

BLUE ZOO

(SUBSINO CASINO GAME – XVGA SERIES)

Exploring the treasures at sea through Blue Zoo. Give you adventure and Excitement.

It designs for your profits and reflects in your cash box. Top earning 15 reels, 20 lines video slot game!



Main Game

HOW TO PLAY

- Insert coin(s) or bill(s).
- Press [Select Lines] to choice the lines (1 line, 5 lines, 10 lines, 15 lines or 20 lines) you would like to play.
- Press [Play] to bet one credits each select line.
- Then press [Start] button to spin the reels. Press [Stop1], [Stop2], [Stop3], [Stop4] or [Stop5] to stop the reel or [Start] button again to stop all reels.
- When you have any win combination, you win. Press [Take Score] to take winning score into Credit, or press [Double Up], [Half Double] or [Re-Double] to play Double Up game. If Double-Up function is disabled, the system will take scores automatically.
- Press [Help] to check the result of last game and relative game information.



Double Up Game

GAME FEATURES

- **GLOBEFISH SYMBOL:** Globefish is wild as joker to replace any symbols.
- **FORTUNE WHEEL:** A winning combination of four Corners of 15 reels with same "OYSTER" symbols access the fever.
Press Start button or touch the crab to trigger the wheel for great reward.
- **JACKPOT FEVER:** There are five Jackpot meters from left to right show the value of JP5, JP4, JP3, JP2 and JP1 in the bottom of columns.



Fortune Wheel

Stare three or more "OYSTER with Tie" symbols land in the center of any of columns, and start fever game. The pop-up second screen shows odds table and to play classic 3 Reels slot game for each relative column. According to combination of 3 reels, pays the Jackpot or award.

3 Jokers on the line win the Jackpot.



Jackpot Fever

INSTALLATION

● MAIN PCB

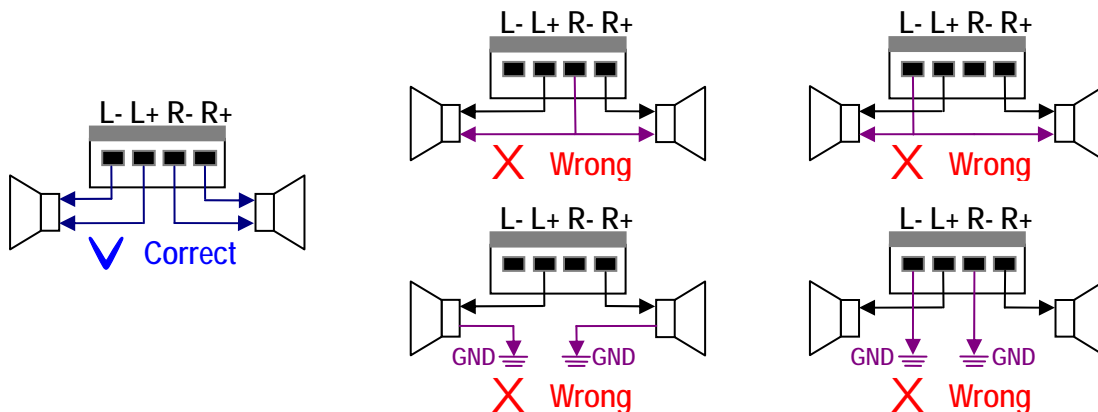
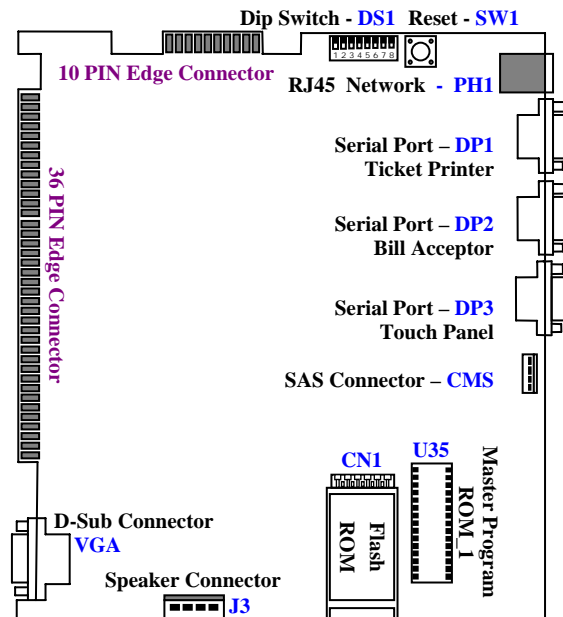
- 1) Make sure you have powered-off game.
- 2) Mount Blue Zoo PC Board on the cabinet.
- 3) Connect 36pin and 10 pin edge connector of the cabinet to Edge connectors (36pin & 10 pin) of Blue Zoo main PCB. Refer Page 12 for the diagram of Connector.

● MONITOR

- 1) Make sure the monitor (CRT/LCD/TFT) supports **1024x768 resolution**.
- 2) Connect monitor connector to the monitor socket (VGA D-Sub) of Blue Zoo main PCB.

● SPEAKER

- 1) Audio Amplifier of hardware is newest powerful stereo Amplifier. It uses 2 set separate speakers for Audio Out. Connect **two speakers to (R+:R-) and (L+:L-)** of J3.
- 2) **Don't connect any of "Audio Out" to Ground (GND) or link directly the speaker to Ground. In the case of wrong Ground linkage, it will cause PC Board (hardware) damage.**



- 3) The **20watt, 8 ohm speaker and more** is recommended. If the power of speaker doesn't enough, the "distortion" may find when audio out.

● TOUCH PANEL

- 1) It's optional and shows relative function automatically after connect.
- 2) Make sure the panel is **3M Microtouch panel or compatible**, and connect to **DP3 – Touch Panel port**. The screen will show relative buttons and function this moment.
- 3) Calibrate: Press [Test/ Setup] on the cabinet to go to "Test/ Setup Mode" and select "Touch Screen Calibrate". Touch a Cross symbol for two times to calibrate.

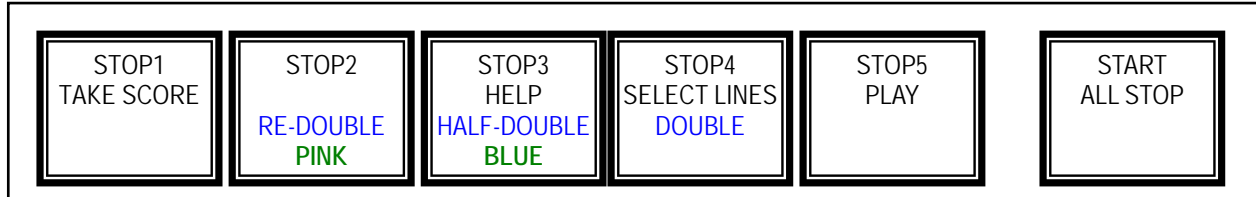
● BILL ACCEPTOR (SERIAL TYPE)

- 1) The game is available to use both pulse and serial type of Bill Acceptor.
- 2) If use serial type of Bill Acceptor as JCM WBA/ UBA or compatible, adjust Dip Switch Dip#1 to ON and link the connector of Bill Acceptor to **DP2** – Bill Acceptor.

● TICKET PRINTER AND SAS PROTOCOL

Both Ticket Printer (**DP1**) and SAS Protocol (**CMS**) are unavailable in the version, and supports in specific version only.

● CONTROL PANEL



Establish above buttons on the panel. Refer the page of Connector Diagram.

▶ **SELECT LINES**

Select the lines (1 Line, 3 Lines, 5 Lines, 7 Lines or 9 Lines) for playing.

▶ **STOP1, STOP 2, STOP 3, STOP 4, STOP 5**

Stop the reel by Stop1, Stop2, Stop3, Stop4 and Stop5.

▶ **DOUBLE, RE-DOUBLE, HALF DOUBLE, PINK, BLUE**

Select D-Up Mode (by Double, Half Double or Re-Double) and Play (by Pink or Blue).

▶ **START/ALL STOP**: Begin the game and again to stop all reels.

** Auto Play: Press Start button without release for over 1-2 seconds to trigger auto play function. Press again to disable the function.

▶ **PLAY**: To bet one credit for each select line.

▶ **TAKE SCORE**: Take winning score into POINT (or SCORE) after won.

▶ **HELP**: Check last game and game features before the player bets.

● POWER ON AND CHECK

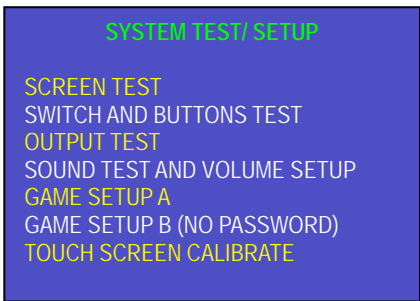
- 1) After you do all of above, please power on the game. Check +5V DC on main PCB side. The voltage between +4.95 to 5.05V DC is good.
- 2) Press [Test/ Setup] on the cabinet to go to “Test/ Setup Mode”.
- 3) Refer Page 4 to 7 of “Test/ Setup Mode” to set each setting.
- 4) Also, check each function and movement in Test/ Setup Mode. (All buttons & lamps, TV size and color adjustment ... etc.)
- 5) Please refer to page 10 of “Troubleshooting” or “Error” if you have any problems or malfunctions.

TEST AND SETUP

If you need to check the condition of the game circuitry, controls or set system value, you can use the Test/ Setup Mode.

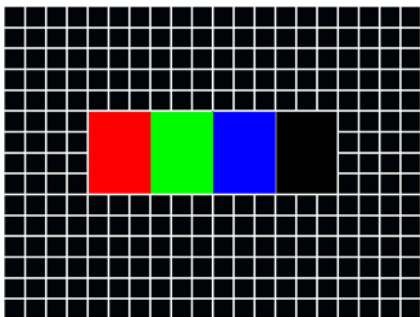
Power ON and Press [Test/ Setup] key will go to the mode, as right.

- Moving the bar by pressing [Stop1] button. After choosing one of the contents with the bar, press the [Stop5] to enter.
- Press [Start] to exit and back to game mode of main screen. In the case, the value you adjusted would available instantly, which don't necessary to turn off the power.



1) SCREEN TEST

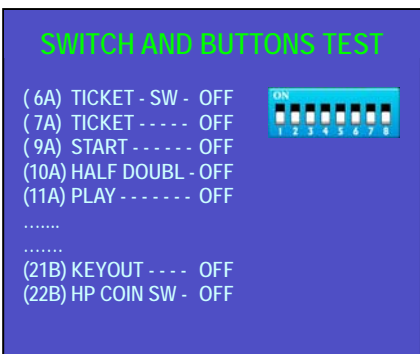
- Use this screen to check the color of monitor and the size of pictures.
- The color bands in the center should be Red, Green, Blue and White from left to right.
- The Cross Hatch test pattern has a white grid on a black background. The check as follows:
 - ▶ The grid line should be straight, and the lines should not have excessive pincushion or barrel distortion.
 - ▶ “Out” line of grid line is same size as “Out” line of game screen, which should able to be seen without overflow of grid lines on screen.
- If the screen does not match above description, adjust the monitor as described in the monitor’s manual.
- Press the [Start] button to back main menu.



2) SWITCH AND BUTTONS TEST

Use this screen to check the buttons and the switch in this game.

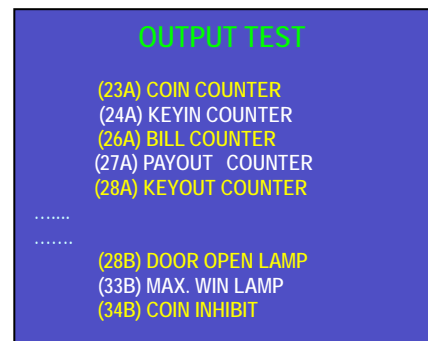
- To check the functioning of each button and switch, activate it and watch the corresponding “OFF” letters change to “ON”. If the “ON” and “OFF” letters don’t appear correctly, check the hardness connections and switches.
- Press the [Start] button to back main menu.



3) OUTPUT TEST

Use this screen to check the lamp of buttons in this game.

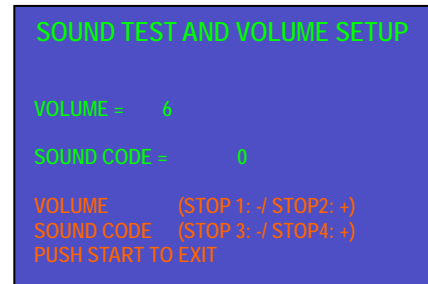
- To check the functioning of each output, including Counters and lamp of button. Press [Stop1] to move and press [Stop1] to test as watch the corresponding lamp ON.
- Counters, Bill Inhibit, Coin Inhibit and HP Full Out are to test the action, no lamp.
- Press the [Start] button to exit.



4) SOUND TEST AND VOLUME SETUP

Use this screen to check all game sounds and setup the volume as soft volume control.

- Adjust the volume by pressing [Stop1] to decrease and [Stop2] to increase.
- Choice a sound by pressing [Stop3] button (previous) or [Stop4] button (next), and the machine will make a sound in the moment.
- Press the [Start] button to back main menu.



5) GAME SETUP A

The setup items are important and operated by important person as owner only. The password is necessary before enter the screen of Game Setup A.

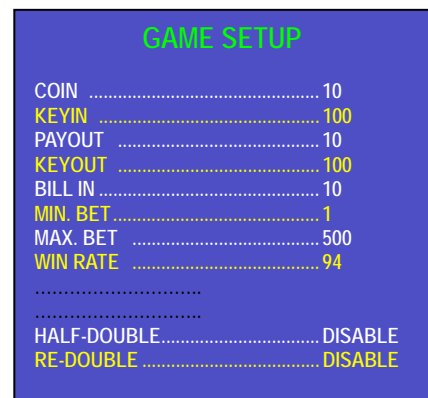
The default value is 111111 (six 1) and enable to change in same password screen.

[Stop1] button for 1; [Stop2] button for 2; [Stop3] button for 3;
[Stop4] button for 4; [Stop5] button for 5;

When the password input with correct, "OK!" is shown on the screen. To change new password, press [Max Bet] button and input new password as you want. Or, press [Start] button to enter screen of Game Setup.

Use the screen to manually adjust the game setting.

- Moving the bar by pressing [Stop1] button.
- Select the setting value by pressing [Stop5] button.
- Press the [Start] button to back main menu. In the case, the value you adjusted would available instantly, which don't necessary to turn off the power.



Contents	Setting Selection (Underlined in setting selection are default settings)
COIN	1, 2, <u>5</u> , 10, 20, 25, 50, 75, 100, 200, 300
KEYIN	1, 2, <u>5</u> , 10, 20, 25, 50, 75, 100, 200, 300, 500
PAYOUT	1, 2, <u>5</u> , 10, 20, 25, 50, 75, 100, 200, 300
KEYOUT	1, 2, <u>5</u> , 10, 20, 25, 50, 75, 100, 200, 300, 500
BILL IN	1, 2, <u>5</u> , 10, 20, 25, 50, 75, 100, 200, 300, 500
TICKET	1, 2, <u>5</u> , 10, 20, 25, 50, 75, 100, 200, 300, 500
MIN. BET	<u>1</u> , 5, 10, 20, 40, 60
MAX. BET	100, 200, 300, <u>400</u>
WINRATE	91, 92, 93, 94, 95, <u>96</u> , 97, 98, 99
GAME LIMIT	5000,10000,20000,30000,40000, <u>50000</u> ,60000,80000,100000,150000,200000
WIN RATE WAVE	<u>NORMAL</u> , HIGH
DOUBLE FUNCTION	<u>ENABLE</u> , DISABLE
HALF-DOUBLE	<u>ENABLE</u> , DISABLE
RE-DOUBLE	<u>ENABLE</u> , DISABLE
DOUBLE RATE	91, 92, 93, 94, 95, 96, <u>97</u> , 98
DOUBLE LIMIT	5000, 10000, 20000, <u>30000</u> , 40000, 50000, 60000, 80000, 100000
SCORE FUNC.	<u>ENABLE</u> , DISABLE
PLAY SCORE	<u>ENABLE</u> , DISABLE
HAND COUNT	<u>ENABLE</u> , DISABLE
CONTINUOUS SPIN	ENABLE, <u>DISABLE</u>
TICKET OUT MODE	<u>NO LIMIT</u> , MAX 1 TK, MAX 2 TK, MAX 3 TK, MAX 4 TK, MAX 5 TK
X10 VIA SCORE	ENABLE, <u>DISABLE</u>
TICKET CONTROL	<u>DIRECT</u> , INTERFACE
AUTOPLAY	<u>ENABLE</u> , DISABLE
MIN. JP BET	25, 33, <u>50</u>

- ▶ Coin: Adjust how many credits per insert coin.
- ▶ Keyin: Adjust how many credits per Keyin.
- ▶ Payout: Adjust how many credits per pay coin.
- ▶ Keyout: Adjust how many credits per pay Step when Keyout.
- ▶ Bill In: Adjust how many credits per Bill signal.
- ▶ Ticket: Adjust how many credits per Ticket
- ▶ Min Bet: Adjust how many min bets to start the game.
- ▶ Max Bet: Adjust how many max bets can bet at one play.
- ▶ Win Rate: Adjust total rate % of game.

The win Rate is calculated and defines as follows:

$$\text{Win Rate} = \frac{\text{Total Won Score}}{\text{Total Played Score}}$$

Since this is quite different from some games, which defined the rate as “Coin Out” divided by “Coin In” (Usually call Payout Rate). You shouldn't set the win rate at the same value used in the games. In our experience, the ideal Win Rate is 94%.

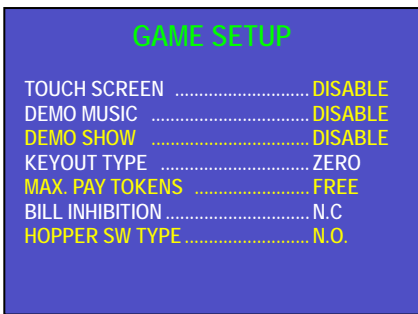
Please don't RESET except necessary. Generally, to stabilize the rates, the game should operate a period (more long, more steady) for the balance. To zero by RESET, the value would recount from starting point.

- ▶ Game Limit: Adjust how many credits game can hold.
- ▶ Win Rate Wave: It's to assign the prizes and rate. Big wave has more big prizes and focus more win or lose. Small wave has more small prizes and rate with more steady.
- ▶ Double Func.: Play D-Up game when Main Game won. The play score in D-Up is winning score in main game.
- ▶ Re-Double: The play score in Double Up is twice winning score in main game.
- ▶ Half Double: The play score in Double Up is a half of winning score in main game.
- ▶ Double Rate: The rate of D-Up game and defines as Win Rate.
- ▶ Double Limit: To limit the winning score in Double Up. The system will take the score automatically when winning score is over Double Limit.
- ▶ Score Func.: Open "Score" Meter and collect all of Win value (Not take into "Point (Credit)" meter).
- ▶ Play Score: To play the value of "Score" Meter after Credit is 0 (zero).
- ▶ Hand Count: To open "Hand Count" Meter and calculate play times. The Max. Payout (or Ticket Out) will limit as the value of "Hand Count" Meter.
- ▶ Continuous Spin: The Reels will spin without stop till press Stop (or all stop) button.
- ▶ Ticket Out Mode: It limits Max. Tickets out.
- ▶ X10 Via Score: To limit Win value into "Score" meter. There are two terms are checked for both "20 times of Coin value" and "10 times of Bet value". The lower one is Max value to take into "Score" meter, and outstanding Win value will take into "Point (Credit)" meter.
- ▶ Ticket Control: To drive Ticket Dispenser by Subsino PC board (Direct) or additional Sub-Board (Interface).
- ▶ Auto Play: To enable or disable "Auto Play" function. If yes, press Start button without release for over 1-2 seconds to trigger auto play function, and press again to disable the function.
- ▶ Min. JP Bet: To set Min Bet to win Jackpot.

6) GAME SETUP B (NO PASSWORD)

The setup items are general ones and can operate by the staff in field. The password is unnecessary for the function of Game Setup B.

Use the screen to manually adjust the game setting.



Contents	Setting Selection (Underlined in setting selection are default settings)
TOUCH SCREEN	ENABLE, <u>DISABLE</u>
DEMO MUSIC	<u>ON</u> , OFF
DEMO SHOW	<u>ON</u> , OFF
KEYOUT TYPE	<u>ZERO</u> , REST
MAX. PAY TOKENS	200, <u>300</u> , 400, 500, FREE
BILL INHIBITION	<u>N.C.</u> , N.O.
HOPPER SW TYPE	<u>N.C.</u> , N.O.
AUTO PLAY	<u>ENABLE</u> , DISABLE

- ▶ Touch Screen: To enable or disable Touch Function.
- ▶ Demo Music: To enable or disable demo music.
- ▶ Demo Show: To enable or disable demo function.
- ▶ Keyout Type: Adjust Keyout should take to 0 (zero) or under one Keyout value (rest).
- ▶ Max Pay Tokens: Adjust max coins are paid, which to avoid the hopper empty.
- ▶ Bill Inhibition: For Bill Acceptor. N.C. - Normal close (low), N.O. – Normal Open (Hi).
- ▶ Hopper Sw. Type: For Hopper. N.C. - Normal close (low), N.O. – Normal Open (Hi).
- ▶ Auto Play: To enable or disable play automatically.

7) TOUCH SCREEN CALIBRATE

The item appears only when Touch Panel was connected. It's to calibrate the touch position. Enter the item and touch a Cross symbol for two times to calibrate.

8) DIP SWITCH FUNCTION

DIP SWITCH		1	2	3	4	5	6	7	8
BILL ACCEPTOR	Serial Pulse	ON OFF	JCM bill acceptor or compatible						
DOOR OPEN	N.C. N.O.		ON OFF						
HOPPER PULSE (Milli-Second)	30 ms			OFF	OFF				
	40 ms			ON	OFF				
	50 ms			OFF	ON				
	60 ms			ON	ON				

BOOK

Press [Book] button to enter Book screens. Press [Stop5] to enter next page and [Stop1] for previous page. Press [Start] button to back normal game.

First Page



The page shows the records from last “check out” till now.

Total Times: Total played times.
 Total Played: Total played score.
 Total Won: Total won score.

“Check Out”: To clear this page. Please refer Page 9, Reset function for Clear Current Record Only.

Second Page

		SCORE	COUNTER
COIN			
PAY OUT			
KEY IN			
KEY OUT			
BILL IN			
NET			
		PLAYED	WON
TOTAL			
MAIN			
DOUBLE			
		PLAYED.TIMES	WIN.TIMES
TOTAL			
DOUBLE			
POWER TIME			

Previous Page (Press 1 LINE) | Press START to Return to Game | Next Page (Press 20 LINE)

The Score column of top form shows the score of Coin, Payout, Keyin, Keyout, Bill In and Net.

The Counter column shows "System Counters". It doesn't able to clear by anyway and affected by Reset function, which to compare relatively with machine's mechanical counters when "check out each time".

Total/Main/Double Played & Total/Main/Double Won
Played scores and Won scores in Total/ Main game/ Double game.

Total/Double Play Times & Total/Double Win Times
Played times & Win times in Total/Double game.

Power Times: The times of Power ON.

Third page

	TIME	SCORE
JACKPOT 1		
JACKPOT 2		
JACKPOT 3		
JACKPOT 4		
JACKPOT 5		
FORTUNE WHEEL		
JACKPOT FEVER		

Previous Page (Press 1 LINE) | Press START to Return to Game | Next Page (Press 20 LINE)

Jackpot 1/Jackpot 2/Jackpot 3/Jackpot 4/Jackpot 5
Times & Score

Win times and win score of Jackpot 1/Jackpot 2/Jackpot 3/Jackpot 4/Jackpot 5

Fortune Wheel: It shows win times and score of Fortune Wheel bonus game.

Jackpot Fever: It shows win times and score of Jackpot Fever game, except Jackpot value.

Fourth & Fifth page: Both pages shown winning times of each prize.

ALL		
ALL		
ALL		
ALL		
ALL		
ALL		
ALL		
ALL		

Previous Page (Press 1 LINE) | Press START to Return to Game | Next Page (Press 20 LINE)

Previous Page (Press 1 LINE) | Press START to Return to Game | Next Page (Press 20 LINE)

RESET (Clear)

- **CLEAR ALL**

Turn off the power. Turn on [Book] and [Setup] key simultaneously and then turn on the power. (If [Book] or [Setup] make by the buttons, you should press without release.)

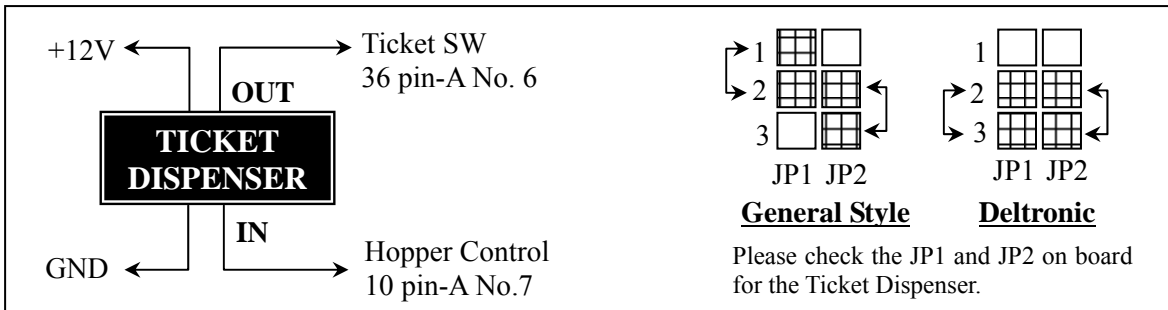
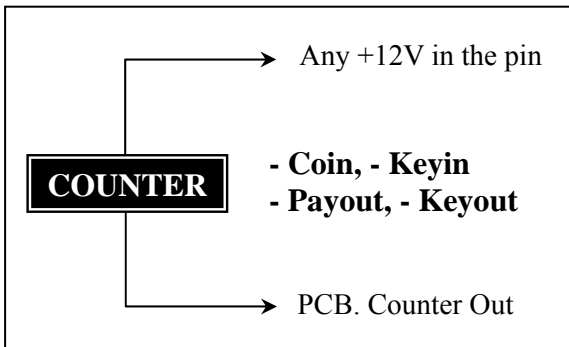
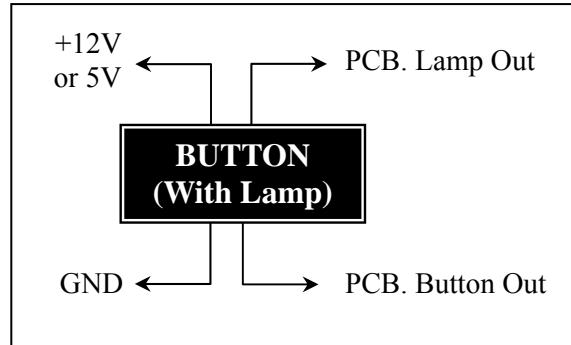
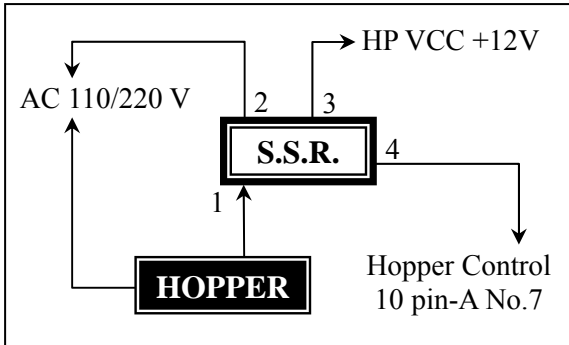
The screen will show "System Reset", which means all of Book data have cleared and game setup values have changed to default value. ("System Counters" in the second page of Book remain unchanged and cleared to zero.).

- ▶ RESET button on the board is unavailable in current version.
- ▶ You should do RESET if you change the Master Rom (Rom_1).
- ▶ Don't forget to do RESET after changed the Win Rate.

- **CLEAR CURRENT RECORD ONLY (CHECK OUT)**

Turn on [Book] Key (or press [Book] button) to enter first page of Book for Current Record. Press [Stop2] and [Stop3] button simultaneously to clear the data of this page. The total records (second page) for from initial operation remain unchanged by this function.

MACHINE PAYOUT



ICT BILL ACCEPTOR - CONNECTOR – CN#1

- PIN#1(Red) - To PCB +12V
- PIN#2(Orange) - To PCB GND
- PIN#3(Yellow) - To PCB +12V
- PIN#4(Green) - To PCB BILL GND (36 Pin Side A, #34)
- PIN#5(Blue) - To PCB BILL (36 Pin Side A, #15)
- PIN#6(Purple) - Unused

ERROR MESSAGE

MESSAGE	DESCRIPTION
System Error	The system may a little confusion instantly. Please do Reset function.
Coin Jam	Power off. Remove the jammed coin from coin selector and power on again. For general error (without jam), press directly “Reset Error” button.
Hopper Jam	Power off. Remove the jammed coin from the hopper and power on again. For general error (without jam), press directly “Reset Error” button.
Hopper Empty	Hopper without Coins/Tokens. Please power OFF and insert Coins/Tokens then power ON again.

TROUBLESHOOTING

SITUATION	FIX
Coin Error	Check coin switch, coin selector and wire wrong.
No sound	<ul style="list-style-type: none"> ● Check the wire of (R+:R-) and (L+:L-) of J3. Two Speaker GND need to be wired separately and don't use same ground. ● Check “Volume setup” on setup page whether close or not.
The counter doesn't work	Check the +12V DC (or +5V DC) line of the counter wire. The wires sometimes are not linked together 10 pin edge connector side of hardness. Please re-wire.
Malfunction of the button, switch and lamps	Check the GND wire. The button, Switch GND has to wire with common GND. Or, check micro switch of button is too old or dirty and the lamp whether out of order.
Coin or Keyin with wrong value	<ul style="list-style-type: none"> ● Check Coin and Keyin wire. Keyin SW port may wire to Coin SW or Bill Acceptor and so on. Please re-wire to correct port. ● Check Game Setup.
Test/ Setup unavailable	Check connection of GND wire between “Test/ Setup” line and common GND line. The GND wire needs to connect with other common GND line.
The Monitor unregulated or Wavy	Adjust the brightness, size and so on as described in the monitor's manual.

CONNECTOR DIAGRAM

Blue Zoo (USA)

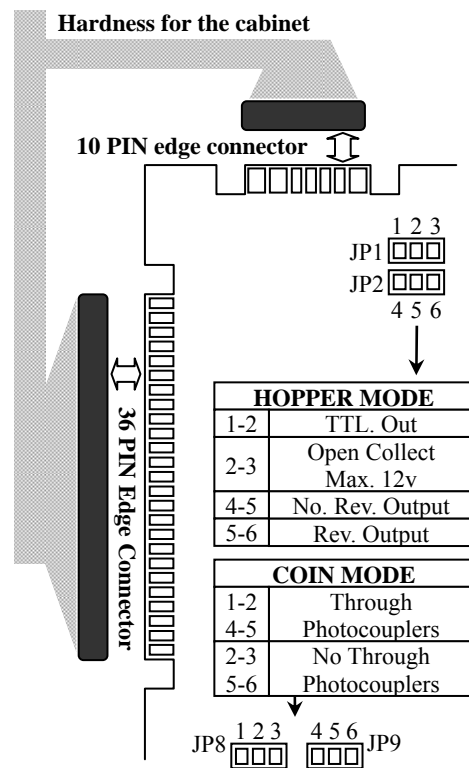
COMPONENT SIDE A	36 PIN	SOLDER SIDE B
	1	
	2	
	3	
	4	
	5	
	6	
Ticket Out button	7	
Ticket SW	8	
Start	9	
Help/ Half Double/ Stop3	10	
Play/ Stop5	11	
Take Score/ Stop1	12	
Select Line/ Double/ Stop4	13	
Attendant	14	
Reset Error	15	
Re-Double/ Stop2	16	
	17	
Coin	18	Keyin
Door Alarm	19	
Book	20	Test/ Setup SW
Payout	21	Keyout SW
	22	Hopper SW ⁽¹⁾
Coin Counter	23	Attendant Lamp
Keyin Counter	24	
	25	
	26	
Payout Counter	27	
Keyout/ Ticket Counter	28	
Start Lamp	29	
Half Double/ Stop3 Lamp	30	
Play/ Stop5 Lamp	31	Game Count Out
Take Score/ Stop1 Lamp	32	
Double/ Stop4 Lamp	33	
Re-Double/ Stop2 Lamp	34	Coin GND
	35	
GND	36	GND

COMPONENT SIDE A	10 PIN	SOLDER SIDE B
GND	1	GND
GND	2	GND
+5V	3	+5V
+5V	4	+5V
+12V	5	+12V
	6	
Hopper Control ⁽²⁾	7	HP VCC ⁽³⁾
	8	
GND	9	GND
GND	10	GND

⁽¹⁾ HP Coin SW: Out signal for Hopper

⁽²⁾ HP Control: In signal for Hopper

⁽³⁾ HP VCC - (DC+12V)



► Reset Error button: To correct instantly “Coin Error”, “Coin Jam” and “Hopper Jam” etc.