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MANUAL

Content

How to Play

1. Insert coins and press [START]. The game will begin to count down.
2. Shoot balls within the time limit. Each shot made is worth 2 Points. Shots made within the last 10-25 seconds are worth 3 points (these are default values which can be adjusted). There are a total of 2-5 rounds to be set up. Each round lasts 30-95 seconds (also adjustable). Points won within each round must reach the (set up) minimum points required in order to pass to the next round. The Hoop will move slowly in the beginning starting from the 2nd round and on. Basket speed will speed up to increase the difficulty.
3. Displays explained:
   a. **Score required to pass the round**: Shown on the left. Before game starts it is red and flashing. It shows the required target score to pass to the next round.
   b. **Top score**: Shown on the left. It is in green and shows the highest score recorded in the single unit.
   c. **Game Time**: Shown on the center.
   d. **Current score**: Shown on the right. It shows the accumulated points won by making balls drop into the hoop. Green means it is below the target score; Red means it is over the target score and are qualified for the next round.
4. Prize payouts, getting points over the target score of the last round will be awarded with prize or tickets.
5. See page 4 for linking play rules.

Assembly Instructions

1. (TBA) Get with Anthony on this.
2. Programming set up see page –

Linking Instructions

1. Link up to 8 units. Every unit must have its own serial number (DIP SW1 pins 6-8 setup). No serial number can be repeated nor can the master board be absent. If the master board is out, it can be replaced by a sub board, converted to a master board.
2. Linking system setup is transmitted by the master unit to the sub-boards. Therefore, all setups of the sub-units are usable, except the DIP SW1 pin 6-8 (serial number set up) and DIP SW1 pin 5 (linking selection). All sub-units must be powered off and back on if any setup changes have been made to the master unit.
3. After sub-units serial numbers have been set, power them on first (DO NOT power on the master unit yet). The serial number will be shown on each of the units only when the master unit is off. Check if any serial number is repeated.

4. The DIP SW1 pin 5 must be set to “ON” to be able to play linked games; otherwise only single play will be allowed.
5. Linking plays are allowed with 2-8 units. There is one master unit and the rest are all sub-units. There must be at least one master and one sub-unit. Either the serial numbers of the master unit or sub-units must not be repeated (DIP SW1 pin 6-8). It is not necessary to set the serial numbers in order, but the master unit must be set.

Linking Play Rules

1. The objective is to compare the score of each unit against the others in a competition. If the score of a unit is zero, it will not be counted into the competition.
2. The competition is to compare the scores of all the units. If any of the units have finished the game first and has restated the game without waiting until the competition is over, it will not be counted into the competition. Upon the end of the competition if only one unit remains, it will not be counted either.
3. The top 3 scores will be displayed. Other scored will not be displayed.
4. During a linked game, units that are not joined in the current competition have no possibility of starting another linked competition. They must wait until the first competition is finished (a link indicator light will be on). Only one group can compete at any given time.
5. When [LINKED PLAY] button is pushed, 6 seconds will the counted down to wait on other units to join the competition. Every time a unit joins the competition time is reset to 6 and counted down again. If only one unit pushed the [LINKED PLAY] button and no one has joined the competition, this unit will start play as [SINGLE PLAY]. In this case, the link indicator light will still be on to invite players to a [LINKED PLAY]

Programming

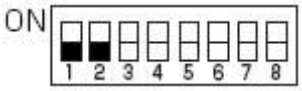
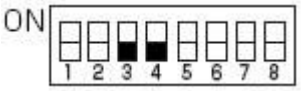
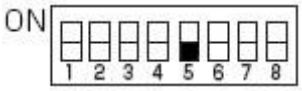
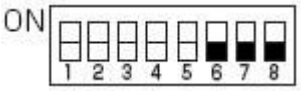
Free Throw Frenzy (WMH-638), Buzzer Beater (WMH-637)

- Time for counter’s pulse 1/96mS = 10.4cps
- Demo Music: always available.
- Free Play: SW4 pin #4 to “ON” and press [START] to play.
- Game time, target score of each stage, time of 3 point are set by internal settings, and every stage can be set with a different setting.
- Dual color of display boards (two color display/High light brightness LED) can be adjusted. Single and double sensor can be adjusted as well.
- Supports outputs of rope lights and speaker lights.
- If top score is over 1000, it will show the score 1--- and under 999 alternately.

The edition of language and Music

- Chinese + English: U16 (V1_CE2.BIN) + U18 (V2.BIN)
- Chinese + Taiwanese: U16 (V1_CT.BIN) + U18 (V2.BIN)
- 2 Chinese: U16 (V1_CC.BIN) + U18 (V2.BIN)

Note: The program W638U301 is only linkable with version W638 (Free Throw Frenzy). The program W637U301 is only linkable with version W637 (Buzzer Beater).

SW No	Setting Subject	Function								DIP SW1
SW1-1, 2	Coin 1 Coin vs. Credit	**1**	**2**	**Function**						
		On	On	4 Coins: 1 Play						
		On	Off	3 Coins: 1 Play						
		Off	On	2 Coins: 1 Play						
		Off	Off	1 Coin: 1 Play						
SW1-3, 4	Coin 2 Coin vs Credit	**3**	**4**	**Function**						
		On	On	4 Coins: 1 Play						
		On	Off	3 Coins: 1 Play						
		Off	On	2 Coins: 1 Play						
		Off	Off	1 Coin: 1 Play						
SW1-5	Link Play	**5**	**Function**							
		On	Yes							
		Off	No							
SW1-6, 7, 8	Serial Number of Sub-units	**6**	**7**	**8**	**Function**					
		On	On	On	No. 8: Master					
		On	On	Off	No. 7					
		On	Off	On	No. 6					
		On	Off	Off	No. 5					
		Off	On	On	No. 4					
		Off	On	Off	No. 3					
		Off	Off	On	No. 2					
		Off	Off	Off	No. 1					
DIP SW1	Default Value	1	2	3	4	5	6	7	8	
		x	x	x	x	x	x	x	x	

Adjustment Instructions

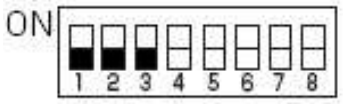
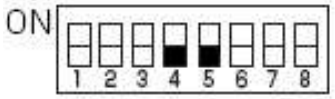
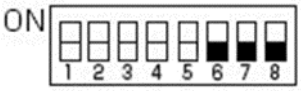
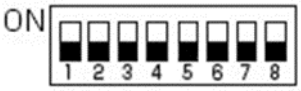
1. If coin 1 and coin 2 are adjusted to the same mode, both coin acceptors will be accumulating the total value of inserted coins. For example, both coin acceptors are adjusted to two tokens for one play, then insert one token into coin 1 and insert one token into coin 2, machine will accumulate the two tokens to allow one play. If both acceptors are adjusted to a different mode, then both of them will calculate separately.
2. Linked play DIP SW1 pin 5 “ON”, otherwise only for single play.

3. Linked play must be controlled by the master machine, so the secondary machines must set up DIP SW1 pin 6-8 and DIP SW1 pin 5 “on [YES]”, the other DIP SW’s remain off. **(Note: If you have reset the master machine then you must restart all secondary machines to obtain new message from the master)**
4. Link play up to 8 machines, each machine must be set up with individual sub-unit serial number (DIP SW1 pin 6-8) and all the numbers must not repeat. A master is required. All the machines can work as a master to avoid machine fault.
5. Link play must be at least 2 machines and can link up to 8 machines.

<table>
<tr><th>SW No</th><th>Setting Subject</th><th colspan="8">Function</th><th>DIP SW1</th></tr>
<tr><td rowspan="5">Sw2-1, 2</td><td rowspan="5">Number of Stages</td><td colspan="8"><table><tr><th>1</th><th>2</th><th>Function</th></tr><tr><td>On</td><td>On</td><td>5 Stages</td></tr><tr><td>On</td><td>Off</td><td>4 Stages</td></tr><tr><td>Off</td><td>On</td><td>3 Stages</td></tr><tr><td>Off</td><td>Off</td><td>2 Stages</td></tr></table></td><td rowspan="5"> </td></tr>
<tr><td rowspan="4">SW2-3, 4</td><td rowspan="4">Reserved</td><td colspan="8"><table><tr><th>3</th><th>4</th><th>Function</th></tr><tr><td>Off</td><td>Off</td><td>No</td></tr></table></td></tr>
<tr><td rowspan="4">SW2-5</td><td rowspan="4">Language</td><td colspan="8"><table><tr><th>5</th><th>Function</th></tr><tr><td>On</td><td>Language 2</td></tr><tr><td>Off</td><td>Language 1</td></tr></table></td></tr>
<tr><td rowspan="4">SW2-6, 7, 8</td><td rowspan="4">Reserved</td><td colspan="8"><table><tr><th>6</th><th>7</th><th>8</th><th>Function</th></tr><tr><td>Off</td><td>Off</td><td>Off</td><td>Off</td></tr></table></td></tr>
<tr><td rowspan="4">DIP SW2</td><td rowspan="4">Default Value</td><td colspan="8"><table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>x</td><td>o</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td></tr></table></td></tr>
</table>

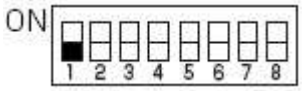
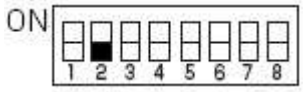
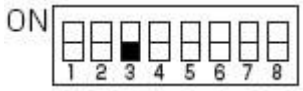
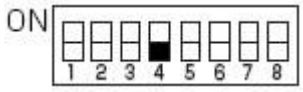
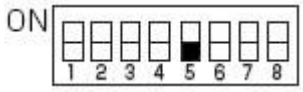
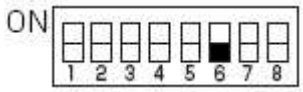
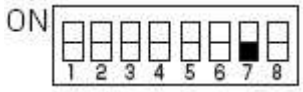
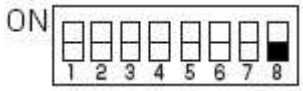
Adjustment Instructions Continued

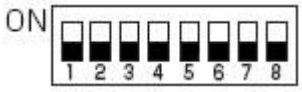
1. Option of language, it has to combine with U16 language ROM. The Language options as below.
   a. Chinese + English: U16 (V1_CE2.BIN) + U18 (V2.BIN)
   b. Chinese + Taiwanese: U16 (V1_CT.BIN) + U18 (V2.BIN)
   c. 2 Chinese: U16 (V1_CC.BIN) + U18 (V2.BIN)

SW No	Setting Subject	Function								DIP SW1
SW3-1, 2, 3	Reserved	**1**	**2**	**3**	**Function**					
		Off	Off	Off	None					
SW3-4, 5	Set ticket payout per game	**4**	**5**	**Function**						
		On	On	10						
		On	Off	2						
		Off	On	1						
		Off	Off	0						
SW3-6, 7, 8	Set ticket payout per winning score	**6**	**7**	**8**	**Function**					
		On	On	On	100					
		On	On	Off	50					
		On	Off	On	30					
		On	Off	Off	20					
		Off	On	On	10					
		Off	On	Off	5					
		Off	Off	On	2					
		Off	Off	Off	0					
DIP SW3	Default Values	1	2	3	4	5	6	7	8	
		x	x	x	x	x	x	x	x	

Adjustment Instructions Continued

1. Ticket payout according to score: X number of points give one ticket. For example setup 100 points to give one ticket. If players score is 436, Only 4 tickets will be dispensed. The rest of the points will not be counted because they did not reach the minimum value needed to dispense a ticket.

SW No	Setting Subject	FUNCTION		● DIP SW4
SW4-1	Free Game	1	FUNCTION	
		ON	Yes	
		OFF	No	
SW4-2	Keep the tickets which are not dispensed out yet after powering off.	2	FUNCTION	
		ON	Yes	
		OFF	No	
SW4-3	Keep CREDIT	3	FUNCTION	
		ON	Yes	
		OFF	No	
SW4-4	DEMO Music	4	FUNCTION	
		ON	No	
		OFF	Yes	
SW4-5	5 sec. break between steps	5	FUNCTION	
		ON	No	
		OFF	Yes	
SW4-6	Reserved	6	FUNCTION	
		OFF	No	
SW4-7	Optic sensor of basket	7	FUNCTION	
		ON	Double sensor	
		OFF	Single Sensor (J12 sensor)	
SW4-8	Display	8	FUNCTION	
		ON	High Brightness LED	
		OFF	Dual color DISPLAY	

DIP SW4	Default Value	1	2	3	4	5	6	7	8	
		X	X	X	X	X	X	X	X	

Adjustment Instructions continued

1. Free play setting: [YES]. Does not need to insert coins. Press [START] to start the game. Tickets will not pay out during free play mode.
2. Display:
    - Standard model made for indoor use only.
    - High brightness LED model has option to use machine outdoors, but user/operator should install a W071024 PCB.

Inner Value Setup Instructions

1. Push [TEST] button to enter "Test mode", then push and hold [ACC] button for two seconds to enter the inner value setup mode.
2. STUFF
3. Restart the machine after adjusting.

ITEM	Detail	Adjusting	Default
P01	TARGET SCORE 1st stage	30,40,50,60 points	50 points
P02	TARGET SCORE 2nd stage	150~200 points Every 10 points for a range	150 points
P03	TARGET SCORE 3rd stage	250~300 points Every 10 points for a range	250 points
P04	TARGET SCORE 4th stage	350~400 points Every 10 points for a range	350 points
P05	TARGET SCORE 5th stage	450~500 points Every 10 points for a range	450 points
P06	Game Time for 3 Point Score 1st stage	0~30 sec.	10 sec.
P07	Game Time for 3 Point Score 2nd stage	0~30 sec.	10 sec.
P08	Game Time for 3 Point Score 3rd stage	0~30 sec.	10 sec.
P09	Game Time for 3 Point Score 4th stage	0~30 sec.	10 sec.
P10	Game Time for 3 Point Score 5th stage	0~30 sec.	10 sec.

ITEM	Detail	Adjusting	Default
P11	GAME TIME of 1st stage	30~95 sec., Every 5 sec. for a range	30 sec.
P12	GAME TIME of 2nd stage		30 sec.
P13	GAME TIME of 3rd stage		30 sec.
P14	GAME TIME of 4th stage		30 sec.
P15	GAME TIME of 5th stage		30 sec.

To reset press and hold [TEST] and [ACC] buttons while powering on. A sound will be heard stating that reset is complete. All book keeping is reset. Top scores will be reset to 150. A1-A6 accounting records won't become zero. A1-A6 will have to be reset one by one to zero manually.

(Note: After resetting or changing settings, all secondary machines have to restart to get updated changed settings from master machine if games have been linked.)

Book Keeping

To enter book keeping press [ACC] button with in standby. Press and hold [ACC] button to switch the book keeping items. Press [TEST] button at any time to exit menu.

- Single item reset to zero: Press and hold [START] button for 2 seconds to reset item.
- All items reset to zero: Within book keeping section press and hold [START] and [LINKING] buttons for 2 seconds. A sound will be heard stating that reset is complete. All book keeping will be reset to zero and the Top score will be reset to the default 150.

ITEM (Credit Display)	CONTAIN (5 digits , extend to TIME pool)
A1	COIN1 TOTAL COINS INSERTED
A2	COIN2 TOTAL COINS INSERTED
A3	Number of times service button being pressed (free game times)
A4	Number of Ticket Payout
A5	RESERVED
A6	TOTAL GAME PLAYS
A7	TOP SCORE

Testing Game

Press [TEST] button with in standby to enter test mode. Press {TEST] within test mode to switch between items. To quit test mode, power machine off and on.

ITEM	CONTAIN	
Credit Display	**Top Score Display**	
0		DISPLAY TEST
1-	dS1	DIP SW1 test, TIME display shows the SW on/off status
2-	ds2	DIP SW2 test, TIME display shows the SW on/off status
3-	dS3	DIP SW3 test, TIME display shows the SW on/off status
4-	dS4	DIP SW4 test, TIME display shows the SW on/off status
5-	In	input interface test, TIME display shows the input end's code, SCORE display shows the input end's status
6-	out	output interface test: Enter the Test mode before touch any button that SCORE display shows 【-00】 a. Press【ACC】to test the capsule dispenser. Hold down button to turn and relieve to stop. The status is shown on the center 【-10】=turn 【-00】=stop. (This is selective purchase and not reserve on all machines). b. Press【LINKED PLAY】button to test the balls gate. Press one time to close and one time to open. The open/close status is shown on the left 【100】=Open 【000】=Close 【-00】=Stop. The decimal point shows the gate's status. If it is on means the gate is at the open position. c. Press【SINGLE PLAY】button to test the hoop motor. Hold down to turn and release to stop. The status is shown on the right, 【-01】=turn 【-00】=stop.
7-	Sou	Sound test, TIME display shows the sound code. Press【START】button to send the next sound. Press【LINK】button to repeat.

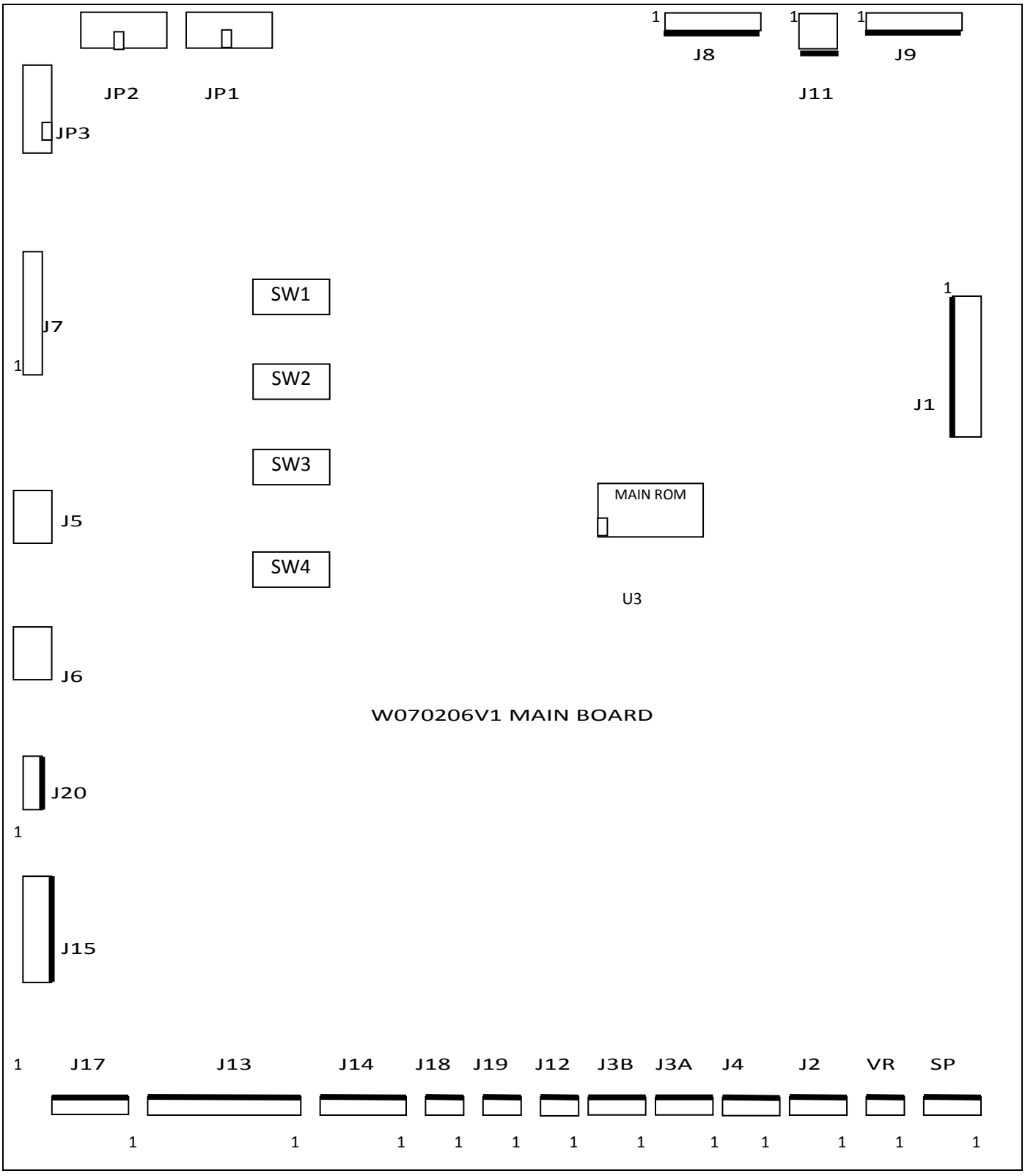
Error Codes and Solutions

Code		Error Description	Solution
Dot-matrix	CREDIT display		
Error 1	E1	COIN1 break down	1. Check the Coin Accepter is setting on N.C. and Please switch back to N.O. 2. Coin Accepter Broken and Need Repair 3. PCB Faulty and Need Repair.
Error 2	E2	COIN2 break down	
Error 3	E3	TICKETS DISPENSER break down	1. It will show out number of ticket which is not dispensed yet. 2. Press【TEST】or【SERVICE】or【ACC】any of the mentioned buttons to remove the error code，and will keep paying out tickets.
Error 4	E4	Wrong PCB Edition	Please change PCB to W070206 Edition
Error 6	E6	EP ROM out of service	PCB is out of Service, please change PCB.
Error 7	E7	FRAM out of service	PCB is out of Service, please change PCB.

Faulty Description		Solution
Hoop Problems	Hoop Stop Moving	1. Check 2A fuse next to PIN J20 might be fuse break) 2. Check Main PCB J20 PIN might be loose 3. Check Hoop Motor Cable connector might be loose or connect fault 4. PCB Faulty and Need Repair 5. Hoop Motor Broken and Please Repair Motor
	Hoop Orientate Problems	1. Check Main PCB PIN J3A might be loose 2. Check Hoop Proximity Switch Cable Connector might be loose or connect fault 3. Check Hoop Proximity Switch might be fault
	Hoop Sensor Problems	1. Check Main PCB PIN J12 might be loose 2. Check Hoop Sensor Cable Connector might be loose or connect fault 3. Check Hoop Sensor to see if fault
Gate Problems	Gate Stop Moving	1. Check F1 2A Fuse PCB, which next to PIN J15 might be fuse break 2. Check Main PCB PIN J15 might be loose or connect fault 3. Check Gate Motor Cable Connector might be loose or connect fault 4. Gate Motor Broken and Need Repair Motor 5. PCB Faulty and Need Repair
	Gate Keep Turn and not stop	1. Check PCB PIN J18 might be loose 2. Check Gate Proximity Switch Cable Connector might be loose or connect fault 3. Check Gate Proximity Switch might be fault

Faulty Description		Solution
Link Problems	After Switch machine On, Time Display only show up Number (Do not Link)	1. Check Main PCB DIP SW1 Pin 6~8, if secondary machine number setting repeat 2. Check Main PCB PIN J5 or J6 Connector might be loose or connect fault 3. Check the #6 PIN COM Port might be broken or connect fault, Please Repair 4. Check the Main PCB ERROM and Secondary EPROM model must be same 5. PCB Faulty and Need Repair
	SW Adjust no effect	1. Check Main PCB DIP SW1PIN 5is on “ON”, Link Play. If the answer is YES, check the Main DIP SW setting is from Master to secondary Please check Master Setting. 2. Please Check by following up the above way (Do not link Test)
	Sometimes can or cannot link	1. Please Check by following up the above way (Do not link Test) 2. Check Link button Connector might be loose or connect fault 3. PCB Faulty and Need Repair
Sound Problems		1. Check Volume VR 1K 2. Check Speaker Cable Connector might be loose or Connect fault 3. Speaker Fault and Need Repair. 4. PCB Faulty and Need Repair
Display Error		1. Check Display Cable might break or fault 2. Display faulty and Need Repair 3. PCB Faulty and Need Repair.
LED Round Flash Light Error		1. Check on PIN J8 & J9, might loose 2. Cable Fault and Need Repair. 3. LED Round Flash Light PCB Fault and Need Repair. 4. PCB Faulty and Need Repair. 5. Please check on 12V 3A transformer when both LED Round Flash Light do not work
Problems with switch on the machine		1. Check on the LED light on Power Supply 2. Power Supply Fault and Need Repair 3. PCB Faulty and Need Repair.

Wiring Diagrams



Main Board Diagram

J1	color	PIN	NOTE
1	Black	GND	Power supply PIN
2	Black	GND	
3	Black	GND	
4	Black	GND	
5	Red	+5V input	
6	Red	+5V input	
7	Red	+5V input	
8	Yellow	+12V input	
9	Yellow	+12V input	
10	Yellow	+12V input	

J11	color	PIN	NOTE
1	Black	AC12V input	AC12V 3A Transformer
2	Black	AC12V input	

J9	color	PIN	NOTE
1	Yellow/Black	AC2	Connect one by one to W040420 LED display
2	Green/Red	LED21	
3	Blue/Orange	LED22	
4	Purple/Yellow	LED23	
5	Grey/Red	LED24	
6	White/Black	LED25	
7	Pink/Green	AC2	

(Note: The transformer AC12V's initial power supply is ±10%. For example, AC110V, The power supply's range is between AC100V-AV120V. If the power is too high, W040420 LED display's LED's life will be shortened.)

J8	color	PIN	NOTE(BLUE)
1	Yellow	AC2	Connect one by one to W040420 LED display
2	Green	LED11	
3	Blue	LED12	
4	Purple	LED13	
5	Grey	LED14	
6	White	LED15	
7	Pink	AC2	

1. connection of using Dual color DISPLAY board.

JP1	color	PIN	NOTE
14PIN Cable		Connect to SCORE display of W040418	

JP2	color	PIN	NOTE
14PIN Cable		Connect to TOP RECORD display of W040418	

JP3	color	PIN	NOTE
10PIN Cable		Connect to GAME TIME display of W040419	

2. Connection of using High Brightness LED display board

JP1	color	PIN	NOTE
14PIN Cable		Reserved	

JP2	color	PIN	
14PIN Cable		Connect JP1 of W071024 display PCB	

JP3	color	PIN	NOTE
10PIN Cable		Reserved	

J7	color	PIN	NOTE
1	Black	GND	Connect one by 12 to W991907 CREDIT display
2	Brown	GND	
3	Red	TCOM15	
4	Orange	TCOM14	
5	Yellow	GND	
6	Green	TGG	
7	Blue	TGF	
8	Purple	TGE	
9	Grey	TGD	
10	White	TGC	
11	Pink	TGB	
12	Red/Black	TGA	

J5	color	PIN	NOTE
6PIN communication wire		Linking communication wire socket	

J6	color	PIN	NOTE
6PIN communication wire		Linking communication wire socket	

J20	color	PIN(RED)	NOTE
1	RED	Hoop motor +	Hoop motor PIN
2	RED	Hoop motor +	
3	BLACK	Hoop motor -	
4	BLACK	Hoop motor -	

J15	color	PIN	NOTE
1	Yellow	+12V input	Hoop motor PIN
2	Black	GND	
3	Red	Gate Motor +-	
4	Pe/Yw	Gate Motor –	
5			
6			
7			
8			