

# STONE AGE

TM

~ USER MENU ~

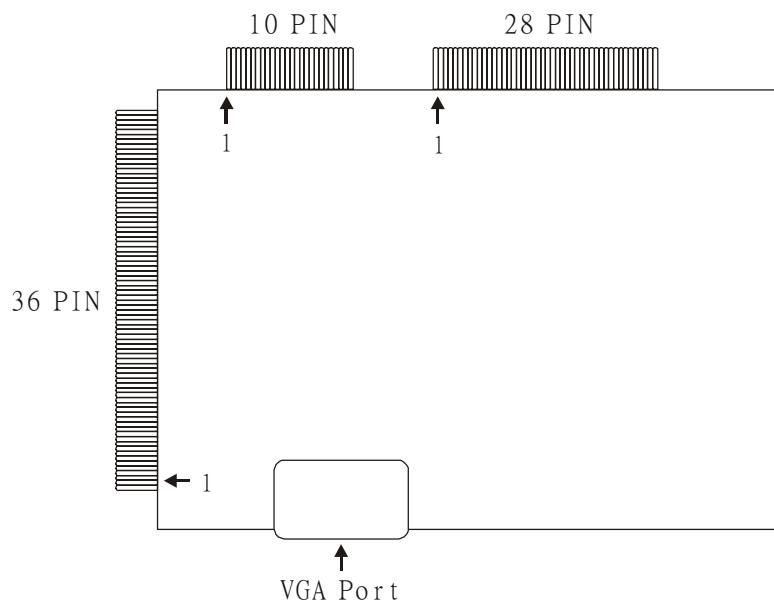


ASTRO CORP.

## TABLE OF CONTENTS

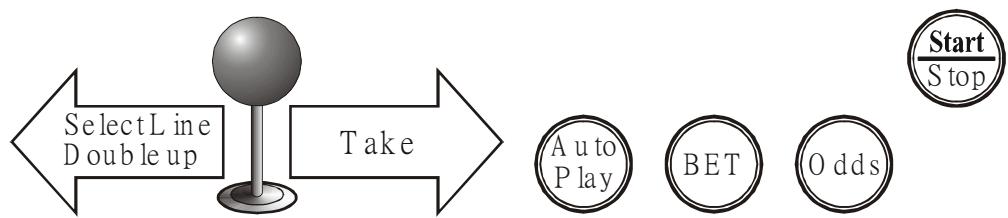
PC Board Connectors Layout.....	1
28 PIN & 36 PIN Button Layout .....	2
Data Setting List.....	3
Main Menu .....	4
Information .....	5
Data Setting.....	6 ~ 7
Bookkeeping.....	8 ~ 11
I/O Test.....	12
How To Play Main Game .....	13 ~ 15
How To Play Happy Hour.....	16
How To Play Dino .....	17
How To Play Savage .....	18
How To Play Dino Jackpot .....	19
How To Play Egg Jackpot .....	20
How To Play Double -Up Game .....	21 ~ 22
How To Play Bonus Game1 .....	23 ~ 24
How To Play Bonus Game2 .....	25 ~ 26
Troubleshooting .....	27
Special Note.....	28
Password.....	29
Diagnostics .....	30 ~ 31

## PC BOARD CONNECTERS LAYOUT



## 28 PIN & 36 PIN BUTTON LAYOUT

### 28 PIN Button Layout



According to Diagram (3).....page.30

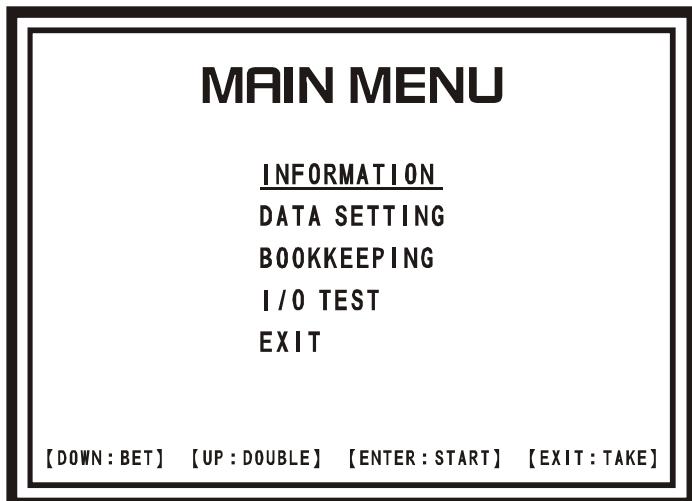
### 36 PIN Button Layout



## DATA SETTING LIST

<b>1</b>	COIN IN UNIT	1,2,4,5,10,15,20,25,50,75,80,100,200,500
<b>2</b>	KEY IN UNIT	1,10,15,20,25,50,75,100,300,500,1000,3000,5000
<b>3</b>	BILL UNIT	OFF,1,10,15,20,25,50,75,100,300,500,1000,3000,5000
<b>4</b>	KEY OUT AS	AS COIN IN,AS KEY IN,CLEAR ALL
<b>5</b>	KEY OUT UNIT	1,2,4,5,10,15,20,25,50,75,80,100,200,500
<b>6</b>	CREDIT LIMIT	5000,10000,20000,30000,50000,100000,300000,500000,1000000
<b>7</b>	COIN OUT LIMIT	NO LIMIT,100,200,300,500,1000,2000,3000,5000
<b>8</b>	MAX. BET / LINE	1,2,3,4,5,6,8,10,15,20,25,30
<b>9</b>	MIN. BET / TOTAL	1,5,10,15,20,25,50,75,100,125,150,200,250,375,500,625,750
<b>10</b>	JP MIN. BET	25,50,75,100,125,150,200,250,375,500,625,750
<b>11</b>	DOUBLE UP GAME	ON,OFF
<b>12</b>	MAIN GAME RATE	98,97,96,95,94,93,92,91
<b>13</b>	PAYOUT RATE	LOW,NORMAL,HIGH
<b>14</b>	DINO JP PROGRESSIVE SPEED	NO PROGRESSIVE,30,40,50,60,70,80,90,100,110
<b>15</b>	DINO JP MAX. VALUES	MAX_BET* 100,200,300,400,500,800,1000,1200,1500,2000
<b>16</b>	DINO JP MIN. VALUES	JP_BET* 50,100,200,300,400,500,600,700,800,1000
<b>17</b>	EGG JP PROGRESSIVE SPEED	NO PROGRESSIVE,30,40,50,60,70,80,90,100,110
<b>18</b>	EGG JP MAX. VALUES	MAX_BET* 100,200,300,400,500,800,1000,1200,1500,2000
<b>19</b>	EGG JP MIN. VALUES	JP_BET* 50,100,200,300,400,500,600,700,800,1000
<b>20</b>	DEMO SOUND	ON, OFF
<b>21</b>	WIN TO	CREDIT,POINT
<b>22</b>	POINT MODE PLAY	ON, OFF
<b>23</b>	AUTO PLAY	ON, OFF
<b>24</b>	DOOR OPEN ALARM	YES, NO
<b>25</b>	PASSWORD	NO USE, 1, 2, 3, 4, 5, 6, 7

## M A IN M ENU



1. Press **《TEST》** button to enter the Main Menu page.
2. The Main Menu contains: **《INFORMATION》** , **《DATA SETTING》** **《BOOKKEEPING》** and **《IO TEST》**
3. Press **《TAKE》** to exit Main Menu.

## INFORMATION

### INFORMATION

GAME NAME	: STONE AGE
GAME TYPE	: MULTI-LINER
DEVELOPER	: ASTRO CORP.
PUBLISH DATE	: 2004/6/12
VERSION	: 0.00.00.A

[EXIT: TAKE]

- 1.Press 《TEST》 button to enter the Main Menu.
- 2.Select 《INFORMATION》 to enter the Information page.
- 3.Press 《TAKE》 to exit the Information page.

## DATA SETTING

### DATA SETTING

COIN IN: 1 COIN 10 CREDITS  
KEY IN: 1 TURN 100 CREDITS  
BILL IN: 1 PULSE 100 CREDITS  
COIN OUT: 1 PAY 10 CREDITS  
KEY OUT: AS KEY IN  
CREDIT LIMIT: 30000  
COIN OUT LIMIT: NO LIMIT  
MAX. BET/LINE: 10(250)  
MIN. BET: 1  
JP MINIMUM BET: 125  
MORE. . .

[DEFAULT:BET+AUTO] [GAME RESET:BET+ODDS]  
[DOWN:BET] [UP:DOUBLE] [CHANGE:START] [EXIT:TAKE]

- 1 Press 《TEST》 button to enter the Main Menu page.
- 2 Select 《DATA SETTING》 to enter the Data Setting.
- 3 Press 《DOUBLEUP》 or 《BET》 to choose the selection.
- 4 Press 《START》 to change the values.
- 5 Press 《BET》 + 《AUTO PLAY》 to load the factory default (Data Format).
- 6 Press 《TAKE》 to exit Data Setting.
- 7 Press 《BET+ODDS》 to reset the bookkeeping data, but would not change the value in the setting.

\*There are total 3 pages in the data setting

# SYSTEM RESET

DO YOU WANT TO RESET ?

YES

NO

[SELECT : BET] [ENTER : START] [EXIT : TAKE]

The program will reconfirm the reset instruction.

## BOOKKEEPING

LAST RECORD		
TOTAL IN	:	400
TOTAL OUT	:	0
CURRENT CREDIT	:	150
CURRENT POINT	:	0
TOTAL PROFIT	:	250
PAYOUT RATE	:	0.00%
MAIN GAME IN	:	250
MAIN GAME OUT	:	0
MAIN GAME RATE	:	0.00%
DB. GAME IN	:	0
DB. GAME OUT	:	0
DB. GAME RATE	:	0.00%

[CLEAR LAST RECORD : BET+AUTO]  
[NEXT PAGE : BET] [PREV PAGE : DOUBLE] [EXIT : TAKE]

1 / 12 PAGE

- 1 Press 《TEST》 button to enter the Main Menu.
- 2 Select 《BOOKKEEPING》 to enter the Bookkeeping.
- 3 Press 《DOUBLE UP》 or 《BET》 to go to the next page.
- 4 Press 《TAKE》 to exit Bookkeeping.
- 5 There are total 12 pages. (6 pages for the Last Record and 6 pages for Total Record)
- 6 Press 《BET》 + 《AUTO》 to clear the “Last Record”
- 7 Total Record would not be reset unless to reset the system.

## LAST RECORD

TOTAL GAME	:	1
TOTAL HITS	:	0
TOTAL LOST	:	0
HIT RATE	:	0.00%
COIN IN	:	0
KEY IN	:	400
BILL IN	:	0
COIN OUT	:	0
KEY OUT	:	0
CURRENT CREDIT	:	150
CURRENT POINT	:	0

[CLEAR LAST RECORD : BET+AUTO]  
[NEXT PAGE : BET] [PREV PAGE : DOUBLE] [EXIT : TAKE]

2/12PAGE

## LAST RECORD

	TIMES 0	OUT 0

[CLEAR LAST RECORD : BET+AUTO]  
[NEXT PAGE : BET] [PREV PAGE : DOUBLE] [EXIT : TAKE]

3/12PAGE

- 0 9 -

## LAST RECORD

	BONUS TIMES 1	OUT 0
	BONUS TIMES 0	OUT 0
	BONUS TIMES 0	OUT 0
	BONUS TIMES 0	OUT 0

HAPPY HOUR TIMES 0

HAPPY HOUR OUT 0

[CLEAR LAST RECORD : BET+AUTO]

[NEXT PAGE : BET] [PREV PAGE : DOUBLE] [EXIT : TAKE]

4 / 12 PAGE

## LAST RECORD

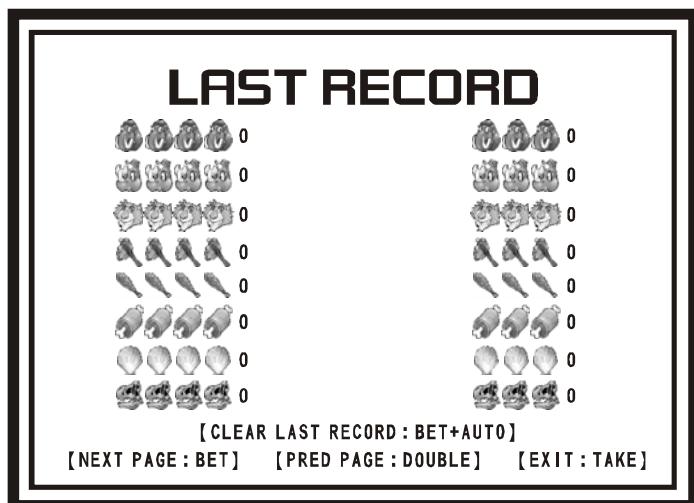
ALL  0	0

[CLEAR LAST RECORD : BET+AUTO]

[NEXT PAGE : BET] [PREV PAGE : DOUBLE] [EXIT : TAKE]

5 / 12 PAGE

- 10 -



6 / 12 PAGE

7~12 pages are Total Record. If the Total Record equals to the Last Record, the program would not show the Total Record.

## I/O TEST

I O TEST	
BUTTON	SWITCH
START : OFF	TEST : OFF
BET : OFF	COIN IN : OFF
DOUBLE UP : OFF	KEY IN : OFF
ODDS : OFF	KEY OUT : OFF
TAKE SCORE : OFF	HOPPER SW. : OFF
AUTO PLAY : OFF	ACCOUNT : OFF
PAY OUT : OFF	BILL IN : OFF
DOOR SWITCH : OFF	RESERVE SW. : OFF

[EXIT: TAKE(1SEC)]

- 1 · Press 《TEST》 button to enter the Main Menu.
- 2 · Select 《I/O TEST》 to enter the I/O Test.
- 3 · I/O Test includes all keyboard function testing.
- 4 · Press 《TAKE》 to exit I/O Test.

## HOW TO PLAY

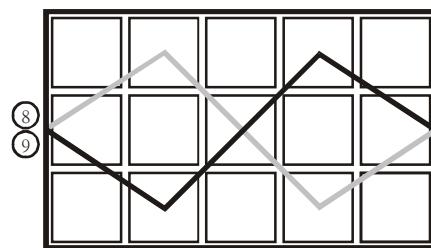
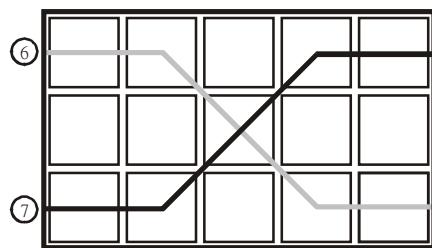
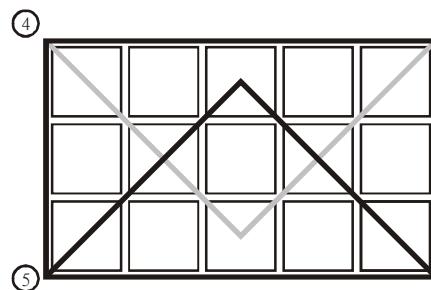
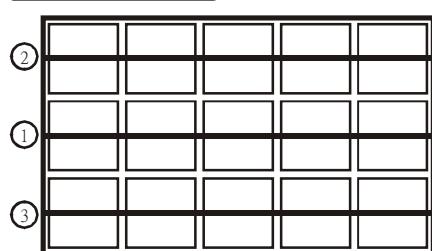
### A MAIN GAME

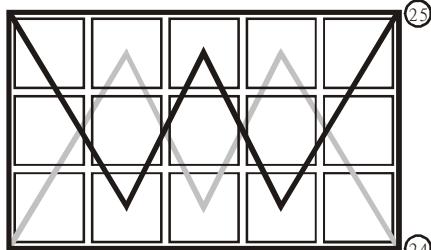
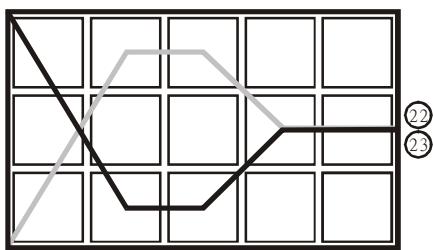
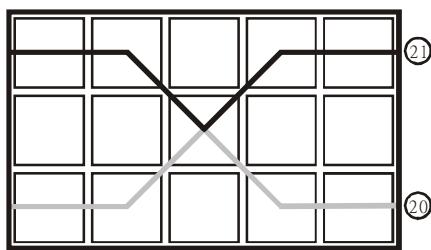
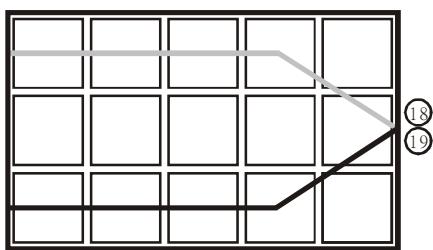
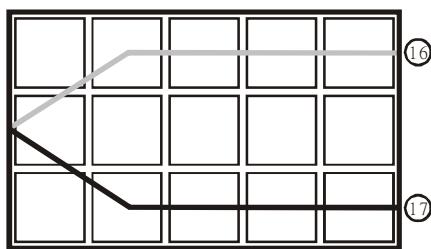
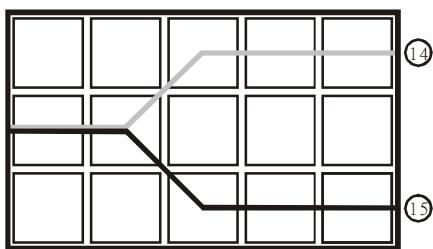
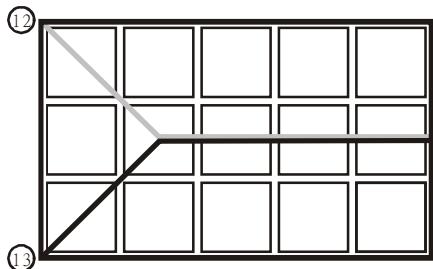
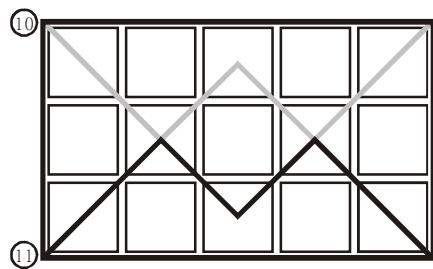


1 • 15-reel, 25-line style.

2 • Prize awarded when 3 or more of the same symbol lined up in an active line.

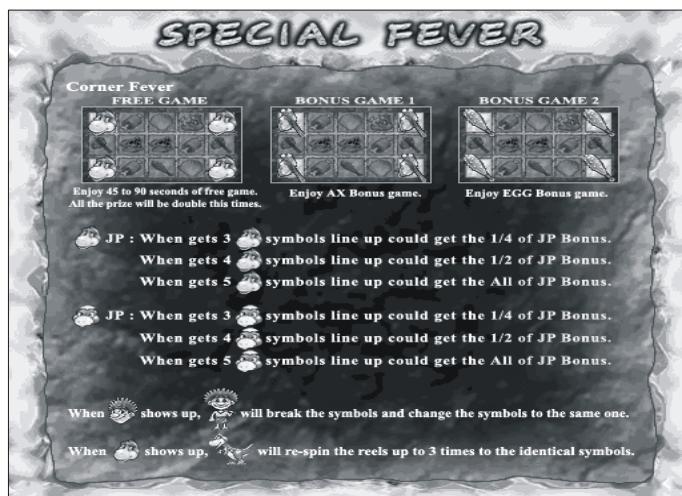
### PAY CHART





## ODDSTABLE

ODDS TABLE					
ALL OF A KIND (x TOTAL BET)					
ALL  2000	ALL  200	ALL  120	ALL  80		
ALL  500	ALL  150	ALL  100	ALL  60		
EACH LINE					
1000	100	50			
400	40	20			
150	30	12			
120	20	10			
100	15	7			
80	12	4			
50	10	3			
20	5	2			



**B** HAPPY HOUR



When all 4 comers have "BLUE DINO" symbol, player enters the "HAPPY HOUR" bonus round for 45~90 seconds. In "HAPPY HOUR", all prizes double.



In the "HAPPY HOUR" bonus, a "HAPPY HOUR" sign showed on the upper lefthand corner. A timer showed on the lower righthand corner.

C BLUE DINO



Blue Dino gives 3 extra re-spins.

D SAVAGE



The savage appears occasionally.



The savage hits and transforms any random symbol(s) into another symbol(s).



- 1 • When lined 3 or more "BLUE DINO" in an active line, player receives the EGG JP.
- 2 • Player receives all JP  
 Player receives 1/2 of JP  
 Player receives 1/4 of JP
- 3 • The MIN. value of DINO JP can be set in #16 in the Data Setting, Range 50~1,000 times of JPMIN.Bet.
- 4 • The MAX. value of DINO JP can be set in #15 in the Data Setting, Range 100~2,000 times of MAX.Bet.
- 5 • The progressive speed of DINO JP can be set in #14 in the Data Setting.

F EGG JP



1 • When lined 3 or more “ PINK DINO ” in an active line, player receives the EGG JP .

2 • Player receives all JP

Player receives 1/2 of JP

Player receives 1/4 of JP

3 • The MIN. value of EGG JP can be set in #19 in the Data Setting, Range 50~1,000 times of JPMIN.Bet.

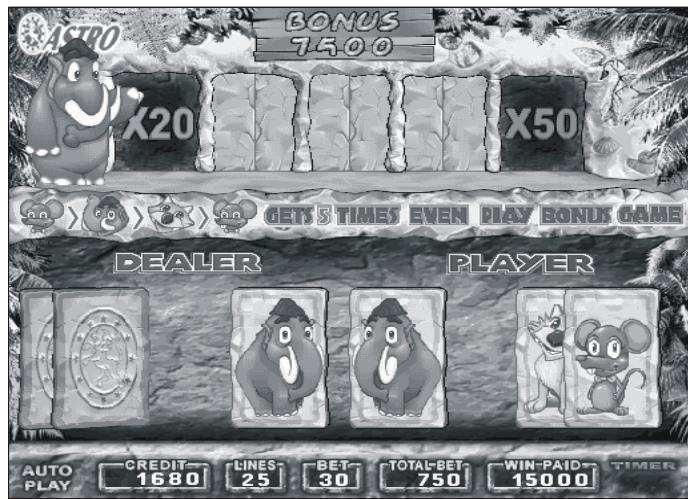
4 • The MAX. value of EGG JP can be set in #18 in the Data Setting, Range 100~2,000 times of MAX.Bet.

5 • The progressive speed of EGG JP can be set in #17 in the Data Setting.

**G DOUBLE UP GAME**



- 1 • Left hand side appears to be the dealer. The dealer will choose one card randomly.
- 2 • Lefthand side appears to be the player. The player chooses a card to out beat dealer's card. If the player out beat the dealer, the prize doubles. If the dealer wins, then player would lose all prize. If cards are even, then a light of Bonus will be given on top of the screen.
- 3 • Elephant > Cat > Mouse > Elephant



- 1 • In the double up game, if player plays even for 5 times straight, the door of prize opens.
- 2 • There are five doors, and four of the doors are from 1 to 50 times of betting and the other one has an animal symbol. Player continually choose doors of prize until opening a door with an animal symbol

H AX GAME



When all four comers have the symbol "AX" the player will enter the sub-game, Savage.



- 1 • The player will be giving 10 axes to attack the savage.
- 2 • Stopwatch is showed on the lower right hand corner. Each attack should be done in five seconds; otherwise the ax will be thrown itself.

3 • When the savage's being attacked by the ax, the scale of livability goes down and more points will be given to the player. If the savage blocks the ax, the scale of livability and points retain.

4 • The savage occasionally swings his wooden stick at player. The screen then turns red, and player loses one ax.

5 • The following chart represents the odds and the number of times the savage being attacked.

HITS	BET X
1	1
2	3
3	5
4	7
5	10
6	30
7	50
8	100
9	200
10	500

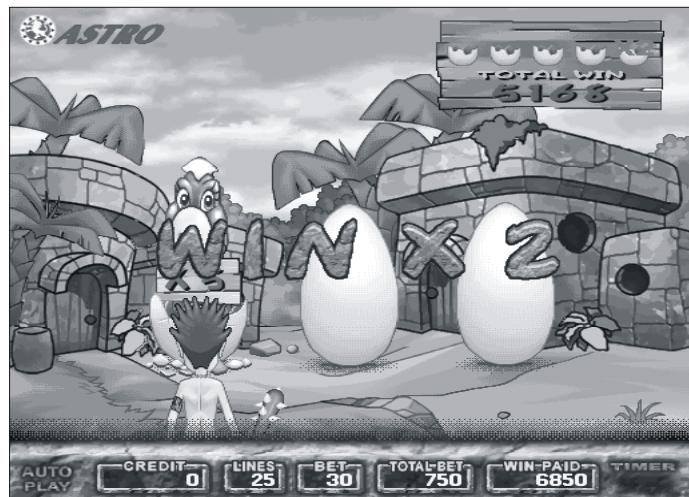
## I EGG CHALLENGE



When all four corners have the symbol "WOODEN CLUB", the player will enter the sub-game, Egg Challenge.



- 1 • Player would choose to break one of the three eggs. When player chooses the egg contains odds multiples, the player scores. When player chooses the egg contains the dragon with flame, the game is over.



- 2 • Player has to choose the egg in 5 seconds, otherwise the egg would be choosing itself. Stopwatch is showed on the lower righthand corner.
- 3 • Total maximum of 5 chances to choose. If the player chooses all eggs with odds 5 times straight, the scores double.

## SOLUTIONS FOR ERRORS

When an error has been detected, an error message would appear in the message column. Please try the following steps:

ERROR MESSAGE	SOLUTIONS
<b>ROM ERROR</b>	1. Restart the machine. 2. If step 1 does not clear the error, please contact the maker.
<b>RAM ERROR</b>	1. Restart the machine. 2. Go to DATA SETTING and Press BET + ODDS to reset. 3. If steps 1 and 2 do not clear the error, please either replace the RAM or contact the maker.
<b>EPPROM ERROR</b>	1. Restart the machine. 2. If step 1 does not clear the error, please contact the maker.
<b>COIN JAM</b>	1. Check the coin acceptor for any jamming. 2. Restart the machine and go to the main menu to exit.
<b>HOPPER JAM</b>	1. Check the Hopper for any jamming. 2. Restart the machine and go to the main menu to exit.
<b>HOPPER EMPTY</b>	1. Fill up the coins in the hopper. 2. Restart the machine and go to the main menu to exit.
<b>MAX. CREDIT</b>	1. Key out or coin out. 2. Increase the value of #6. MAX. CREDIT in the main menu and continue the game.
<b>DOOR OPEN</b>	1. Shut the machine door properly. 2. Choose OFF for #24 DOOR OPEN in the main menu.
<b>CALL ATTENDANT</b>	1. Key out or continue the game. 2. Increase the value of #7 MAX PAY OUT in the main menu to execute coin out.

## SPECIAL NOTICE

### <PAY OUT RATE> (#13 MAIN MENU)

High : Gives out more Big Prize, less Medium and Small Prizes.

Normal : Payout rate normal.

Low : Gives out more Medium, Small Prizes, less Big Prize.  
Player wins frequently

### CO IN-IN COUNTER, CO IN-OUT COUNTER, KEY-IN COUNTER, and KEY-OUT COUNTER .

#### CO IN-IN COUNTER :

1 • For each coin insert, the CO IN-IN COUNTER clicks once.

2 • CO IN-IN COUNTER also counts bills. Bill Unit is counted the same as the Coin Unit. Any remainder unit(s) count(s) in the next round.

Ex : Coin Unit = 10, Bill Unit = 15. When first bill inserts, counter clicks once. When second bill inserts, counter clicks twice.

#### CO IN-OUT COUNTER :

For each coin out, the CO IN-OUT COUNTER clicks once.

#### KEY-IN COUNTER :

For each key in, the KEY-IN COUNTER clicks once.

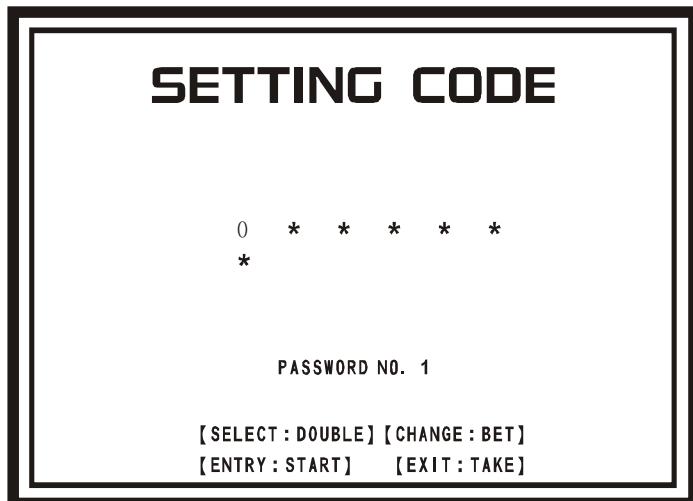
#### KEY-OUT COUNTER :

Follow the steps of #5 in the main menu.

1 • The cardinal number of CO IN-IN or KEY-IN is the number of clicks of ASCOIN IN or ASKEY IN.

2 • The cardinal number of KEY-IN is the number of clicks of CLEAR ALL. Any remainder goes to the next count.

## SETTING CODE



1 Press 《TAKE》 to exit the Password page.

2 Press 《DOUBLE》 to select the icons.

3 Press 《BET》 to change the value.

4 Press 《START》 to enter the setting page.

PASSWORD NO.	0	1	2	3	4	5	6	7
CODE	NO use	821215	106921	625806	398422	298015	566480	783818

## PIN LAYOUT

CONNECTOR (36PIN)

PARTS SIDE	SLODER SIDE
	1
	2
SPEAKER	3 <b>SPEAKER GROUND</b>
	4
	5
	6
BILL IN	7
	8
START /STOP	9
SELECTLINE /DOUBLE	10
BET	11
TAKE	12
AUTO	13
	14
	15
ODDS	16
	17
COIN IN SW ITCH	18 KEY IN SW ITCH
	19
ACCOUNT SWITCH	20 TEST SW ITCH
PAYOUT BUTTON	21 KEY OUT SWITCH
	22 HOPPER SW ITCH
COIN IN COUNTER	23
KEY IN COUNTER	24 HOPPER SSR
	25
	26
HOPPER COUNTER	27
KEY OUT COUNTER	28
START LAMP	29 (*3) COIN INHIBIT
SELECT LINE / DOUBLE LAMP	30 ERROR LAMP
BET LAMP	31 WIN LAMP
TAKE LAMP	32
AUTO LAMP	33
ODD SLAMP	34
	35
GND	36 GND

CONNECTOR (10PIN)

PARTS SIDE	SLODER SIDE
GND	1 GND
GND	2 GND
+5V	3 +5V
+5V	4 +5V
+12V	5 +12V
+12V	6 +12V
(*1) BA INHIBIT	7
(*2) HOPPER SSR	8
GND	9 GND
GND	10 GND

(\*1) BA Inhibit active low.

(\*2) This pin is connected with the solder side 24th pin of connector 36 pin.

(\*3) The coin accepter can only be started when under <LOW>.

**CONNECTOR (28PIN)**

PARTS SIDE		SLODER SIDE
GND	1	GND
GND	2	GND
+5V	3	+5V
+5V	4	+5V
	5	
+12V	6	+12V
	7	
<b>COIN IN COUNTER</b>	<b>8</b>	<b>HOPPER COUNTER</b>
<b>KEY IN COUNTER</b>	<b>9</b>	<b>KEY OUT COUNTER</b>
<b>SPEAKER</b>	<b>10</b>	<b>SPEAKER GROUND</b>
<b>KEY IN SW ITCH</b>	<b>11</b>	<b>PAYOUT BUTTON</b>
	12	
	13	
GND	14	TEST SW ITCH
<b>ACCOUNT SWITCH</b>	<b>15</b>	
<b>CO IN IN SW ITCH</b>	<b>16</b>	<b>ERROR LAMP</b>
<b>START /STOP</b>	<b>17</b>	<b>START LAMP</b>
<b>BILL IN</b>	<b>18</b>	<b>TICKET SSR</b>
	19	W IN LAMP
<b>SELECTLINE / DOUBLE</b>	<b>20</b>	<b>SELECTLINE / DOUBLE LAMP</b>
<b>TAKE</b>	<b>21</b>	<b>TAKE LAMP</b>
<b>AUTO</b>	<b>22</b>	<b>AUTO LAMP</b>
<b>BET</b>	<b>23</b>	<b>BET LAMP</b>
<b>ODDS</b>	<b>24</b>	<b>ODDSLAMP</b>
	25	<b>KEY OUT SWITCH</b>
<b>HOPPER SSR</b>	<b>26</b>	<b>HOPPER SW ITCH</b>
GND	27	GND
GND	28	GND