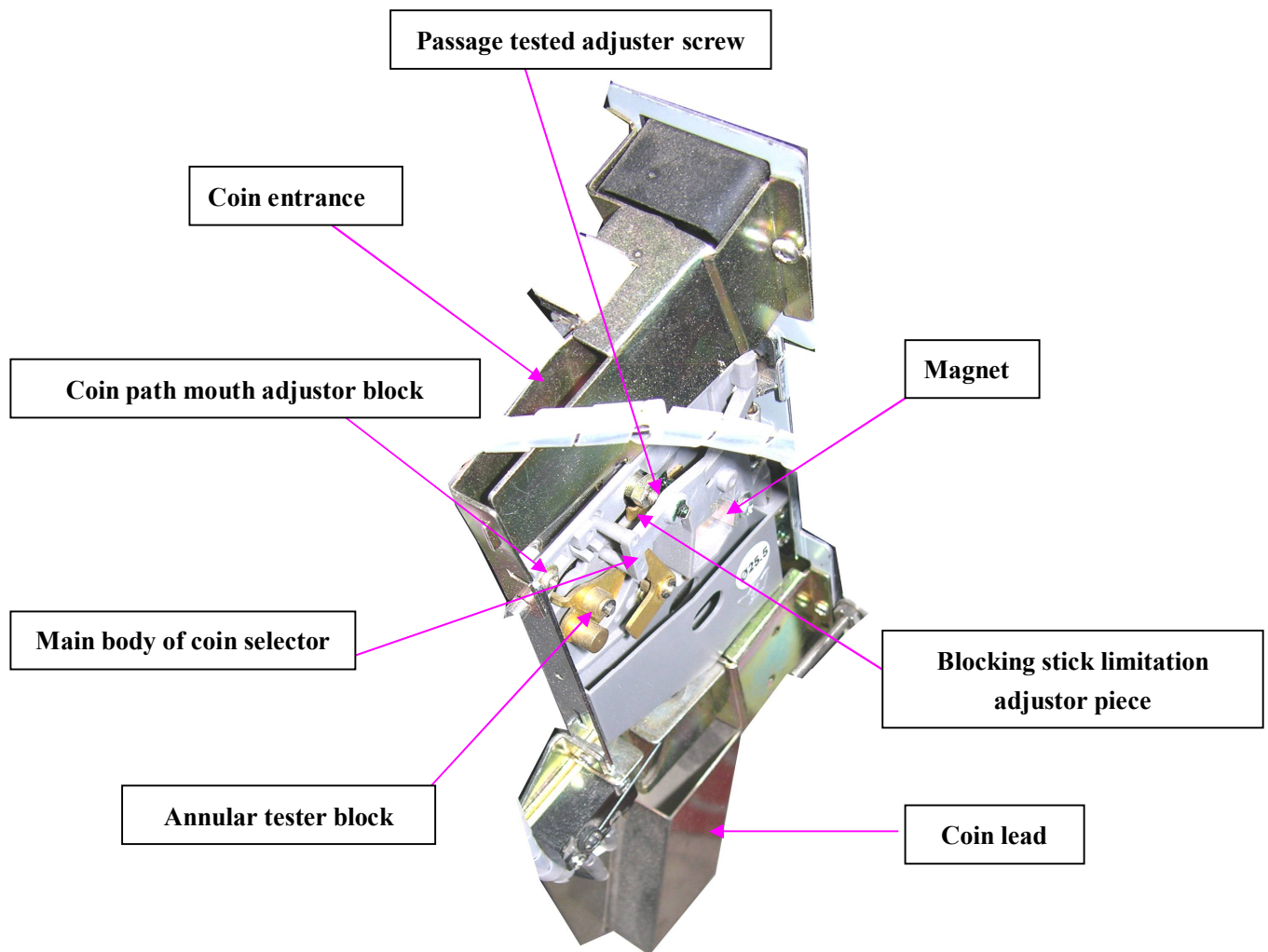
**Major prize counter:** records the total major prize out Qty since the machine has been used.

**Clear alarm for no prize:** when the prize has been used up, load the machine with prize, press the button, the machine dispenses the unpaid out prize.

**Clear parameter:** press the button over five seconds, all the data will be cleared.

**Test button:** press the button, the machine enters test mode.

## 8-2. Coin selector



This coin selector is mechanical type machine. It is with high accuracy and steady performance. It is with function of super magnet guard against fake coin. guard against thief and guard against coin cheat due to machine inclination

**Coin exit button:** If the inserted coin gets blocked in the coin selector, press the button, it will come out of the exit.

**Coin exit button:** If the inserted coin is not a suitable one, it will come out of the coin exit automatically.

**Acceptable coins:** Different specifications of coins with a diameter from  $\phi 25\text{mm}$  to  $\phi 28\text{mm}$  and a thickness from  $1.5\text{mm}$  to  $2.6\text{mm}$  from different countries.

**Coin path mouth adjustor block:** Adjust the diameter of the coin. If you have to set inserting minor coin, move it right. Generally if you do not insert minor coins, move the block left. It controls coins with a diameter of  $0.1\text{mm}$ .

**Passage tested adjuster screw:** turn it clockwise, and then it becomes looser. Turn it anticlockwise and then it becomes tighter. Thickness can be controlled into  $0.05\text{mm}$ .

**Blocking stick limitation piece:** adjusts the upper limit of the diameter of the coin.

**Annular test block:** controls floor level of diameter of acceptable coin, used together with blocking stick limitation adjuster piece, adjusts the diameter of the coin to varies within a limitation of  $0.1\text{mm}$ . Coins of different specifications are suitable for different types of annular tester block. As for test block of the same specification, the larger, and the tighter: the smaller, the looser.

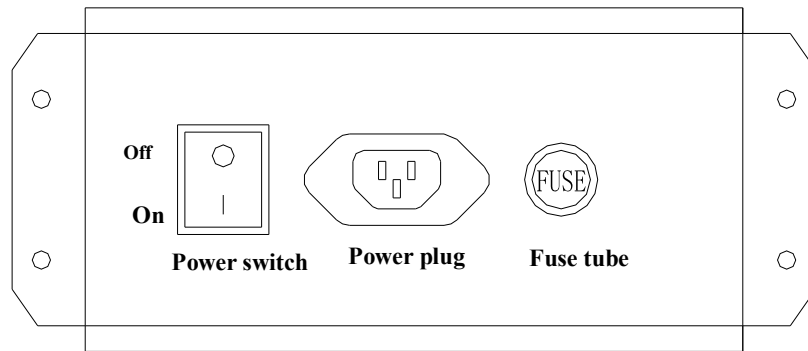
**Magnet:** Select the iron-contained quantity of coins. Those containing a large iron quantity easily get absorbed, while those containing a small iron quantity don't get through hard at all. if iron- all-over coins are used, get off the magnet.

### **8-3. Power connector box**

**Power switch:** Used to switch on or off power.

**Power plug:** Connect AC power.

**Fuse tube:** has an AC fuse with specification of  $\phi 6\text{mm} \times 30\text{mm}$  in it.



#### 8-4. Main board

**J1: Main power input connector.**

**J2: Serial connector input.**

**J3: Serial connector output.**

**J4: LED serial output connector.**

**J5: Ticket out connector. (This machine hasn't connect)**

**J6: Base function connector.**

**J9: Serial connector input 2.**

**J10: Serial connector output 3**

**J11: Speaker connector.**

**J12: Volume control, adjusts size of volume.**

**Memory chip: Records the total coins Qty and prize out Qty.**

**INCON1: # 1~ # 15 INPUT**

**INCON2: # 16~ # 27INPUT**

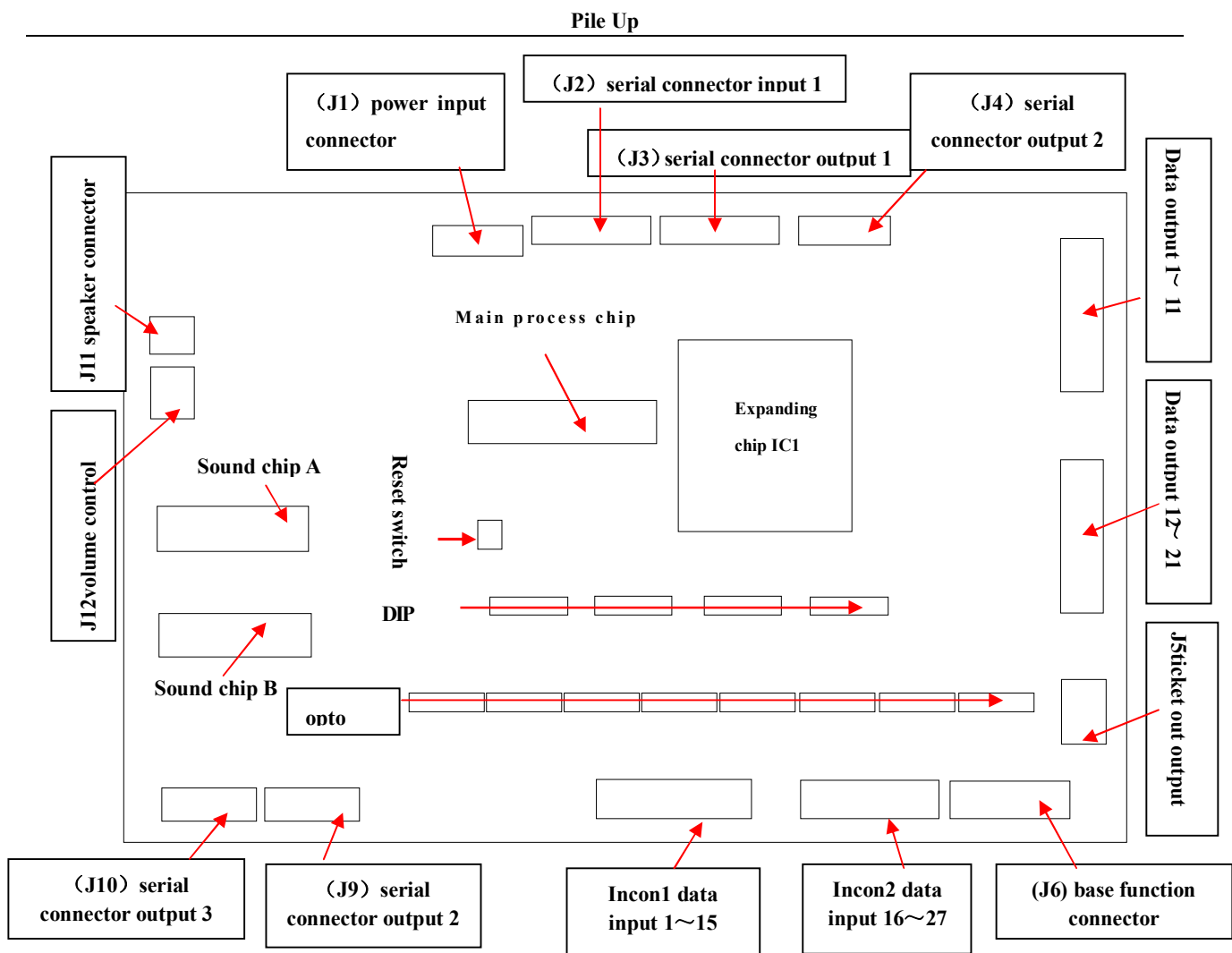
**DIP: there are four Dip's on it: SW1. SW2. SW3. SW4. Refer to "Function of DIP**

**switch on main board" for the specific setting of them.**

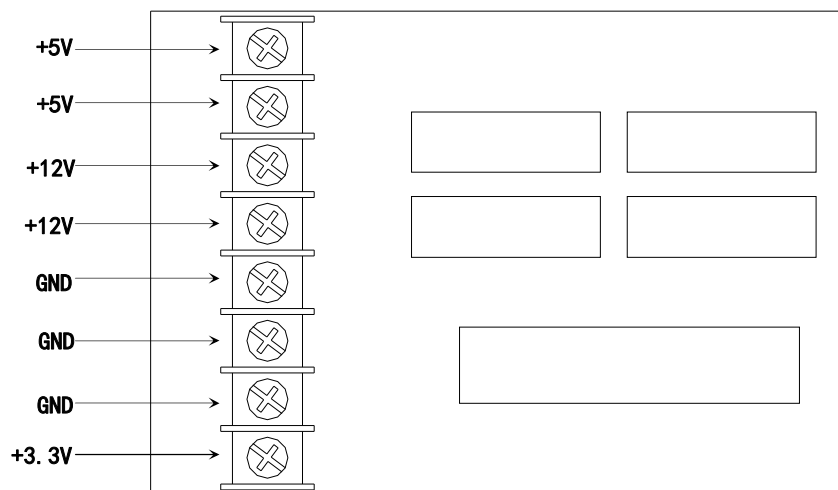
**Reset switch: A. when the machine alarms, after you clear the error, press the button, the alarm will be cleared.**

**B. when you reset the function of DIP, press the button to confirm.**

**Sensor: Make effects of separation, anti- interruption and protection**



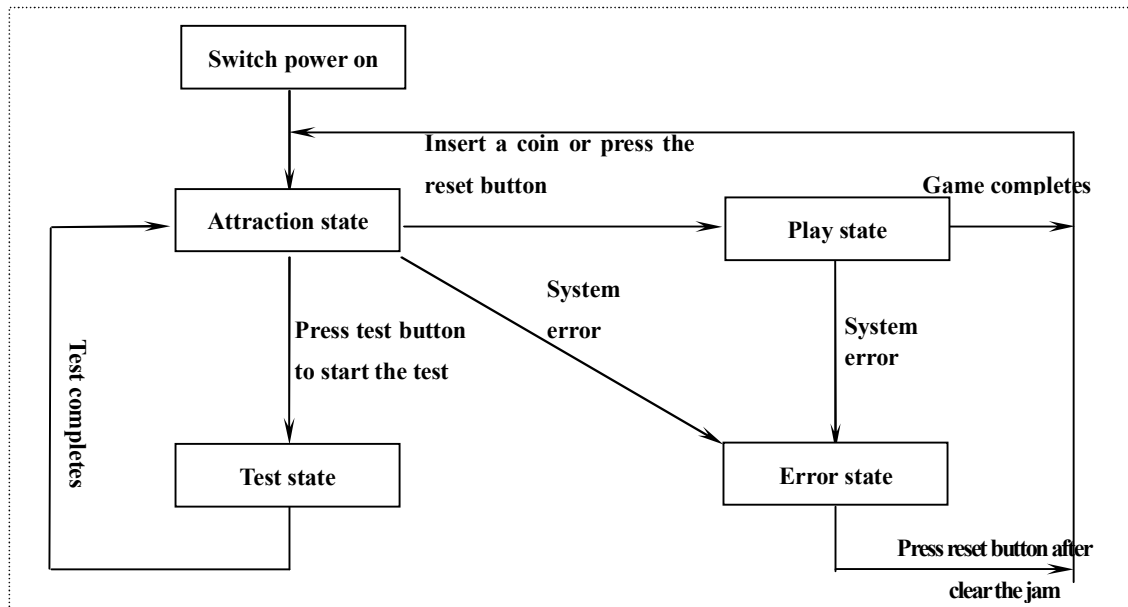
### 8-5. Power converts plate



## 9. Operation

When the machine works, the game can be adjusted into coin play mode and free play mode. In coin play mode, as long as the power of the machine has been switched on or you press parameter reset switch and hold it over five seconds, the

machine enters play mode, one continues game after another. Not a single coin is needed. In coin play mode, it could be in attraction state, test state, play state or error state. The flow chart of test when the machine is in the coin play mode is as following:



### 9-1.switch power on

Check whether the power plug and power wire are good and whether the voltage of power is suitable for the machine. After you make sure all the above is correct, connect the power.

### 9-2.Attraction state

Prize lamp and Led chases, blocks moves random.

### 9-3.Play state

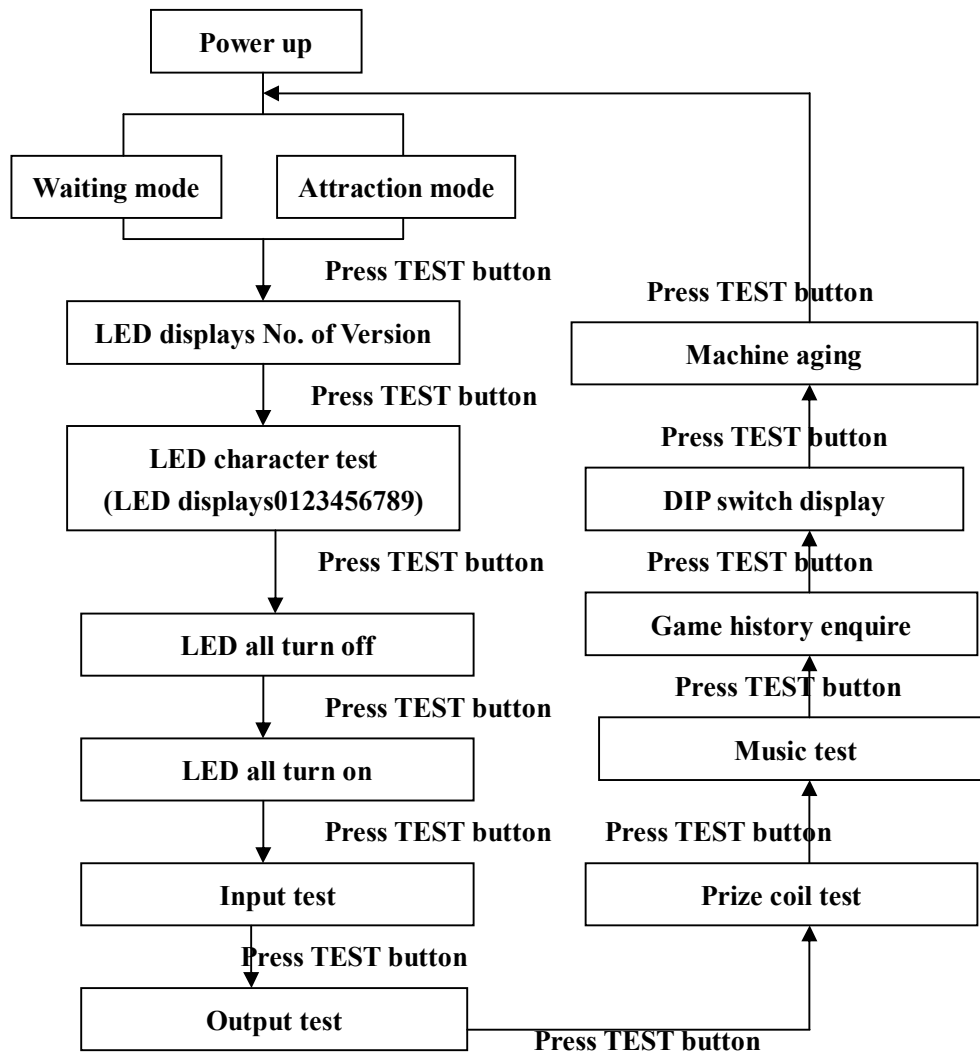
Prize lamp sparkles. Led displays 0, blocks pile up automatically.

### 9-4.Error state

When the machine works, it steps into error state if the system gets error, the alarm rings, all the LED's turn off or LED displays error code: EX, X stands for error code1. 2. 3. 4. 5,6,7.You can find out the error reason according to the error code. After clearing the error, reset the machine. See the Error Code Table for charts for error state and solutions.

## 9-5. Test state

Detect whether LED is full, whether lamp, block screen can work normally, whether music is normal. The history of the latest 10 plays can be checked and LED can display DIP switch change, the function for machine aging has been added in Version 1.136.



**Output test mode / prize coil test mode / music test mode / history check mode:**

You can change the state by pressing CONTINUE button to increase or pressing PRIZE SELECT button to decrease.

**Game history enquire mode:**

The screen displays latest history.

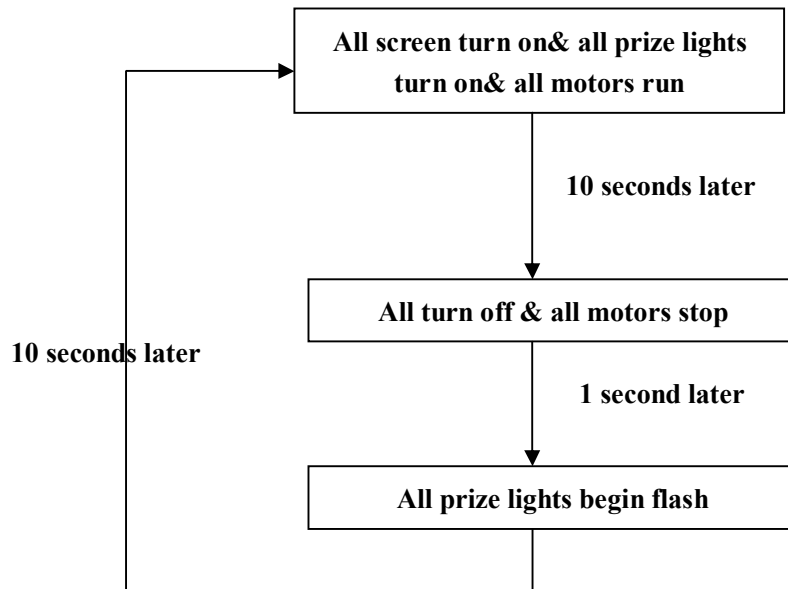
**DIP switch display mode:**

the main screen displays “S”, and the first line of nether screen displays SW1, the

third line displays SW2, the fifth line displays SW3 and the seventh line displays SW4. When the switch is turned to ON, the screen will turn on, or it will turn off.

#### Machine aging mode:

If machine has entered aging state, it won't exit unless you press TEST button or reset again.



#### 9-6. Clear Alarm for no prize

Clear the unpaid prize and the alarm. If you want the machine to continue to pay out prize, press reset button or restart the machine.



## 10. Common blocks and solution

Blocks	Causes	Elimination
The machine dose not work	1.power dose not get through 2.power connector box damaged 3. Crystal vibrator stops vibrating. 4.main program chip error	1. Find error of AC voltage of power. 2. Power supply has no +5V. +12V output, displace power connector box. 3. Displace main board. GND voltage of two feet of 24M-crystal vibrator should be within 2.1 to 3.1. 4. Displace main program chip
LED is not full	1.this section error 2.IC6B595 has no output	1. Displace LED. 2. Displace IC6B595
No sound	1.speaker burns out 2.sound amplifier IC burns out 3.6295IC burns out 4. +12V power dose not get through to sound amplifier IC	1. Cut off the power and test the AC resistance of speaker , displace speaker. 2. keep the power normal, displace frontal signal end, if the speaker makes big sound, it is normal, or the sound amplifier IC error. 3. If ①②④is normal, maybe it damaged or the sound chip error. 4.make sure +12V power supplied to TDA1557Q
No prize out	No prize Motor damaged Drive board of motor damaged Connection line falls off Main board damaged	Replenish prize Displace motor Displace drive board of motor Connect line once again Displace main board

## 11. Appendix

### 11-1. DIP connect on the main board

Plug code	Pin code	Pin color	Function	I/O NO	Function of I/O
<b>J1</b> (Power Input Connector )	PIN 1	4*0.75-Red	+5V Input	----	<b>Power Input</b>
	PIN 2	4*0.75-Black	GND	----	
	PIN 3	4*0.75-Black	GND	----	
	PIN 4	4*0.75-Yellow	+12V Input	----	
<b>J4</b> (#2 Serial Output Connector )	PIN 1	6*0.3—Green	CLK	----	<b>Digital LED Board Output Connection turns.</b> <b>1.Coins counter indicator LED</b> <b>2.Prize lamp board</b>
	PIN 2	6*0.3—White	DAT	----	
	PIN 3	6*0.3—Brown	LTH	----	
	PIN 4	6*0.3—Yellow	+12V Output	----	
	PIN 5	6*0.3—Black	GND	----	
	PIN 6	6*0.3—Red	+5V Output	----	
<b>J5</b> (Ticket Out Connector )	PIN 1	4*0.3—White	#1 Ticket Out Drive	OUT #21	<b>Ticket Out Connector</b> (#1,#2 Ticket Output Not Used)
	PIN 2	4*0.3—White	#2 Ticket Out Drive	OUT #20	
	PIN 3	4*0.3—Yellow	+12V Output	----	
	PIN 4	4*0.3—Yellow	+12V Output	----	
	PIN 5	4*0.3—Black	GND	----	
	PIN 6	4*0.3—Black	GND	----	
	PIN 7	4*0.3—Green	#1 Ticket Feedback	IN #29	
	PIN 8	4*0.3—Green	#2 Ticket Feedback	IN #24	
<b>J6</b> (Base Function connector )	PIN 1	10*0.3-Yellow	+12V Out	----	<b>Base Function connector</b> <b>Note: Reset ticket and ticket meter are both not used.</b>
	PIN 2	Null	+5V Out	----	
	PIN 3	10*0.3—Black	GND	----	
	PIN 4	Null	GND	----	
	PIN 5	10*0.3—Blue	service	IN #25	
	PIN 6	Null	No Connect	----	
	PIN 7	Null	No Connect	----	

**Pile Up**

	PIN 8	Null	No Connect	----	
	PIN 9	10*0.3-Purple	Test	IN #27	
	PIN 10	10*0.3-Orange	Clear JP	IN #28	
	PIN 11	10*0.3— White	#1 Coin Signal	IN #30	
	PIN 12	10*0.3— Green	Clear Alarm For No Ticket	IN #31	
	PIN 13	10*0.3— Gray	Ticket Qty	OUT #22	
	PIN 14	10*0.3— Brown	Coin Qty	OUT #23	
<b>J8</b> (Serial display output control .)	PIN 1	6*0.3— Red	+5V Output	----	<b>Blocks screen.</b>
	PIN 2	6*0.3— Yellow	+12V Output	----	
	PIN 3	6*0.3— Green	CLK	----	
	PIN 4	6*0.3— Black	GND	----	
	PIN 5	6*0.3— White	DAT	----	
<b>J10</b> (Serial display output control .)	PIN 1	Null	No Connect	----	
	PIN 2	Null	No Connect	----	
	PIN 3	6*0.3— Brown	LTH	----	
	PIN 4	Null	No Connect	----	
	PIN 5	Null	No Connect	----	
	PIN 6	Null	No Connect	----	
<b>J11</b> (Volume Ctrl )	PIN 1	4*0.15— Green	Right Signal Input	----	<b>Volume Ctrl</b>
	PIN 2	4*0.15— White	Left Signal Input	----	
	PIN 3	4*0.15— Red	Right Signal Output	----	
	PIN 4	4*0.15-Yellow	Left Signal Output	----	
	PIN 5	Screen shielding line	GND	----	
	PIN 6	Screen shielding line	GND	----	
<b>J12</b> (Speaker )	PIN 1	2*0.75-White	Left Speaker +	----	<b>Speaker</b>
	PIN 2	2*0.75-Black	Left Speaker -	----	
	PIN 3	2*0.75-Red	Right Speaker +	----	
	PIN 4	2*0.75-Black	Right Speaker -	----	

InCON1 (#1~#15 Input )	PIN 1	0.3—Brown	Input	IN #0	Continue to play button signal
	PIN 2	0.3—Pink	Input	IN #1	START/STOP button/prize confirm signal
	PIN 3	0.3—Orange	Input	IN #2	Prize out test signal
	PIN 4	0.3—SkyBlue	Input	IN #3	Prize selection button signal
	PIN 5	0.3—Green	Input	IN #4	Ball Detect Sensor
	PIN 6	0.3—Blue	Input	IN #5	
	PIN 7	0.3—Purple	Input	IN #6	
	PIN 8	0.3—Gray	Input	IN #7	Prize cleared test signal
	PIN 9	0.3—White	Input	IN #8	
	PIN 10	0.3—SkyBlue	Input	IN #9	
	PIN 11	0.3—Brown	Input	IN #10	
	PIN 12	0.3—Pink	Input	IN #11	
	PIN 13	0.3—Orange	Input	IN #12	
	PIN 14	0.3—SkyBlue	Input	IN #13	
	PIN 15	0.3—Green	Input	IN #14	
	PIN 16	0.3—Black	GND	----	
	PIN 17	0.3—Red	+5V Output	----	
	PIN 18	0.3—Yellow	+12V Output	----	
InCON2 (#16~#27) Input )	PIN 1	0.3—Brown	Input	IN #15	
	PIN 2	0.3—Pink	Input	IN #16	
	PIN 3	0.3—Orange	Input	IN #17	
	PIN 4	0.3—SkyBlue	Input	IN #18	
	PIN 5	0.3—Green	Input	IN #19	
	PIN 6	0.3—Blue	Input	IN #20	
	PIN 7	0.3—Purple	Input	IN #21	
	PIN 8	0.3—Gray	Input	IN #22	
	PIN 9	0.3—White	Input	IN #23	
	PIN 10	0.3—SkyBlue	Input		
	PIN 11	0.3—Brown	Input		

**Pile Up**

	PIN 12	0.3—Pink	Input	IN #26	Alarm for moving test signal
	PIN13	0.3—Orange	Input		
	PIN 14	0.3—Black	GND	----	
	PIN 15	0.3—Red	+5V Output	----	
	PIN 16	0.3—Yellow	+12V Output	----	
<b>OutCON1 (#1~#11 Output )</b>	PIN 1	0.3—Green	Output	OUT #0	Continue TO PLAY button indicator lamp
	PIN 2	0.75—Yellow	+12V Output	----	.
	PIN 3	0.3—SkyBlue	Output	OUT #1	START/STOP button indicator lamp output
	PIN 4	0.75—Yellow	+12V Output	----	
	PIN 5	0.3—Purple	Output	OUT #2	Prize selection signal indicator lamp
	PIN 6			----	
	PIN 7	0.3—Gray	Output	OUT #3	<b>Ball Out Control</b>
	PIN 8			----	
	PIN 9	0.3—White	Output	OUT #4	
	PIN 10			----	
	PIN 11	0.3—Blue	Output	OUT #5	
	PIN 12			----	
	PIN 13	0.3—Purple	Output	OUT #6	
	PIN 14			----	
	PIN 15	0.3—Gray	Output	OUT #7	Coin insertion indicator lamp
	PIN 16	0.3—Yellow		----	
	PIN 17	0.3—White	Output	OUT #8	Minor prize counter board
	PIN 18	0.5—Yellow		----	
	PIN 19	0.3—SkyBlue	Output	OUT #9	Major prize counter board
	PIN 20			----	
	PIN 21	0.3—Brown	Output	OUT #10	
	PIN 22			----	(See in at the frontal side of the machine)

<b>OutCON2 (#12~#21 Output )</b>	<b>PIN 1</b>	<b>0.3—Brown</b>	<b>Output</b>	<b>OUT #11</b>	<b>Prize stick #1 (up of left BONUS)</b>
	<b>PIN 2</b>	<b>0.5—Yellow</b>		----	
	<b>PIN 3</b>	<b>0.3—Pink</b>	<b>Output</b>	<b>OUT #12</b>	<b>Prize stick #2 (below of left BONUS)</b>
	<b>PIN 4</b>			----	
	<b>PIN 5</b>	<b>0.3—Orange</b>	<b>Output</b>	<b>OUT #13</b>	<b>Prize stick #3 (left MINOR PRIZE 1)</b>
	<b>PIN 6</b>			----	
	<b>PIN 7</b>	<b>0.3—SkyBlue</b>	<b>Output</b>	<b>OUT #14</b>	<b>Prize stick #4 (left MINOR PRIZE 2)</b>
	<b>PIN 8</b>			----	
	<b>PIN 9</b>	<b>0.3—Green</b>	<b>Output</b>	<b>OUT #15</b>	<b>Prize stick #5 (left MINOR PRIZE 3)</b>
	<b>PIN 10</b>			----	
	<b>PIN 11</b>	<b>0.3—Blue</b>	<b>Output</b>	<b>OUT #16</b>	<b>Prize stick #6 (left MINOR PRIZE 4)</b>
	<b>PIN 12</b>			----	
	<b>PIN 13</b>	<b>0.3—Purple</b>	<b>Output</b>	<b>OUT #17</b>	<b>Prize stick #7 (left MINOR PRIZE 5)</b>
	<b>PIN 14</b>			----	
	<b>PIN 15</b>	<b>0.3—Gray</b>	<b>Output</b>	<b>OUT #18</b>	<b>Prize stick #8 (left MINOR PRIZE 6)</b>
	<b>PIN 16</b>			----	
	<b>PIN 17</b>	<b>0.3—White</b>	<b>Output</b>	<b>OUT #19</b>	<b>Prize stick #9 (up of right BONUS)</b>
	<b>PIN 18</b>			----	
	<b>PIN 19</b>	<b>0.3—SkyBlue</b>	<b>Output</b>	<b>OUT #20</b>	<b>Prize stick #10 (below of right BONUS)</b>
	<b>PIN 20</b>			----	
<b>Instruction for manufacture of main board</b>	<b>1</b>	<b>Adopts Ver3.0C (or more advanced downward toleration version) in main board.</b>			
	<b>2</b>	<b>Y1 use 24MHz crystal vibrator.</b>			

## 11-2. Function of DIP switch on main board

Function DIP	Bit	1	2	3	4	5	6	7	8	Function
SW1	ON									Prize out
	OFF									No prize out
				ON						Need to insert coins
				OFF						No need to insert coins(free play)
					ON	ON				4 coins/game
					OFF	ON				3 coins/game
					ON	OFF				2 coins/game
					OFF	OFF				1 coin/game
								ON		Parameter saved when power off
								OFF		Parameter unsaved when power off
									ON	Background music on when machine free
									OFF	Background music off when machine free
SW2	ON	ON								Slow down block move speed 4(slowest speed) (applicable when allow prize out)
	OFF	ON								Slow down block move speed 3
	ON	OFF								Slow down block move speed 2
	OFF	OFF								Slow down block move speed 1(quickest speed)
SW3	OFF	ON	OFF	ON						Level 11 hardest (approximately 1 Major Prize win in 1600 games)
	ON	OFF	OFF	ON						Level 10 very very very hard (approximately 1 Major Prize win in 1200 games)
	OFF	OFF	OFF	ON						Level 9 very very hard (approximately 1 Major Prize win in 800 games)
	ON	ON	ON	OFF						Level 8 very hard (approximately 1 Major Prize win in 600 games)
	OFF	ON	ON	OFF						Level 7 hard (approximately 1 Major Prize win in 500 games)
	ON	OFF	ON	OFF						Level 6 medium to hard (approximately 1 Major Prize win in 400 games)
	OFF	OFF	ON	OFF						Level 5 medium (approximately 1 Major Prize win in 300 games)
	ON	ON	OFF	OFF						Level 4 easy to medium (approximately 1 Major Prize win in 200 games)
	OFF	ON	OFF	OFF						Level 3 easy (approximately 1 Major Prize win in 150 games)
	ON	OFF	OFF	OFF						Level 2 very easy (approximately 1 Major Prize win in 100 games)
	OFF	OFF	OFF	OFF						Level 1 easiest (approximately 1 Major Prize win in 50 games)
					ON	ON	ON	ON		Level 16 hardest(approximately 1 Minor Prize win in 35 games)
					OFF	ON	ON	ON		Level 15 very very very very hard (approximately 1 Minor Prize win in 30 games)
					ON	OFF	ON	ON		Level 14 very very very hard(approximately 1 Minor Prize win in 25 games)

**Pile Up**

					OFF	OFF	ON	ON	Level 13 very very hard(approximately 1 Minor Prize win in 20 games)
					ON	ON	OFF	ON	Level 12 very hard(approximately 1 Minor Prize win in 16 games)
					OFF	ON	OFF	ON	Level 11 harder(approximately 1 Minor Prize win in 13 games)
					ON	OFF	OFF	ON	Level 10 hard (approximately 1 Minor Prize win in 10 games)
					OFF	OFF	OFF	ON	Level 9 medium to hard (approximately 1 Minor Prize win in 9 games)
					ON	ON	ON	OFF	Level 8 medium (approximately 1 Minor Prize win in 8 games)
					OFF	ON	ON	OFF	Level 7 easy to medium (approximately 1 Minor Prize win in 7 games)
					ON	OFF	ON	OFF	Level 6 easy (approximately 1 Minor Prize win in 6 games)
					OFF	OFF	ON	OFF	Level 5 easier (approximately 1 Minor Prize win in 5 games)
					ON	ON	OFF	OFF	Level 4 very easy (approximately 1 Minor Prize win in 4 games)
					OFF	ON	OFF	OFF	Level 3 very very easy (approximately 1 Minor Prize win in 3 games)
					ON	OFF	OFF	OFF	Level 2 very very very easy (approximately 1 Minor Prize win in 2 games)
					OFF	OFF	OFF	OFF	Level 1 easiest (approximately 1 Minor Prize win in every game)
SW4	ON	ON	ON						The coil turns time per Major prize =56 Sec
	OFF	ON	ON						The coil turns time per Major prize =48 Sec
	ON	OFF	ON						The coil turns time per Major prize=40 Sec
	OFF	OFF	ON						The coil turns time per Major prize=32 Sec
	ON	ON	OFF						The coil turns time per Major prize=24 Sec
	OFF	ON	OFF						The coil turns time per Major prize=16 Sec
	ON	OFF	OFF						The coil turns time per Major prize=8 Sec
	OFF	OFF	OFF						The coil turns time per Major prize=4 Sec
				ON	ON	ON			The coil turns time per Minor prize=56 Sec
				OFF	ON	ON			The coil turns time per Minor prize=48 Sec
				ON	OFF	ON			The coil turns time per Minor prize=40 Sec
				OFF	OFF	ON			The coil turns time per Minor prize=32 Sec
				ON	ON	OFF			The coil turns time per Minor prize=24 Sec
				OFF	ON	OFF			The coil turns time per Minor prize=16 Sec
				ON	OFF	OFF			The coil turns time per Minor prize=8 Sec
				OFF	OFF	OFF			The coil turns time per Minor prize=4 Sec
							ON	ON	Allow to reselect prize for 6 times when no prize has been tested
							OFF	ON	Allow to reselect prize for 4 times when no prize has been tested
							ON	OFF	Allow to reselect prize for 2 times when no prize has been tested
							OFF	OFF	Allow to reselect prize for 1 times when no prize has been tested

**Note: These options with gray background are factory settings of DIP switch. Please adjust the volume control to middle (volume well situated).**



### 11-3. Error code table

Error code table		
Code	Significance	Solution
E1	Inserted coin gets blocked.	Check whether the coin selector jammed, if there is a jam, clear the jam manually. if no, check the relating circuit is good or whether the coin selector is in short circuit.
E2	Prize switch gets blocked.	Check relating prize test board.
E3	Parameter saver chip U12 works in an improper way.	Displace the chip.
E4	DIP switch sets error.	Check relating DIP.
E5	No prize out overtime.	Check whether there are prizes on the prize coil or check the prize sensor.
E6	Ball Detect Sensor abnormal	Check the ball detect sensor
E7	No Ball out overtime.	Check whether there are ball on the funnel or check the ball detect sensor.

**Note: It won't be informed in case of any change of the performance of the machine, content of the manual or the program!**