

VIKING LEGEND

(SUBSINO CASINO GAME – HIGH RESOLUTION SERIES)

The Viking Legend delivers an excellent fold-down player that will make the lucky times even better. It's loaded with extra features and originally designed to make casino playing fun.

Players will love the action and ocean adventure of find the fortune!



HOW TO PLAY

- Insert coin(s) or bill(s).
- Press [Bet] to bet one credit for one line and again for next line. The Bet should be in circle for 8 lines. Or, press [Max Bet] for max bet.
- Then press [Start] button to begin to spin. Press [Stop1], [Stop2], [Stop3] or [All Stop] to stop the reels.
- When you have any win combination, you win. And, press [Take Score], [Double Up], [Half Double] or [Re-Double]. If the Double-Up function is disabled, the system will take score automatically.
- If lost, press [Start] button for next game. Or, press [Hold1 or [Hold2 or [Hold3] (Column Hold mode)/ [Hold](Symbol Hold mode) to keep good combination and press [Start] again.
- Press [Help] to check the last result of game.



GAME FEATURES

- **CAPTAIN SYMBOL:** Captain is wild as joker to replace any symbols.
- **RE-SPIN:** The winning combination with 3 same symbols land an active line, it should hold and outstanding reels will spin again for great award.
- **MAP BONUS:** Initiated when 3 Map symbols land on a played line, and starting with island navigation for the bonus.

Spin the reel for the steps to reveal the award. Spin again for next steps for next award. Ends when step at Dead Island.

- **HOLD MODE:** Two modes to select in Setup for Column Hold and Symbol Hold.

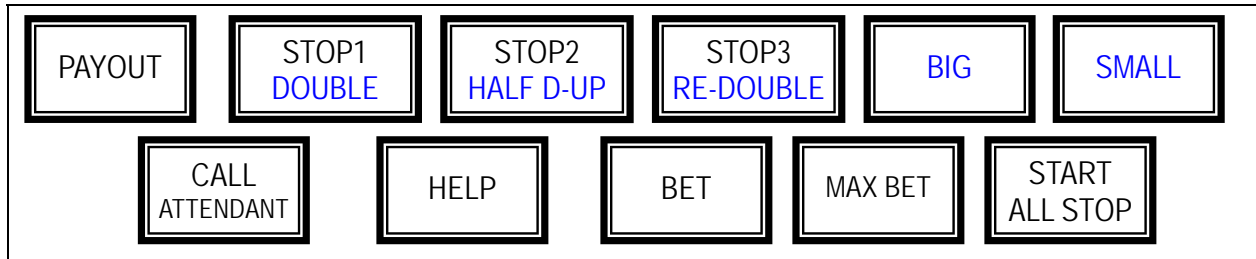


INSTALLATION

● MONITOR

- 1) Make sure the monitor has 31K mode or computer monitor. Don't connect "Red, Green, Blue, Sync" and using VGA connector.
- 2) Connect monitor connector to the monitor socket of Viking Legend main PCB (P1).

● CONTROL PANEL



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

- ▶ **STOP1/ HOLD1 / SYMBOL HOLD/ DOUBLE, STOP2/ HOLD2/ HALF DOUBLE, STOP3/ HOLD3/ RE-DOUBLE**
(1) Stop or Hold the reels of the column. (2) Hold function at Symbol Hold Mode.
(2) Stop1, Stop2 and Stop3 for Double Up mode.
- ▶ **START/TAKE SCORE/ALL STOP**
(1) Start the game. (2) Take the score when winning. (3) Stop all reels.
- ▶ **HELP**
Check last game and game features before the player bets.

● MAIN PCB

- 1) Make sure you have powered-off game.
- 2) Mount the Viking Legend PCB on the cabinet.
- 3) Connect 36pin and 10 pin edge connector of the cabinet to Edge connectors (36pin & 10pin) of Viking Legend main PCB.

● 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". Refer Page 3 to 5 of "Test/ Setup Mode" to set each setting.
- 3) Also, check each function and movement in Test/ Setup Mode. (All buttons & lamps, TV size and color adjustment ... etc.)
- 4) Please refer to page 8 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.

SYSTEM TEST/ SETUP
SCREEN TEST
SWITCH AND BUTTONS TEST
LAMP TEST
SOUND TEST
GAME SETUP

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 [Small] button 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) BUTTONS AND SWITCH 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.

BUTTON/SWITCH TEST

(4A)	STOP 1	-----	OFF		
(5A)	STOP 2	-----	OFF		
(6A)	STOP 3	-----	OFF		
(7A)	BIG	-----	OFF		
(9A)	SMALL	-----	OFF		
(10A)	BET	-----	OFF		
(11A)	MAX. BET	---	OFF		
.....					
(21A)	PAYOUT	-----	OFF		
(21B)	KEYOUT	-----	OFF		
(22B)	HP COIN SW		OFF		

SW

ON							
1	2	3	4	5	6	7	8

3) LAMP TEST

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

- To check the functioning of each lamp of button, press [Stop1] and watch the corresponding button change to lamp ON. Press again for next lamp of button. If the lamp doesn’t light ON, check the hardness connections and lamps.
- BILL GND and COIN GND are to test the action, no lamp.
- Press the [Start] button to exit.

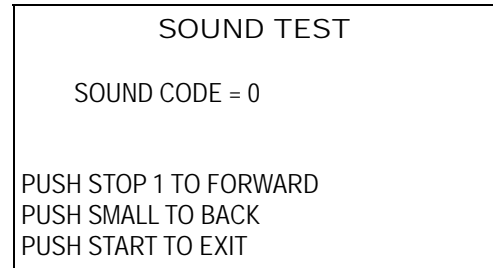
LAMP TEST

(29A)	---	STOP 1
(30A)	---	STOP 2
(31A)	---	STOP 3
(32A)	---	BIG
(33A)	---	SMALL
(34A)	---	BILL GND
(29B)	---	BET
(30B)	---	MAX. BET
(31B)	---	START
(32B)	---	HELP
(34B)	---	COIN GND

4) SOUND TEST

Use this screen to check all game sounds.

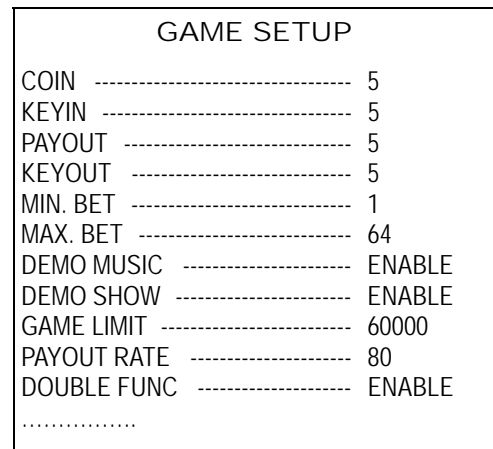
- Choice a sound by pressing the [Stop1] button (forward) or [Small] button (back), and the machine will make a sound.
- Press the [Start] button to back main menu.



5) GAME SETUP

The password is necessary before enter the screen of Game Setup. The default value is 111111 (six 1) and enable to change in same password screen.

Stop 1 button for 1 Stop 2 button for 2
 Stop 3 button for 3 Big button for 4
 Small button for 5



Use these screens to manually adjust the game setting.

- Moving the bar by pressing [Stop 1] button.
- After choosing one of the contents with the bar, select the setting style by pressing the [Small].
- 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
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
MIN. BET	1, <u>8</u> , 16, 24, 32, 40, 64, 80, 120
MAX. BET	8, 40, 64, 80, 120, 160, 200, 240, <u>280</u>
DEMO MUSIC	<u>ENABLE</u> , DISABLE
DEMO SHOW	<u>ENABLE</u> , DISABLE
GAME LIMIT	5000, 10000, 20000, 30000, 40000, <u>60000</u> , 80000, 100000, 200000
PAYOUT RATE	60, 65, 70, <u>75</u> , 80, 85, 90
DOUBLE FUNC.	<u>ENABLE</u> , DISABLE
DOUBLE LEVEL	<u>0 (EASY)</u> , 1, 2, 3, 4, 5, 6, 7(HARD)
DOUBLE LIMIT	5000, 10000, 20000, <u>30000</u> , 40000, 50000
PAY LIMIT	<u>300</u> , 400, 500, FREE
MAX. PRIZE	<u>ENABLE</u> , DISABLE
HOLD FUNC.	<u>ENABLE</u> , DISABLE
HOLD TYPE	<u>COLUMN</u> , SYMBOL
KEYOUT OVER	<u>ZERO</u> , REST
BILL TYPE	<u>N.C.</u> , N.O.
WIN RATE WAVE	BIG, <u>MIDDLE</u> , SMALL
RE-DOUBLE	<u>ENABLE</u> , DISABLE
HALF-DOUBLE	<u>ENABLE</u> , DISABLE

- 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 Keyout.
- Min. Bet: Adjust Min bets for one play.
- Max. Bet: Adjust Max bets for one play.
- Demo Music: To enable or disable demo music.
- Demo Show: To enable or disable demo function.
- Game Limit: Adjust how many credits game can hold.
- Payout Rate: Adjust total payout % of game, which defined as Coin Out / Coin In.

The Payout Rate is calculated and defines as follows:

$$\text{Payout Rate} = \text{Coin Out} / \text{Coin In}$$

Since this is quite different from some games, which usually defined the win rate as “Total score won” divided by “Total score played” (Usually call Main Game Rate). You shouldn't set the win rate at the same value used in the games. In our experience, the ideal Win Rate is 70-80%.

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.

- Double Func.: Play D-Up game when Main Game won. The play score in D-Up is winning score in main game.
- Double Level: Adjust the difficulty of Double.
- Double Limit: To limit the winning score in Double Up. The system will take the score automatically when winning score is over Double Limit.
- Pay Limit: Adjust max coins are paid, which to avoid the hopper empty.
- Max. Prize: To disable max prize - 9 Crown, is won.
- Hold Func.: To enable or disable hold function.
- Hold Mode: To change the hold mode for Column Hold or Symbol Hold.
- Keyout Over: Adjust Keyout should take to 0 (zero) or under one Keyout value (rest).
- Bill Type: For Bill Acceptor. N.C. - Normal close (low), N.O. – Normal Open (Hi).
- Win Rate Wave: The assignment of Rate. Big wave has more big prizes and focus more win or lose. Small wave has more small prizes and rate with more steady.
- 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.
- There is only one function set on Dip Switch of board for

DIP SWITCH		1	2	3	4	5	6	7	8
DOOR OPEN	N.O. N.C.		OFF ON						

BOOK

There are totally four pages for Book Records. Press [Book] button to enter Book screens. Press [Small] to enter next page and [Stop 1] for previous page. Press [Start] button to back normal game.

FIRST PAGE

CURRENT RECORD	
COIN	0
PAYOUT	0
KEYIN	70900
KEYOUT	40265
NET	30635
TOTAL TIMES	8827
TOTAL PLAYED	215641
TOTAL WON	185006
OUT 2.00	

The first 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. Refer RESET function for how to clear.

OUT2.00 – Version number.

SECOND PAGE

	SCORE	COUNTER
COIN	0	000000
PAYOUT	0	000000
KEYIN	70900	000770
KEYOUT	40265	000397
NET		30636
	PLAYED	WON
TOTAL	215641	185006
MAIN	215641	185006
DOUBLE	0	0
	PLAY TIMES	WIN TIMES
MAIN	8927	4326
DOUBLE	0	0
POWER TIMES		1

The "Score" column of top form shows the score of Coin, Payout, Keyin and Keyout. The "Counter" column are "System Counters", which are unable to clear by anyway and don't affected by RESET to compare relatively with machine's counter for check out each time.

Total Played: Total played scores.

Total Won: Total won scores.

Main Played: Played scores in Main Game.

Main Won: Won scores in Main Game.

Main Play Times & Win Times: Played times & Win times in Main Game.

Double Play Times & Win Times: Played times & Win times in Double Up.

Power Times: The times of Power ON.

Please refer directly the third page for winning times of each prize.

RESET (Clear)

● **CLEAR ALL**

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

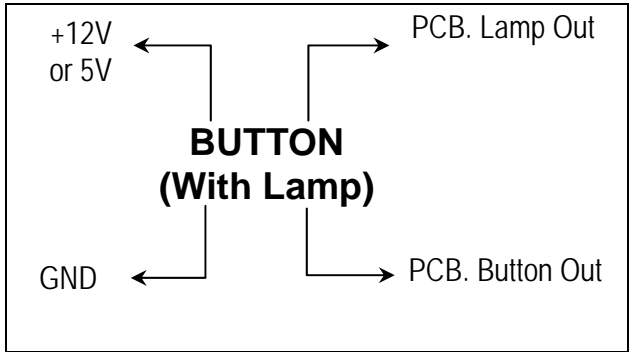
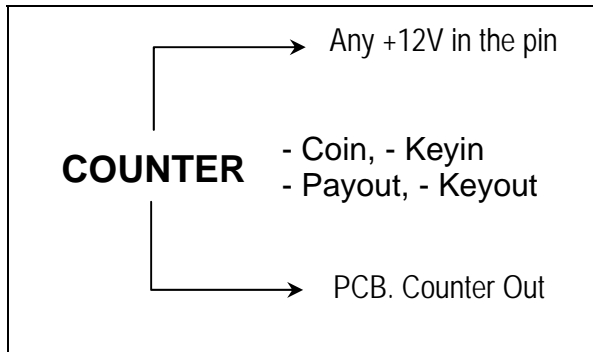
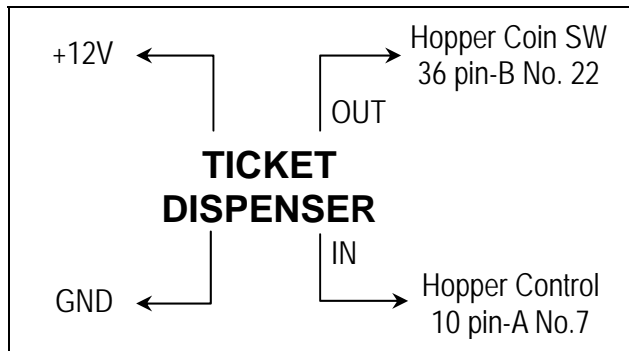
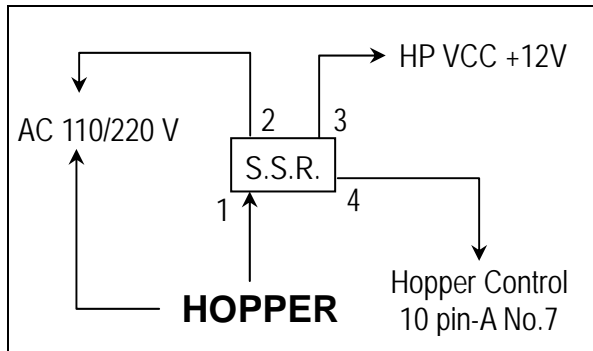
The screen will show "System Reset", which means all of Book data have cleared and game setup values have changed to default value. ("System Counters" in the second page of Book remain unchanged and cleared to zero.).

- ▶ 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 [Stop 2] and [Stop 3] 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



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 "Speaker(-)" on the cabinet side. "The "Speaker(-)" line needs to be wired separately to common GND line. ● Check "Volume control" on board 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 wired 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

Viking Legend (Standard)

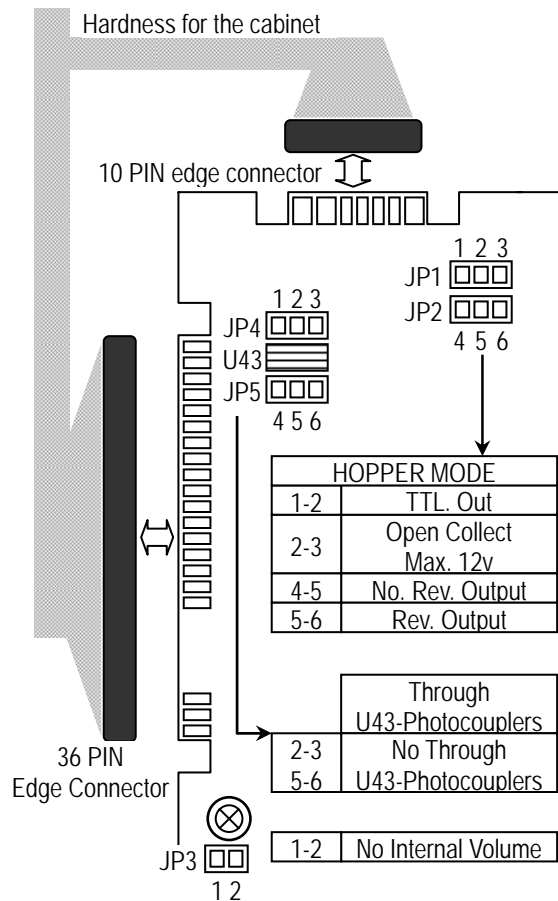
COMPONENT SIDE A	36 PIN	SOLDER SIDE B
	1	
	2	
Speaker	3	Speaker GND
Stop1/ Double	4	
Stop2/ Half D-Up	5	
Stop3/ Re-Double	6	
Big	7	
	8	
Small	9	
Bet	10	
Max. Bet	11	
Attendant	12	
Start	13	
Help	14	
Bill	15	
Reset Error	16	
	17	
Coin	18	Keyin
Door Alarm	19	
Book	20	Test/ Setup SW
Payout	21	Keyout SW
	22	Hopper SW
Coin Counter	23	Attendant Lamp
Keyin Counter	24	
	25	
	26	
Payout Counter	27	
Keyout Counter	28	
Stop1 Lamp	29	Bet Lamp
Stop2 Lamp	30	Max Bet Lamp
Stop3 Lamp	31	Start Lamp
Big Lamp	32	Help Lamp
Small Lamp	33	Payout Lamp
Bill GND	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	
(2) Hopper Control	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.