TABLE OF CONTENTS

Version:1.17 Time:2009-12-17

1、Brief introduction

Mode CP. FKLQ09 Shooting Hoops Ⅳ is an indoor ticket redemption machine newly developed by our company. It represents a real basketball sports game with fantastic hip hop sounds. Height for the game is suitable for both adults and children. The cabinet is built of brilliant materials with attractive lightings. In addition, the machine has the latest new linking play function (2-16 sets of machines can be linked together): just simply link the machines together and press specific keys to activate the games. It is easy to play: insert a coin, choose START or LINK, and shoot the basketballs into the baskets. The more scores you get, the more tickets you win. Players get bonus game when the record is broken. Shooting Hoops Ⅳ is the latest Basketball game that every game center MUST HAVE!

2、Caution

2-1. Notice for installation

- **This machine is for indoor use only (not outdoor).**
- **The game should be placed on flat floor to maintain its stability.**
- **Do not disassemble the machine without technical guidance.**
- **Make sure to turn off the power and pull out the plug before moving the machine.**
- **The machine should not be put in places of high temperature or near flammable equipment.**
- **Should not put any heavy equipment on the top of the cabinet or the wiring of the game.**
- **Wirings of the machine should not be exposed to open air for a long time.**

2-2. Notice for operation

- **Checks whether the power plug and power wire are in good conditions.**
- **Before switching on the power, check if the voltage is suitable for the machine**
- **Voltage of power supply should correspond to the voltage stated on the back cover of the machine.**
- **Switch off the power before you perform any inspections.**
- **Only experienced electricians and technicians are allowed to check the electrical parts for the game.**
- **Appropriate technical parts should be used for all replacement.**
- **Hold the plug instead of the wire to unplug the power cord.**
- **Do not plug or unplug the plug with wet hand, do not pull or twist the power wire.**

3、Accessories

Check whether the following accessories are equipped with the game before operation:

Items	Qty	Remark
Operation Manual	**1**	
Key	**6**	**1888(5), 1866(1)**
Power Cord	**1**	
Sensor	**1**	**Lower level**
Basketballs	**8**	

4、Game features and how to play

(A). Machine set special features

- **You can play five rounds at most according to DIP switch, and you have to achieve the HIGH SCORE of each round set according to DIP switch.**
- **You can set the basket unwavering in first round and make it swing in other rounds. May also disable basket swing in all rounds. (The DIP SW3 #8 sets the function.)**
- **Playtime and the record can be adjusted by pressing the buttons, the adjustable range is wide and the setting way is easy and quick.**
- **2-16 sets of machines can be linked together, that makes the game more interesting.**
- **The game has been improved in lighting and sound effects. (LEDs with intensely bright are used in the game, which are DC12V designed and with little current and they are not delicate. What' more, there are double speakers, that make the game be stereo.**

(B). Game explanation

1. **Insert coins/tokens, the two lamps on the console will start sparkling. Press "START" or "LINK" button and select the play mode to begin the game. The HIGH SCORE LED shows the record of the first round, if you achieve the HIGH SCORE in the game, you can enter the second round for free, otherwise game over.**
2. **When enter the second round, the HIGH SCORE LED shows the record of the second round which equals to the sum of the first round record and the value-added. (See more information from "(C). How to set the record and playtime of each round". The SCORE LED shows the score player got in first round, and the score keeps on increasing as the game continues. When the player breaks the second record, he can play the third round for free.**
3. **When enter the third round, the HIGH SCORE LED shows the record of the third round which equals to the**

sum of the second round record and the value-added. (See more information from "(C). How to set the record and playtime of each round". If the player breaks the third record again, he can play the fourth round for free. And the rest may be deduced by analogy, but there are five rounds at most.

4. **How many rounds you can play in a game is set by SW2 #1 and #2. The SW2 #1 and #2 are turned to "ON OFF" as default parameters before leaving factory, now you can play three rounds at most.**
5. **The player who breaks the last record can win JP tickets. What's more, if he is in LINK state he can also get LINK JP Tickets. (If there are several players get the same score, only the one who achieve the score first can win.) No matter whether the last record is broken, game over when last round's time over.**
6. **When enable basket to swing (turn SW3 #8 to ON), the basket can not move in first round and keep on moving in other rounds. But if turn SW3 #8 to OFF, it will become immobilized in all the game.**
7. **SW4 is available only when LINK, and there should be only one machine's ID set as master. When LINK, the slave's record and playtime are controlled by the master, and they are controlled by themselves only when SINGLE.**
8. **The error states cannot cancel automatically after corresponding problem has been solved except E1, E4, E5, they should been canceled through these methods as follows: the machine power off and then on again or press "Clear JP" button or press "Reset" button on main PCB. (The error E2 can be canceled by pressing "Clear Alarm For No Ticket" button, but it will occur again if the problem hasn't been solved.) Pressing the "Service" button amounts to inserting one coin. The "Clear JP" button is used to clear all parameters, press it over 5 seconds, all data will be cleared and the game will restart.**

(C). How to set the record and playtime of each round

1) **Press "Test" button to enter the test mode.**
2) **When LED displays R1, adjust the record of first round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 10 by pressing button once and the score can be set within the range from 20 to 250.**
3) **Press "Test" button again, when LED displays S1, adjust the playtime of first round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 1 second by pressing button once. The playtime can be set within the range from 30 to 100 seconds.**
4) **Press "Test" button again, when LED displays R2, adjust the record of second round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 10 by pressing button once and the score can be set within the range from 10 to 250. (The score for the second round increased based on the first round is set here)**

5) **Press "Test" button again, when LED displays S2, adjust the playtime of second round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 1 second by pressing button once. The playtime can be set within the range from 30 to 100seconds.**

6) **Press "Test" button again when LED displays R3, adjust the record of third round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 10 by pressing button once and the score can be set within the range from 10 to 250. (The score for the third round increased based on the second round is set here)**

7) **Press "Test" button again, when LED displays S3, adjust the playtime of third round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 1 second by pressing button once. The playtime can be set within the range from 30 to 100seconds.**

8) **Press "Test" button again, when LED displays R4, adjust the record of fourth round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 10 by pressing button once and the score can be set within the range from 10 to 250. (The score for the fourth round increased based on the third round is set here)**

9) **Press "Test" button again, when LED displays S4, adjust the playtime of fourth round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 1 second by pressing button once. The playtime can be set within the range from 30 to 100seconds.**

10) **Press "Test" button again when LED displays R5, adjust the record of fifth round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 10 by pressing button once and the score can be set within the range from 10 to 250. (The score for the fifth round increased based on the fourth round is set here)**

11) **Press "Test" button again, when LED displays S5, adjust the playtime of fifth round by pressing "START" to increase or pressing "LINK" to decrease. The step rate is 1 second by pressing button once. The playtime can be set within the range from 30 to 100seconds.**

12) **Press "Test" button again, when LED displays AL, adjust whether to show the Error which isn't fateful by pressing "START" to increase or pressing "LINK" to decrease. It can be set to "0" or "1".**

Now the E6, E7, E8 and E9 are set to be the Errors which are not fateful. These errors can be shielded by the setting. If the AL is set to be "1", the error will be showed when error appears and game over. Otherwise set AL to be "0", the machine will ignore the E6, E7, E8 and E9 and allow keeping on the game.

13) **Press "Test" button again, now LED displays NO. of system version, and next test option enters each time the "Test" button is pressed, as follows: system linking ID, LED character test (LED displays 0123456789 in**

turn), LED all turn off, LED all turn on, effective input of LED displays (low level is effective, and if more input are effective at one time, they are displayed in turn), output test (each output option is tested when each time the "Test" button is pressed.), tests ticket dispenser, tests sound.

Note: memory of the score and playtime of each round will be saved automatically until set again, even pressing "Clear JP" button can not clear them except for replacing chip U12.

Note: if you change the record or playtime of each round, you should press "Test "button to save it or it will keep last saved parameters. And the setting for Errors which are not fateful can be saved until press "Test" button and display the NO. of system version.

(D) Instruction for linking

1) **If the machine is set as master, DIP SW4 #1~#4 set the maximum linking number. If the number is set to be 1, the linking function failures. There should be only one machine set as master.**
2) **If the machine is set as slave, DIP SW4 #1~#4 set the machine's ID, and the ID should be less than the maximum linking number of the master. For example: when the maximum linking number of master is 3, the slave's ID only can be set as 1 or 2.**
3) **In linking state, if turn SW2 #3 to ON the master will show the slave's ID that communicates failure. And turn SW2 #3 to OFF, the master won't show it.**
4) **If the slave failures to link (it may caused by slave's ID be bigger than the master's or the linking connection error), the slave doesn't show the error and it can only play in SINGLE state (the LINK button is of no effect now). But if it has been playing in LINK state and then error occurs, the slave will show E10.**
5) **If power off or alarm occurs when machines in LINK state, then the slaves will restart from initial state. And if the last round game has ended, it allows slave play in SINGLE or LINK from first round. Otherwise it only allows playing in SINGLE (the LINK button is of no effect now).**
6) **If power off or alarm occurs when machines in LINK state, then the master will restart from initial state.**
7) **If power off or alarm occurs when machines in SINGLE state, then the game will restart from the round when the game breaks off. For example: there are 3 rounds in a game, the record of first round is 20, the second record is 50 and the third is 100. If player got 30 score in the first round, and then the power off or alarm occurs when the player get 36 score in the second round, the game will restart from the second round and now the player's score is 30 on the premise that the SW1 #7 is turned to ON.**

5、Technical parameters

Mode	CP. FKLQ06
Environmental requirement	temperature from –10℃ to +40℃ low radiation, low humidity, low vibration.
Dimension:	1000mm × 2615mm ×2670mm
Weight:	280 KG
Power Supply:	Please refer to the back of the machine.
Maximum Power:	220V/160W, 110V/150W
No. of Players:	Single

6、Single machine（link machines）structure

For the link game machine, the setting of the slave is subject to the setting of the master. The setting of a single game machine is controlled by its own setting. (Details for the settings will be stated in later sections)

6-1. Whole machine structure

This machine is made up of frontal box, left and right side net, strobe mechanism, ticket dispenser, control system (main board, circuit), etc.

The frame of the machine can be taken apart. Instructions for assembly can be found in the packing instructions. The strobe mechanism adopts vertical ascend-and-descend structure. The control system controls the mechanism and electronics system of the machine.

HIGH SCORE LED: Display the Record score of the game.

SCORE LED: Display the score player can get.

TIME LED: Display how much time is left for each game.

Basket: Player shoots the balls into the baskets to win score.

Strobe: A transparent organic plate that moves up and down.

START button: For single game play – The game starts when player press this button.

LINK button: For link game play - Link games start when player press this button.

6-2. Frontal Box Illustration

Ticket box, coin box, speakers and counter board and so on are included in this frontal box.

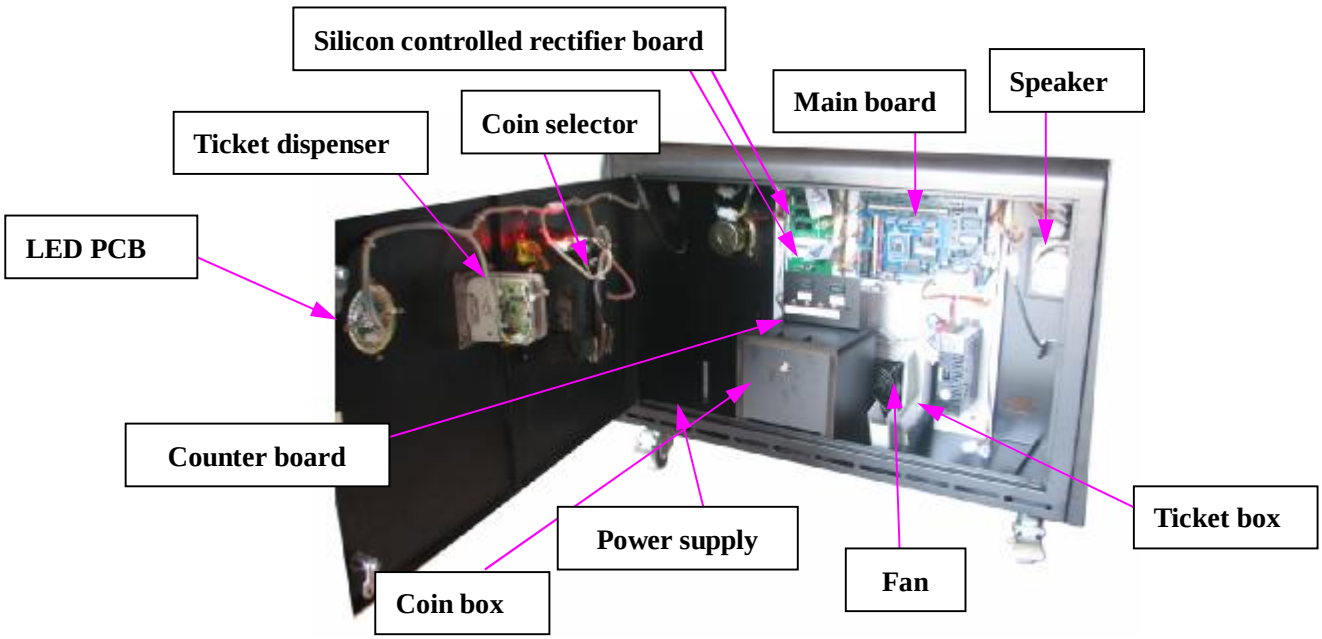
1. Frontal box diagram

Speaker: Sound Amplifiers.

Ticket Exit: Tickets will dispense from this area after every game ends.

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 exi



Main board: main program operation system- it controls the operation of all parts.

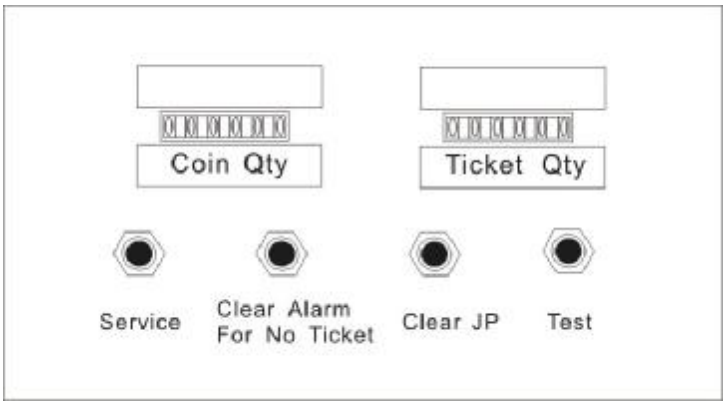
Fan: exhaust heat for the machine.

Silicon controlled rectifier board: it is sometimes called “motor driver board”.

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

Coin selector: Please refer to the “Coin selector” section stated below.

2. Counter board



Coin Qty: records the total coin Qty since the machine has started operation.

Ticket Qty: records the total ticket Qty since the machine has started operation.

Service: Pressing this button = Inserting one coin. Press this button only during maintenance or testing the game.

Clear Alarm For No Ticket: Press this button to replenish the unpaid tickets when the tickets were used up.

Clear JP: Press this button for over five seconds - All the data in the memory chip will be cleared.

Test button: Press this button to get the machine into TEST Mode.

3. Silicon controlled rectifier board

J1: Controlled by IN1 and IN2 of J2 to supply AC voltage output. It controls AC load.

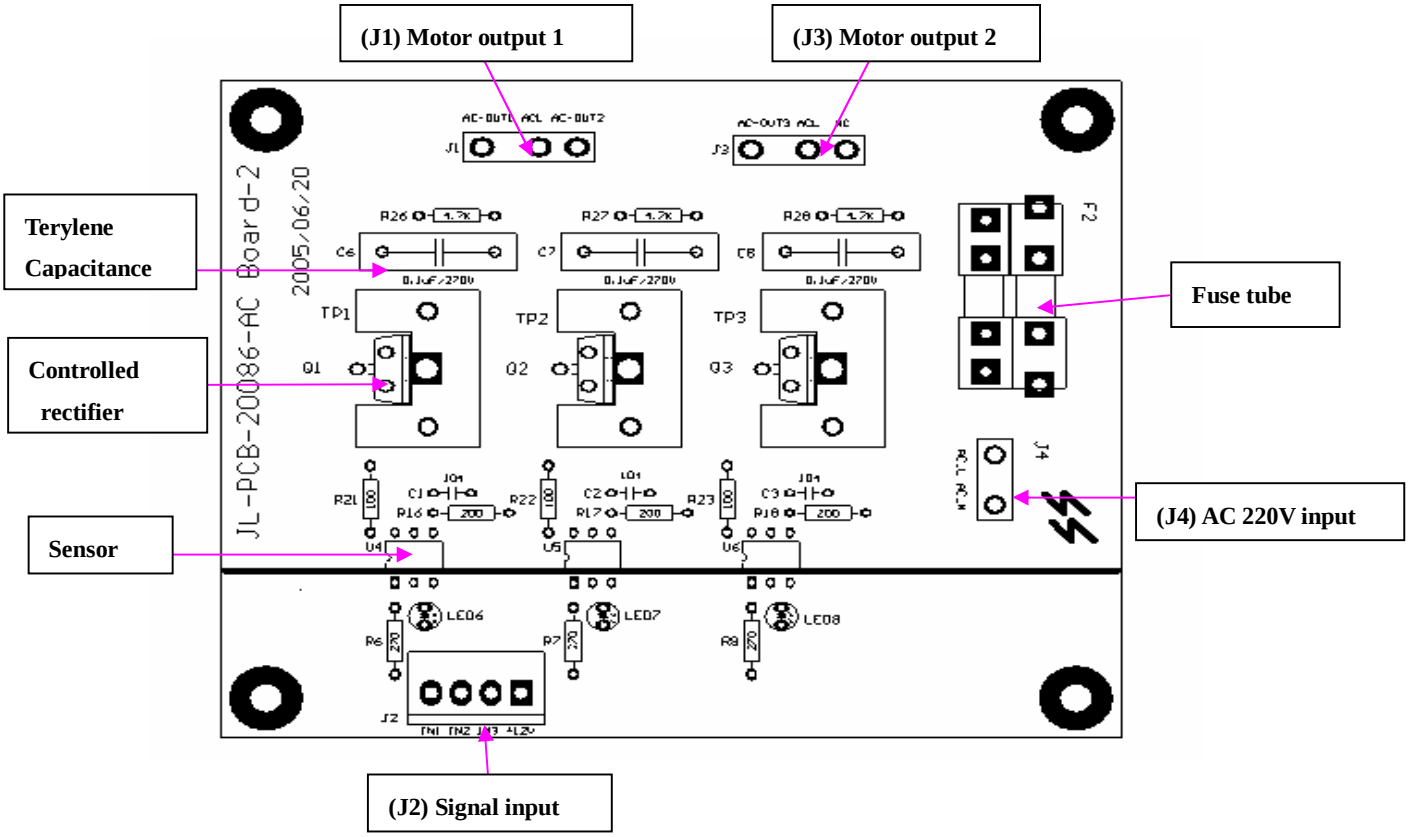
J2: Control AC output of J1 and J3.

a) **When the pin IN1 of it is in low currency, AC-OUT1 of J1 has AC volatge output.**
b) **When it is in high currency, AC-OUT1 of J1 has no AC voltage output.**
c) **When the pin IN2 of it is in low currency, AC-OUT2 of J1has AC volatge output.**
d) **When it is in high currency, AC-OUT2 of J1 has no AC voltage output.**
e) **When the pin IN3 of it is in low currency, AC-OUT3 of J3 has AC volatge output.**
f) **When it is in high currency, AC-OUT3 of J3 has no AC voltage output.**
g) **The +12V input of J1 is power supply input part.**

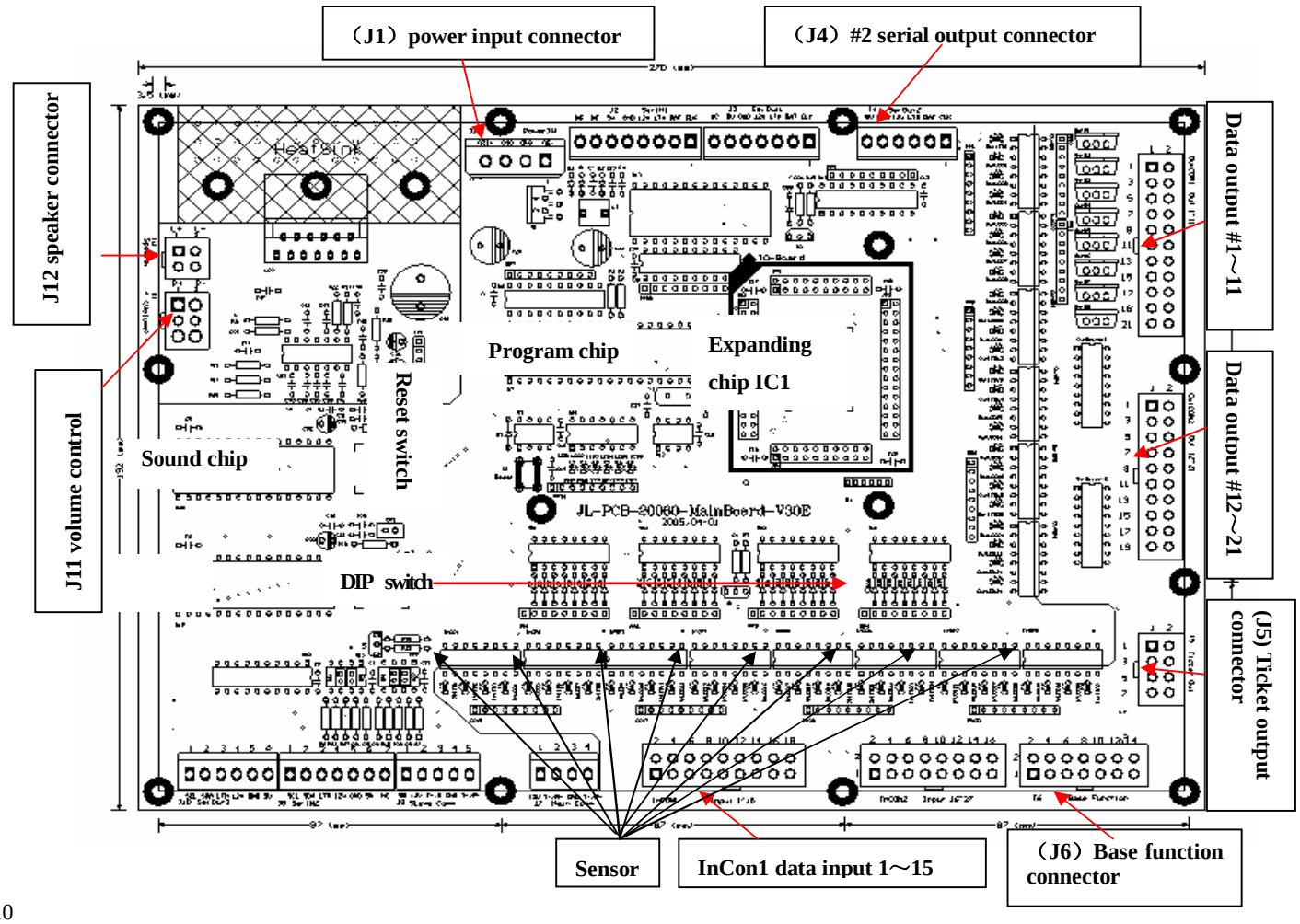
J3: Controlled by IN2 and IN3 of J2 to supply AC voltage output. It controls AC load.

J4: AC voltage input.

Fuse tube: φ5mm × 20mm. The maximum current is 5A.



4. Main board



J1: main power supply input connector.

J4: #2 serial output connector.

J5: ticket out connector.

J6: base function connector.

J11: volume control, adjusts volume.

J12: speaker connector.

Memory chip: records the total coins Qty and tickets Qty and so on.

INCON1:＃1～＃15 INPUT.

OUTCON1:＃1～＃11 OUTCON.

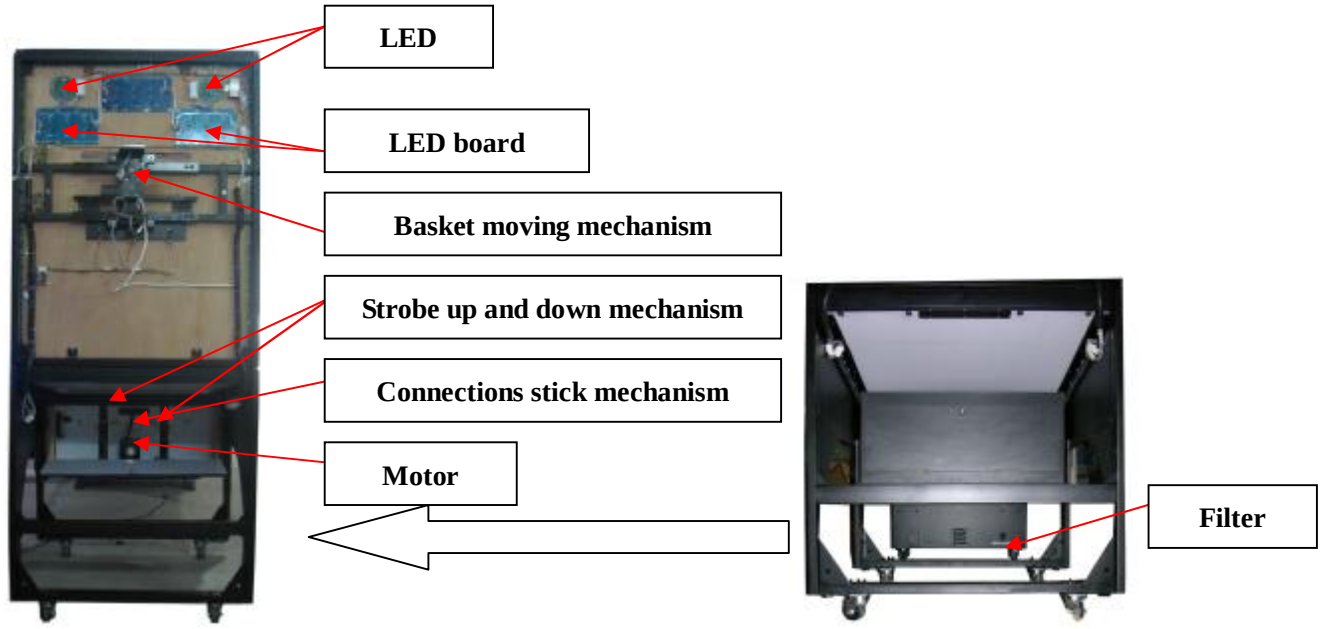
OUTCON2: ＃12～＃21 OUTCON.

(Note: other connectors have not been used in this machine.)

6-3. Back of the machine

Strobe mechanism (motor, transformer, etc) and control system are installed in this area. The control system includes the main board and enclosing circuit.

Back Box Diagram



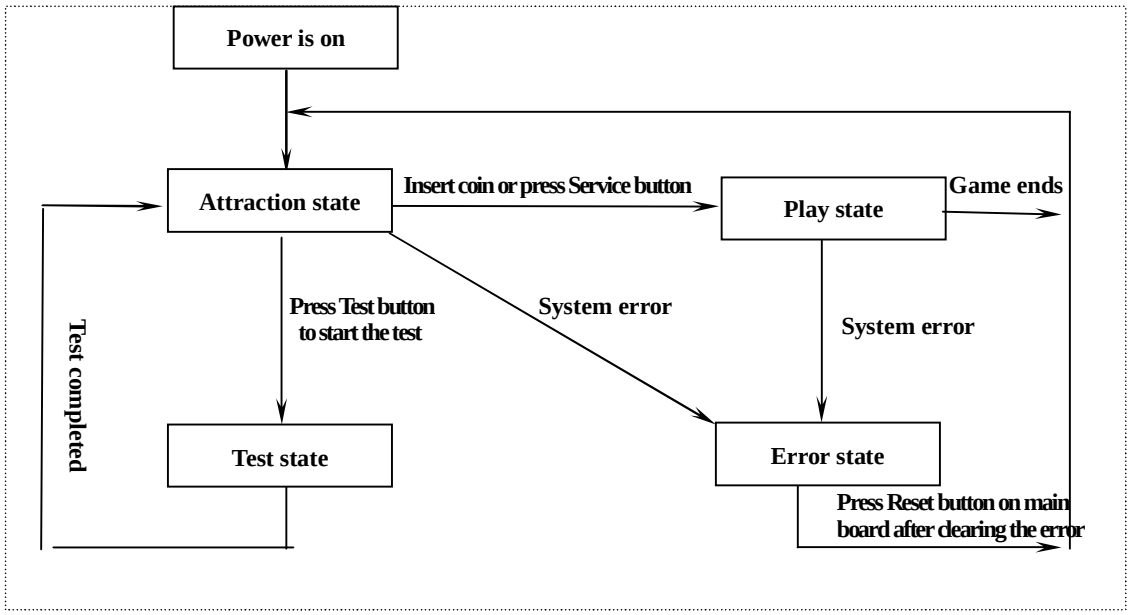
Motor: Drives the strobe mechanism.

Connections stick mechanism: Motivity exchange mechanism - Connecting motor and strobe.

Strobe up and down mechanism: For fixing the strobe – enables the strobe moving up and down neatly under the drive of the motor.

7、Operation

When machine starts to operate, its play mode can be adjusted into free play mode or coin play mode. When machine is in free play mode, once the power is on or the reset button is pressed, it can be played continuously without inserting a coin. When machine is in coin play mode, it can be in 4 statuses: Attraction State, Test State, Play State or Error State. Below Flow chart illustrates the above four status when machine is in coin play mode:



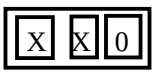
7-1. Switch on the power

Check the plug and cord. Make sure that it has been set to corresponding to the voltage for the machine, and then switch on the power.

7-2. Play state

The HIGH SCORE displays on the game shows the Record score. SCORE LED displays the score player gets. TIME LED displays remaining time for each game. When TIME LED is zero, time is up and the game ends.

7-3. Attraction state

The digits on the HIGH SCORE, SCORE and TIME LED display 

will keep on changing and the music continues to play. Press Test button in the frontal box and the machine will enter into test state. If you press Service button or insert coins, machine will enter into play state.

7-4. Test state

Check whether LEDS, lamps, ticket dispenser and strobe is working properly and whether music is in normal conditions. When machine is in attraction state, if you press Test button, music stops and the machine will enter into test state. Adjust the record and playtime of five rounds→ adjust fateful error→ displays system version N0 →displays LINK ID→ testing LED character → LED all turn off → LED all turn on→ testing input →

testing output→ testing ticket dispenser →testing music → test is completed.

7-5. Error state

Every time machine is switched on, if there is any problem, machine will enter into error state. Alarm will be activated and Error Code: EX will be displayed.

X stands for Error No.1, 2, 3, 4, 5, 6, 7, 8, 9 and 10. You can find out the problem according to the Error Code #.

After the problems are solved, you need to reset the machine. See the Error Code Table for more information.

8、Common Problems and Solutions

Problems	Analysis	Solutions
Whole machine dose not work	1. Power has not been switched on. 2. Defective Power supply 3. Crystal vibrator has stopped vibrating. 4. Defective Main program	1. Check block of AC voltage of power supply. 2. Tests whether there is +5 and +12 DC input. If there isn't, replace power supply. 3. Replace crystal vibrator. 4. Replace main program chip.
No sound	1. Defective Speakers. 2. Defective Sound Amplifier Board. 3. Error on Power supply of sound amplifier board 4. Error on 6295IC.	1. Replace Speakers. 2. Check sound amplifier board (main board has its own self). 3. Check the power supply (whether +12V is in normal conditions). 4. Replace 6295 IC
Motor dose not work or works continuously	1. Defective Motor. 2. Defective Capacitance. 3. Defective controlled rectifier. 4. Defective Sensor	1. Replace motor. 2. Replace capacitance. 3. Replace controlled rectifier. 4. Replace sensor.
LED error	1. The section has been burnt out. 2. 6B595 has no output.	1. Replace LED. 2. Replace 6B595.
Continuous dispense of tickets till alarm is activated.	1. Ticket dispenser has been error 2. Feedback pulse until main board has been in open circuit.	1. Replace ticket dispenser. 2. Check the circuit and confirm its connectivity.
Game does not dispense tickets	1. Ticket dispenser jammed. 2. DIP has been in error state	1. Clear error manually. 2. Check DIP and make sure it is correct.

9、Appendix

9-1.DIP connection on main board

Version: 1.17 Time: 2008-01-13

Plug code	Pin code	Pin color	Function	I/O code	Function of I/O
J1 （Power Input Connector）	PIN 1	4*0.75-Red	+5V Input	-----	Power Input.
	PIN 2	4*0.75-Black	GND	-----	
	PIN 3	4*0.75-Black	GND	-----	
	PIN 4	4*0.75-Yellow	+12V Input	-----	
J4 （#2 Serial Output Connector）	PIN 1	6*0.3－Green	CLK	-----	Digital LED Board Output Connection turn: 1、Time(3 bits). 2、Score(3bits). 3、HIGH SCORE(3 bits).
	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	-----	
J5 （Ticket Out Connector）	PIN 1	4*0.3－White	#1 Ticket Out Drive	OUT #21	Ticket Out Connector. （#2 Ticket Out 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	
J6 （Base Function connector）	PIN 1	10*0.3－Yellow	+12V Out	-----	Base Function connector.
	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	-----	
	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 Out of Tickets	IN #31	
	PIN 13	10*0.3－Gray	Ticket Qty	OUT #22	

	PIN 14	10*0.3－Brown	Coin Qty	OUT #23	
J8 (Communication connector)	PIN 1	4*0.3－Red	+5V Output		Connect to the connector on communication PCB corresponding to the RS485 PIN1, PIN2 are unused.
	PIN 2	4*0.3－Yellow	+12V Output	-----	
	PIN 3	4*0.3－Blue	T+/R+（RS485）	-----	
	PIN 4	4*0.3－Black	GND	-----	
	PIN 5	4*0.3－Green	T-/R-（RS485）	-----	
J11 （Volume Ctrl）	PIN 1	4*0.15－Green	Right Signal Input	-----	Volume Ctrl
	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	-----	
J12 （Speaker connector）	PIN 1	2*0.75-White	Left Speaker +	-----	Speaker.
	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	START button signal
	PIN 2	0.3－Pink	Input	IN #1	LINK button signal
	PIN 3	0.3－Orange	Input	IN #2	Strobe top switch signal
	PIN 4	0.3－SkyBlue	Input	IN #3	Strobe bottom switch signal
	PIN 5	0.3－Green	Input	IN #4	Sensor on the left of basket
	PIN 6	0.3－Blue	Input	IN #5	Sensor in the middle of basket
	PIN 7	0.3－Purple	Input	IN #6	Sensor on the right of basket
	PIN 8	0.3－Gray	Input	IN #7	Upper scoring sensor
	PIN 9	0.3－White	Input	IN #8	Nether scoring sensor
	PIN 10	0.3－SkyBlue	Input	IN #9	Proximity switch input signal
	PIN 11	0.3－Brown	Input	IN #10	Tickets inadequate detect(when it is required)
	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	-----	
OutCON1 （#1～#11	PIN 1	0.3－Blue	Output	OUT #0	START button indicator output
	PIN 2	0.75－Yellow	+12V Output	-----	

	PIN 3	0.3－Pink	Output	OUT #1	LINK button indicator output
	PIN 4	0.75－Yellow	+12V Output	-----	
	PIN 5	0.3－Orange	Output	OUT #2	Strobe baffle indicator
	PIN 6			-----	
	PIN 7	0.3－SkyBlue	Output	OUT #3	Motor for shaking runs clockwise
	PIN 8			-----	
	PIN 9	0.3－Green	Output	OUT #4	Motor for shaking runs anticlockwise
	PIN 10			-----	
	PIN 11	0.3－Blue	Output	OUT #5	Rope light control #1
	PIN 12			-----	
	PIN 13	0.3－Purple	Output	OUT #6	Rope light control #2
	PIN 14			-----	
	PIN 15	0.3－Gray	Output	OUT #7	Coin indicator
	PIN 16	0.3－Yellow		-----	
	PIN 17	0.3－White	Output	OUT #8	Speaker LED(red)
	PIN 18	0.5－Yellow		-----	
	PIN 19	0.3－Brown	Output	OUT #9	Speaker LED(yellow)
	PIN 20			-----	
	PIN 21	0.3－Pink	Output	OUT #10	Speaker LED(blue)
	PIN 22			-----	
OutCON2 （#12～#21 Output）	PIN 1	0.3－Brown	Output	OUT #11	Strobe motor run clockwise output (strobe adown)
	PIN 2	0.5－Yellow		-----	
	PIN 3	0.3－Pink	Output	OUT #12	Strobe motor run anticlockwise output (strobe up)
	PIN 4			-----	
	PIN 5	0.3－Orange	Output	OUT #13	START button LED(red)
	PIN 6			-----	
	PIN 7	0.3－SkyBlue	Output	OUT #14	START button LED(yellow)
	PIN 8			-----	
	PIN 9	0.3－Green	Output	OUT #15	START button LED(blue)
	PIN 10			-----	
	PIN 11	0.3－Blue	Output	OUT #16	LINK button LED(red)
	PIN 12			-----	
	PIN 13	0.3－Purple	Output	OUT #17	LINK button LED(yellow)
	PIN 14			-----	
	PIN 15	0.3－Gray	Output	OUT #18	LINK button LED(blue)

	PIN 16			-----	
	PIN 17	0.3－White	Output	OUT #19	Main frame LED control
	PIN 18			-----	
	PIN 19	0.3－SkyBlue	Output	OUT #20	Tickets lacking indicator(when it is required)
	PIN 20			-----	
Instruction for manufacture of main board	1	Adopts 3.0E version (or more advanced toleration version) main board.			
	2	Y1 uses 11.0592MHz crystal vibrator and SM8958A IC.			

9-2.Function of DIP switch on main board

Version: 1.17 Time: 2008-1-13

Function / Bit / DIP	1	2	3	4	5	6	7	8	Function
SW1	ON								Enable the ticket dispenser
	OFF								Disable the ticket dispenser
		ON	ON						Base tickets = 3
		OFF	ON						Base tickets = 2
		ON	OFF						Base tickets = 1
		OFF	OFF						Base ticket s= 0
				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		Save parameter when power off
							OFF		Not to save parameter when power off
								ON	Music on when machine is in attraction state
								OFF	Music off when machine is in attraction state
SW2	ON	ON							There are at most 5 rounds in a game.
	OFF	ON							There are at most 4 rounds in a game.
	ON	OFF							There are at most 3 rounds in a game.
	OFF	OFF							There is at most 1 round in a game.
			ON						The master shows the ID that link failure in attraction state
			OFF						The master doesn't show the ID that link failure in attraction state
				ON					Deduct coins when the power was cut off or the game gave an alarm

				OFF					Do not deduct coins when the power was cut off or the game gave an alarm
					ON				Get 3 points for every basketball scored for the last 10 seconds of each round
					OFF				Get 2 points for every basketball scored all the same for the last 10 seconds of each round
						ON	ON	ON	Score per ticket=80
						OFF	ON	ON	Score per ticket=60
						ON	OFF	ON	Score per ticket=50
						OFF	OFF	ON	Score per ticket=40
						ON	ON	OFF	Score per ticket=30
						OFF	ON	OFF	Score per ticket=20
						ON	OFF	OFF	Score per ticket=10
						OFF	OFF	OFF	Score per ticket=5
SW3	ON	ON	ON						JP base tickets=100
	OFF	ON	ON						JP base tickets=80
	ON	OFF	ON						JP base tickets=60
	OFF	OFF	ON						JP base tickets=50
	ON	ON	OFF						JP base tickets=40
	OFF	ON	OFF						JP base tickets=30
	ON	OFF	OFF						JP base tickets=20
	OFF	OFF	OFF						JP base tickets=10
				ON	ON	ON			Maximum JP tickets=999
				OFF	ON	ON			Maximum JP tickets=500
				ON	OFF	ON			Maximum JP tickets=200
				OFF	OFF	ON			Maximum JP tickets=150
				ON	ON	OFF			Maximum JP tickets=100
				OFF	ON	OFF			Maximum JP tickets=80
				ON	OFF	OFF			Maximum JP tickets=50
				OFF	OFF	OFF			Maximum JP tickets=20
							ON		JP tickets increases as the coins amount inserted increases
							OFF		JP tickets doesn’t increase as the coins amount inserted increases
								ON	Enable basket to swing
								OFF	Disable basket to swing
SW4	ON	ON	ON	ON					When set as master, the maximum linking number=16 / when set as slave, LINK ID=16
	OFF	ON	ON	ON					When set as master, the maximum linking number=15 / when set as slave, LINK ID=15
	ON	OFF	ON	ON					When set as master, the maximum linking number=14 / when set as slave, LINK ID=14

	OFF	OFF	ON	ON					When set as master, the maximum linking number=13/ when set as slave, LINK ID=13
	ON	ON	OFF	ON					When set as master, the maximum linking number=12 / when set as slave, LINK ID=12
	OFF	ON	OFF	ON					When set as master, the maximum linking number=11/ when set as slave, LINK ID=11
	ON	OFF	OFF	ON					When set as master, the maximum linking number=10 / when set as slave, LINK ID=10
	OFF	OFF	OFF	ON					When set as master, the maximum linking number=9 / when set as slave, LINK ID=9
	ON	ON	ON	OFF					When set as master, the maximum linking number=8 / when set as slave, LINK ID=8
	OFF	ON	ON	OFF					When set as master, the maximum linking number=7 / when set as slave, LINK ID=7
	ON	OFF	ON	OFF					When set as master, the maximum linking number=6 / when set as slave, LINK ID=6
	OFF	OFF	ON	OFF					When set as master, the maximum linking number=5 / when set as slave, LINK ID=5
	ON	ON	OFF	OFF					When set as master, the maximum linking number=4 / when set as slave, LINK ID=4
	OFF	ON	OFF	OFF					When set as master, the maximum linking number=3 / when set as slave, LINK ID=3
	ON	OFF	OFF	OFF					When set as master, the maximum linking number=2 / when set as slave, LINK ID=2
	OFF	OFF	OFF	OFF					When set as master, the maximum linking number=1 / when set as slave, LINK ID=1
					ON				Set as master
					OFF				Set as slave
						ON	ON	ON	LINK JP tickets=100
						OFF	ON	ON	LINK JP tickets=80
						ON	OFF	ON	LINK JP tickets=60
						OFF	OFF	ON	LINK JP tickets=50
						ON	ON	OFF	LINK JP tickets=40
						OFF	ON	OFF	LINK JP tickets=30
						ON	OFF	OFF	LINK JP tickets=20
						OFF	OFF	OFF	LINK JP tickets=10

Note: Those cells highlighted in gray color are factory settings for DIP switch. Please adjust the volume control to middle (volume well situated).

SW4 is only used when LINK and each one can't have the same ID with others in the same linking network.

9-3. Error Code Table

Error Code Table			
No	**Code**	**Significance**	**Solution**
1	**E1**	**Coins Jammed.**	**Check whether the coin selector blocks the coin. If it does, press coin exit button to release the coins. If it does not, check the relating circuit.**
2	**E2**	**Out of tickets/Tickets Jammed.**	**1. Add tickets. Press Clear Alarm For No Ticket. Machine will dispense the unpaid tickets and the alarm will be cleared.** **2. Restart machine or press reset switch on main board. Keep pressing Clear JP button over five seconds, the unpaid tickets will get cleared, but all the data in the memory chip will also be cleared.** **3. When tickets are jammed, take down the lower bottom part of the machine and clear the jam manually.**
3	**E3**	**Error on Chip U12**	**Replace chip U12**
4	**E4**	**Upper scoring sensor abnormal.**	**Check the scoring sensor.**
5	**E5**	**Down scoring sensor abnormal.**	**Check the scoring sensor.**
6	**E6**	**Strobe photo switch for releasing ball abnormal.**	**Check strobe photo switch for releasing ball.**
7	**E7**	**Photo switch for basket located in the middle abnormal.**	**Check the photo switch for basket located in the middle.**
8	**E8**	**Photo switch for basket located on the left abnormal.**	**Check the photo switch for basket located on the left.**
9	**E9**	**Photo switch for basket located on the right abnormal.**	**Check the photo switch for basket located on the right.**
10	**E10**	**Linked games failure - Communication failure (applicable to slave only)**	**Make sure that the communication line for linked games is ok**

Note: No further notice / Amendments to the manual will be given in case of any changes to the machine.