Gnome

(070906 Russia)

BOARD DOCUMENTATION



© 2007 **Amcoe**

«Gnome»
Board documentation

© IGROSOFT 2007

Introduction

«Gnome» is a five-reel video slot machine game with bonus and super-bonus games, with an additional possibility of increasing the reward during a risk-game.

Contents

INTRODUCTION **2**

CONTENTS **3**

INSTRUCTIONS FOR AMUSEMENT ARCADE OPERATOR **4**

SWITCHING ON AND OFF OF THE MACHINE 4
ENTERING AND CANCELING OF THE CREDIT 4
SHORT STATISTIC. 4

INSTRUCTIONS ON SERVICE AND SETUP OF THE MACHINE **5**

OPERATION STATISTIC 5
TOTAL SETTINGS 5
Total Scale *6*
Total Parameters *6*
Security *6*
INITIALIZATION OF THE MACHINE 7
EVENT LIST 7
SET CLOCK 7
GAME STATISTIC 7
GAME OPTIONS 8
TESTS 8

GAME RULES **9**

MAIN GAME 9
RISK GAME 9
BONUS GAME 10
SUPER BONUS GAME 10
GAME BUTTONS 10

APPENDIX №1: PROBLEMS SOLUTION **11**

APPENDIX №2: EVENTS **12**

System events 12
Events of the entering/canceling of the credit 12
Game events 12

APPENDIX №3: ADMISSIBLE SETTING VALUES. **13**

Total Settings→Total Scales 13
Total Settings→Total Parameters 13
Total Settings→Total Access 13
Game Options 13

APPENDIX №4: DIAGRAM OF CONNECTORS **14**

Instructions for amusement arcade operator

Switching on and off of the machine

To set up the machine it is necessary to connect it to the **alternating** current with the **220** V voltage. After the giving of power supply the board will start the system condition check, which will be accompanied by the illumination of game-machine buttons. That is necessary for preliminary diagnosis of board faultinesses. If the testing is successful, an inscription "**HARD TEST PASSED**" will appear, which means that the board is in order and is ready for work.

After the accomplishment of actions stated above the machine should launch a playing or a demonstration mode. If that does not occur, go to appendix 1: problems solution. **It is strongly prohibited to allow customers to use the machine that have not launched a playing or a demonstration mode!**

If there is an inscription «CALL ATTENDANT» on the screen, then, probably, one of the buttons "sticked". To enter the buttons test mode, one should push the button (turn the key) "short statistic". Exiting the text is in a few seconds after the releasing of all the buttons or after the reset.

If the credit has been equal to zero before the machine switching off, after the switching on it should launch a demonstration mode. Besides, the machine enters this mode if there is a zero credit during some period of time. A playing mode is launched immediately after the entering of credit.

If a three-color indicator of working mode is connected to the machine, then:

red – technical mode (setup and statistic));
yellow – an interference of an attendant is required (an exceeding credit, absence of coins in the hopper);
green – demonstration mode; a credit entering is awaited
all are extinguished – playing mode.

The game machine can be switched off at any moment – after switching on it will reestablish the condition, in which it was before switching off. **If the machine needs to be switched off, it is recommended to do this while there is no player.**

Entering and canceling of the credit

Entering of the credit can be accomplished with the help of coin slot, bill acceptor, and credit key. It should be remembered, that a credit key has two work modes – direct (if turned, a appointed in settings value is added to credit) or key-driven (the amount of credit entered while the key is turned depends on button, pressed by the player: **1LINE**=1000, **3LINES**=100, **5LINES**=10, **7LINES**=1, **9LINES** – canceling of the credit; there is a mode, in which the canceling is only working). For each notes- and coin slot there is a setting – a value of a note (a coin) in credits. To enter the credit with the help of the computer one should follow the instructions to its software.

The payout of credit is accomplished with the help of a service button "CREDIT CANCEL", a credit key in a key-driven mode by the **9LINES button**, or a button **PAYOUT**, which is used by player for a payout of prize by a hopper.

Short statistic.

The entering of a short statistic is accomplished by a short statistic key. After the transfer to a short statistic mode there will be a picture on the screen, the example of which is adduced below.

CREDIT – current credit value;
TOTAL IN – the number of credits entered;
TOTAL OUT – the number of credits paid out;
IN–OUT – their disparity;
ACTUAL PERCENTAGE – percentage of credit entered, which was paid out as winnings, is calculated via formula $\frac{\text{TOTAL OUT}}{\text{TOTAL IN}} \cdot 100\%$.
KEY IN – credits, entered with a credit key;
COINS IN – credits, entered in all coin slots;
BILL IN – credits, entered in all bill acceptors;
KEY OUT – credits, withdrawn with a credit key;
HOPER OUT – credits, paid out by hopper;
PREV. F DOOR OPEN – amount and date of last front door opening;
PREV. B DOOR OPEN – amount and date of last back door opening;
SHORT STAT. CLEAR – amount and date of last short statistic cleaning;
LAST VIEW SHORT – date of last statistic browsing.

Besides, important data from long statistic, such as TOTAL IN, TOTAL OUT and ACTUAL PERCENTAGE are adduced below.

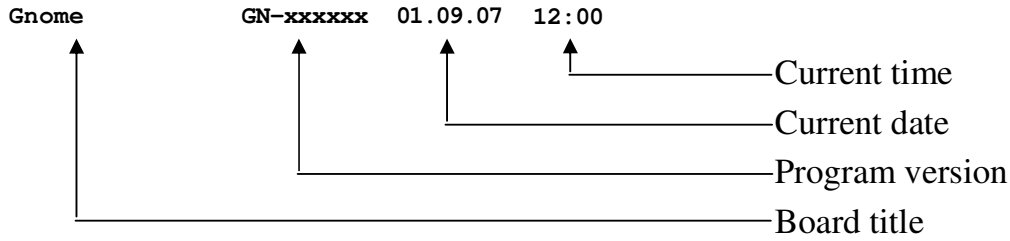
Instructions on service and setup of the machine

To enter the service mode a long-statistic key should be used. The offsetting over the menu is accomplished with buttons **HOLD1**[1] – up and **HOLD2** – down. The choice of a necessary entry is accomplished with the button **START**, exit – with the button **CANCEL** (**BET**).

The Menu contains the following entries:

OPERATION STATISTIC – long statistic;
TOTAL SETTINGS – general settings;
INIT – machine initialization;
EVENT LIST – register of events;
SET CLOCK – date and time adjustment;
GAME STATISTIC – the statistics of plays;
GAME OPTIONS – game adjustment;
TESTS – tests of sound, connector contacts and event register;
EXIT – exit to playing or demonstration mode (depends on credits available).

At the very top of the screen there is an information line with the title and version of the game, and current date. Below an example of information line deciphering is given:



Controls in all menus of lower level are similar to those of the main one, and the parameters changing is accomplished with buttons **HOLD3** and **HOLD4**.

Operation Statistic

Operation statistic, or long statistic, consists of two pages. The change of pages is accomplished with the button **HOLD2**.

On the first there is information about credit (how much and where it is entered and where it is paid out, see short statistic), and besides:

HOPPER UNLOAD – amount of coins, given out by hopper, being unloaded.

On the second page there is information about next system events:

INIT MACHINE – board initialization;
CHANGED TOT. SET. – changing of general parameters;
CHANGED GM. PREF. – changing of game options;
PREV. F DOOR OPEN – opening of the front door;
PREV. B DOOR OPEN – opening of the back door;
PREVIOUS SERVICE – turning on of the service mode;
SHORT STAT. CLEAR – clearing of short statistic;
OPER. STAT. CLEAR – cleaning of operation statistic;
POWER ON – switching on of the machine;
LAST VIEW SHORT – last view of short statistic;
LAST VIEW OPER. – last view of operation statistic;

After a title of the events their amount since the last cleaning of statistic and the date of the last are given. The cleaning of the statistic is accomplished with pressing of the button CANCEL (BET) and holding it for five seconds. **Cleaning of the statistic does not affect the percentage of payout of the machine.**

Total Settings

After entering this section of the main menu, you will get to a sub menu, which contains four entries:

TOTAL SCALE – options of coins- and bill acceptors, credit key and external counters;
TOTAL PARAMETERS – general parameters settings;
SECURITY – access settings;
EXIT – exit to the main menu.

---

[1] Here and further **HOLD1** corresponds with button **1LINES**, **HOLD2** – **3LINES**… **HOLD5** – **9LINES**

Total Scale

First eight points impose the correspondence between one response of indicated machine and the amount of credits, entered at the time. For example, if coin slot **COIN B** (see pict.) responds, credit goes twice, and if **BILL ACCEPTOR 4**, then – 100 times.

HOPPER OUT COIN – coin slot, corresponds to hopper;

CREDIT KEY – credit key receives several numerical and one special value. As it was described above, credit key is able to work in two modes – direct and key-driven. By default, the key-driven mode is on, but it can be changed to direct.

COUNTERS RATE – an adjustment for three mechanical counters of credits entered (credit key + computer, coin slot + bill acceptor and general), and also for tree counters of credits unloaded (key + computer, hopper + ticket distribution device and general);

BET COUNTER RATE –an adjustment for counter of bets lost.

Two these parameters assign the value of a counter unit in credits. I.e., if `BET COUNTER RATE` is assigned equal to 50, then the corresponding counter will change only if the amount of bets collected increase not less then 50.

Total Parameters

This page of parameters is intended for the settings of common features of all games on the board.

PAYOUT RATE – percentage of winnings, the higher the value, the more winnings the machine will pay out. **Changing without initialization will lead to losing of all history.** It is recommended not to set this parameter too low – the machine will not be popular with gamers;

CREDIT LIMIT – the maximum magnitude of the credit, if it is exceeded, there will be a corresponding inscription on the screen and the machine will not let play until the credit is unloaded. Used for setting limit of maximum winning, paid out to a player, corresponding to the game arcade rules;

BARRIER – game events with a parameter below the one, assigned by this setting are not recorded into the event list. **Do not assign this setting too low – this can lead to the clog of the list with unnecessary information;**

MAX TOTAL BET – maximum bet. Limits the diapason of changing of other parameters, which assign the magnitudes of bets. **Changing of this parameter can lead to the modification of other parameters;**

BILL INHIBIT LEVEL – level of the signal of blockage of coins- and bill acceptors;

BILL RECEPTION LIMIT – magnitude of credit, after the exceeding of which coins- and notes receivers are blocked;

HOPPER INHIBIT LEVEL – level of error signal of the hopper;

HOPPER SW EDGE – edge of the signal, due to which coins, given out by the hopper, are counted.

HOPPER CAPACITY – amount of coins, the hopper can give out for one time.

Security

Putting of permissions and passwords on system pages.

CLEAR SHORT – permission to clean short statistic;

CLEAR LONG – permission to clean long statistic;

MAKE INIT – form of access to initialization;

SET TIME – form of access to time setting;

CHANGE TOTAL SCALES – form of access to the settings page of coins- and bill acceptor and machine counters;

CHANGE TOTAL PARAMETERS – form of access to the page of general parameters;

CHANGE GAME OPTIONS – form of access to the page of game options;

PASSWORD – putting of a password, which will be asked if a protected page is tried to access. Removal is accomplished by entering an empty password.

After the initialization of the boar the password will be lacking. To lock access to any page with a password one should:

– To set a form of access to a corresponding page «**PAROLE**»;

– To enter a password different from empty.

Password is no more then eight figures (from 1 to 5), entered with the buttons HOLD1, HOLD2, … HOLD5.

Initialization of the machine

Before the receipt into the sale every board is initialized by the manufacturer and therefore a buyer does not need to conduct this operation himself. But in case of some mistakes, caused by wrong adjustment or influence of external factors, it can be necessary.

Initialization (full nulling) – is an adjustment of all settings by default, some of which can be set only before the first start of the game, then they are blocked until the next initialization.

Initialization is invoked from the main menu of the service mode. Then, pressing button **CANCEL** (BET) and holding it for five seconds it is possible to null the board.

Attention! All information about settings, credit and winnings is lost at the same time. All settings drop by default.

Event List

Event list is intended to control the work of the machine. All events, satisfying some conditions, for example game events, numerical parameter of which is not less then a value assigned, are written down in it.

It is possible to view four types of lists:

ALL EVENT LIST – all happened events;
PAYOUT LIST – entering and canceling of credit;
PAY AND CONTROL LIST – entering and canceling of credit and system events;
<GAME NAME> EVENT LIST – register of game **<GAME NAME>** events
EXIT – exit to the main menu.

All events have the following structure:

<event title> [<numerical parameter>] <date> <time>

Numerical parameter can be lacking for some types of events (for example: switching on/ off of the machine). The whole list of events and their deciphering is situated in appendix №2 events.

Set Clock

With the help of this menu the setting of time and date is accomplished.

The change of position of editing is accomplished with **HOLD1** and **HOLD2** buttons, forward and backward correspondingly. The change of the value is accomplished with the **HOLD3** and **HOLD4** buttons– previous and next value. The denying of changes is accomplished with the **CANCEL** (BET) button. Exit with the saving of adjusted time is accomplished with the button **START**.

Game statistic

On the first page the general information is given:

TOTAL GAMES – amount of games;
TOTAL BETS – amount of bets made;
MAIN GAME WIN – sum of all winnings in the main game;
TAKEN WIN – sum of winnings taken (including risk- and bonus-games);
RISK IN – sum of winnings, with which the doubling was entered;
RISK OUT – sum of winnings in doubling;
BONUS QUANTITY – quantity of bonuses hit;
BONUS WINNING – sum of all winnings in the bonus-game;
SBONUS QUANTITY – quantity of entrances of the super bonus-game;
SUPER BONUS WIN – sum of all winnings in the super bonus-game.
SBNS WIN COUNT – amount of super bonus game won.

On the pages from second to fourth the information about winnings is given: an amount, sum of winnings, date and time of the last hit.

Game options

In this menu the game Gnome can be adjusted. There are the following settings here:

MIN BET – minimum bet;
MAX BET – maximum bet;
MIN BET FOR UMBRELLA – minimum bet for the umbrella to appear.

Tests

After entering of this unit of the menu, you get to the sub menu, in which you can choose:

KEYS TEST – ports test;
SOUND TEST – sound test;
HOPPER UNLOAD – unload of the hopper;
ERROR LIST – records about errors.

Choosing **the ports test,** you will get to the screen, where all board ports are listed (title and location on the connector), and also their current condition. If you think, that you have some external device or button unable to work, then after entering of this mode, you will be able to check your supposition.

After choosing the sound test, there will be three inscriptions: "**CHANNEL 1**", "**CHANNEL 2**" and "**CHANNEL 3**" appearing in turns on the screen. At that time the sound will be given through, correspondingly, the first, the second and the third channels.

Unload of the hopper is accomplished with the simultaneous display of the coins thrown out. With the help of this function efficiency and accuracy of the adjustment of this devise can be checked, and besides, the quantity of coins can be counted.

Error list is needed for the registration of not established situation. If the machine behaves itself in a "strange" way or suddenly demanded an initialization, then, probably, a situation of that type has occurred. A type of the error can be learnt from this list. This list is necessary only for the producer. If there is no serious reason, do not pay attention to the errors.

Initialization does not clear this list. To clear it, it is necessary to press the button **CANCEL** (**BET**) while viewing it and then hold it for five seconds.

Attention! If some inscription has appeared in your error list, that is a ground for contact with the support service of the machine seller.

Game rules

Main game



The game starts with pressing of the button «**START**», with the credit value different from naught. You can change the bet on the line and the number of the lines playing (however, at that time total value of the bet can not exceed the value of current credit). This is accomplished with the buttons «**BET**» and «**1LINE**», «**3LINES**»… «**9LINES**».

The «**Max Bet**» button specifies the maximum bet, not changing the number of playing lines, and starts automatically the game. If the maximum bet exceeds the credit, then the maximum bet is specified, but the launching of reels is not accomplished.

Pressing of the button «**HELP**» will lead to the invoke of the help, which contains a table of winnings and game rules in English.

The «**Pay Out**» button will call in the hopper, which will give out, if there are enough coins, the whole credit.

After the reels stop, you will be shown your winning, if there is one. There is a symbol ("gnome") in the game, which can replace any other symbol with a lower coefficient (see the table of coefficients). If two different winnings appear on a single line, this symbol gets the form for earning a larger one of them.

This game supports up to nine lines; that is why, theoretically, they all can win at one moment. In such a case all winnings on every line are summed up. If there are winning lines on the screen, then they are highlighted in turns, and then their numbers start blinking. A line is reckoned winning, if it contains at least three similar objects in a row, and at the same time they should touch the right or the left edge. The more similar objects a line contains, the more a coefficient, on which a line bet is multiplied. There is a table below, in which the correspondence between the type of object and the amount of them in line.

Symbol name	Coefficients		
	Three in a row	Four in a row	Five in a row
«Prec. stones»	200	1000	5000
«Gnome»	100	500	2000
«Umbrella»	30	100	500
«Picker»	20	50	200
«Helmet»	10	30	100
«Lamp»	5	10	50
«Anvil»	3	5	20
«Hammer»	2	3	10

If there are three or more trolleys on the screen, then after the display of winning the bonus game will start. Take into account, that trolleys do not give any winning, when they are in a row – only entering to the bonus game.

If you win something, you have an opportunity to increase your winning. To do that you should press the button «**RISK**» while the lines are displayed – the risk game will start.

Risk game

It starts after the button «**RISK**» was pressed while the winning lines were displayed. On the screen there will be five cans of different colors, the first of which will be facing you. The aim is to open a can with a figure **not less**, than barman's one. If the figure is bigger, than on the dealer's can, current winning is **doubling**, if less **- if not – zeroing**, and if they are equal, a re deal is accomplished and the winning does not change.

The can with an inscription «Joker» is always bigger than all other ones.

A number of steps in the risk game IS NOT LIMITED.





Bonus game

If in the main game there are three or more trolleys on the reels in any positions, the bonus game starts.

The aim of the game is to unload the more trolleys, the better. They can be unloaded in any order. If a stone falls out of a trolley the gnome takes it and a winning from 1 to 50 full bet is given.

In some trolleys there can be caustic dust, from which only an umbrella, given for a large bet, can protect. An umbrella can be used only once. If the gnome has no umbrella and the trolley there is dust, bonus game ends.

The winning, got during the bonus game is always added to credit.

Super bonus game

It starts if in bonus game all trolleys were unloaded and the gnome did not soil himself with the dust.

The aim of the game is to open the chest with treasure. If successful, the winning will compose from 50 to 500 full bets (with the step of 50: 50, 100, 150, 200… 500).



Game buttons

Button Game	BET	1 LINE	3 LINES	5 LINES	7 LINES	9 LINES	START	MAX BET	HELP	PAY-OUT
Making a bet	BET	1 LINE	3 LINES	5 LINES	7 LINES	9 LINES	START	MAX BET and START	HELP	PAY-OUT
Display of lines, waiting for the game to enter the risk-game	RISK	–	–	–	–	–	TAKE WIN	–	–	–
Risk game	–	–	PICK 2nd CARD	PICK 3rd CARD	PICK 4th CARD	PICK 5th CARD	TAKE WIN	–	–	–
Bonus game	–	OPEN 1st OVEN	OPEN 2nd OVEN	OPEN 3rd OVEN	OPEN 4th OVEN	OPEN 5th OVEN	–	–	–	–
Super bonus game	–	–	CHECK LEFT BUSH	–	CHECK RIGHT BUSH	–	–	–	–	–
Help	–	PREVIOUS PAGE	–	–	–	NEXT PAGE	EXIT	–	–	–

Appendix №1: problems solution

Q: The machine does not enter the demonstration or the game modes. It drops itself constantly and writes «INIT MACHINE».

A: Probably, a serious error has occurred. It is necessary to initialize the board. It is possible to learn about an error from the error list (see "Instructions on service and setup of the machine" chapter "Tests").

Q: The machine gave out an inscription «HARD TEST PASSED» and one or several more from the list: «SHORT STATISTIC ERROR», «LONG STATISTIC ERROR», «MAIN SETTINGS ERROR», «INTERNAL ERROR», «ERROR: FAILED MEMORY! INIT NEEDED!». And did not enter game/demonstration mode.

A: A memory failure has occurred in the corresponding domain of data. It is recommended to clear corresponding statistic, if an error occurred in it, or, having entered the service menu, change damaged settings. In any case, it is better to accomplish an initialization of the board and if it repeats again, contact the organization that sold the board/the machine.

Q: After switching on there is an inscription: «CALL ATTENDANT» at the bottom of the black screen.

A: Probably, one or several game buttons are out of order or got "sticked". It is necessary to press "short statistic". The machine will enter the mode of buttons test, an exit from which is accomplished in a few seconds after all the buttons get free or after a reset (switching off and repeated switching on of the machine).

Q: A just bought machine gives a large amount of winnings. Its percentage of exit exceeds 100%.

A: Such behavior is peculiar for any new machine. That is kind of advertising and attracts customers. In some time it will start to maintain specified percentage. If that does not suit you, play yourself and when the machine reaches the necessary percentage, start its usual exploitation.

Q: Players do not play games on this machine.

A: Probably, too low percentage of winnings was established. Increase it to the maximum value. If after that people will not play, than, obviously, the game does not suit their taste.

Q: During an attempt to give out the credit by the hopper, an inscription HOPPER ERROR appeared.

A: The sum demanded was too high. The inscription is removed with any key, including the credit one.

Q: The hopper started to give out money, but did not give them all. An inscription CALL ATTENDANT appeared.

A: The hopper ran out of coins. It is necessary to add them there. The inscription is removed with any service key.

Q: One or several players <u>constantly</u> win more, than lose.

A: Probably, these players have found a method of breaking through the game security system. Check, if the producer has new versions of micro programs. If not or the upgrade did not solve the problem, it is highly recommended to observe the actions of the players (methods of playing, bets made, lines used, etc), contact the seller and pass your observations. The earlier and the more accurate information will get the developer, the faster he will be able solve the problem: usually, during 7 days after the localization of the error (i.e. the discovery of the reason of the error). The cases of external interrupting into the program with the help of service stuff of the game arcade are known. To avoid such situations, it is recommended to establish twenty-four-hour surveillance for the machines.

Appendix №2: events

System events

POWER ON/OFF	– switching on/off of the machine
INIT MACHINE	– initialization of the machine
SET CLOCK	– time and date setting
OPEN (CLOSE) FRONT (BACK) DOOR	– doors movement control
CHANGE TOTAL SETTINGS	– adjustment of parameters
CLEAR SHORT	– clearing of the short statistic;
CLEAR LONG	– clearing of the long statistic.

Events of the entering/canceling of the credit

COIN IN	– credit is entered through the coin slot;
HOPPER OUT	– credit gave out by the hopper;
KEY IN/OUT	– credit entered/canceled with the help of a credit key;
BILL IN	– credit is entered through the bill acceptor;
TICKET OUT	– credit is given out with the tickets.

Game events

□□□□□ **LINE #<N>**	– winning on the line <n> is a specified combination and compile an specified number;
SEVERAL LINES	– winning on several lines;
RISK WIN STEP #<n>	– winning in a risk game on the step <n> compiles an specified number (not necessarily taken by the player);
BONUS WIN	– in a bonus game winning compiles a specified number;
SUPER BONUS WIN	– winning in a super bonus game compiles a specified number.

Appendix №3: admissible setting values.

Name	List of possible values
Total Settings→Total Scales	
COINS A, B, C, D BILL ACCEPTORS 1, 2, 3, 4	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 2000, 5000
HOPPER OUT COIN	**A**, B, C, D
CREDIT KEY	10, 20, 50, 100, 200, 500, 1000, **BUTTONS**, OUT ONLY
COUNTERS RATE	**1**, 10, 100
BET COUNTER RATE	**1**, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 2000, 5000
Total Settings→Total Parameters	
WIN PERCENT	1 (low pay out percent - «greedy game»), 2, **3**, 4, 5 (high pay out percent - «generous game»)
CREDIT LIMIT	1000, 5000, 10000, **20000**, 50000, 100000, 200000, 500000, 900000
BARRIER	0, 2, 5, 10, 20, 50, 100, **200**, 500, 1000, 2000, 3000, 4000, 5000, 7000, 10000, 20000, 50000
MAX TOTAL BET	10, 50, 100, **250**, 500, 1000
BILL INHIBIT LEVEL	**HIGH**, LOW
BILL RECEPTION LIMIT	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1500, **2000**, 2500, 3000, 3500, 4000, 4500, 5000, 6000, 7000, 8000, 9000, 10000
HOPPER INHIBIT LEVEL	**HIGH**, LOW
HOPPER SW EDGE	**FRONT**, BACK
HOPPER CAPACITY	100, 200, **300**, 400, 500, 600, …, 3000 (step 100)
Total Settings→Total Access	
CLEAR SHORT	**YES**, NO
CLEAR LONG	**YES**, NO
MAKE INIT	**FREE**, PAROLE
SET TIME	**FREE**, PAROLE
CH. TOTAL SCALES	**FREE**, PAROLE
CH. TOTAL PARAMS	**FREE**, PAROLE
CH. GAME OPTIONS	**FREE**, PAROLE
PASSWORD	Any combination of not more, than eight numbers from 1 till 5 (by default **is not assigned**).
Game Options	
MIN BET	**1**, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60
MAX BET	8, 9, 10, 15, 20, **25**, 30, 35, 40, 45, 50, 60, 70, 80, 90

In bold settings by default are emphasized.

Appendix №4: Diagram of connectors

COMPONENT SIDE			SOLDER SIDE		
		1A	1B		
		2A	2B		
Out	SPEAKER	3A	3B	GND	
In	HOLD 1 SW	4A	4B	BILL ACCEPTOR 1	In
In	HOLD 2 SW	5A	5B	BILL ACCEPTOR 2	In
In	HOLD 3 SW	6A	6B	BILL ACCEPTOR 3	In
In	HOLD 4 SW	7A	7B	BILL ACCEPTOR 4	In
In	HOLD 5 SW	8A	8B	HOPPER INHIBIT*	In
In	START SW	9A	9B		In
In	BET / DOUBLE SW	10A	10B		In
In	RESERVE	11A	11B		In
In	RESERVE	12A	12B		In
In	RESERVE	13A	13B		In
In	MAXBET SW	14A	14B		In
In	HELP SW	15A	15B		In
In	FRONT DOOR SW	16A	16B		In
In	BACK DOOR SW	17A	17B		In
In	COIN A	18A	18B	COIN B	In
In	COIN C	19A	19B	COIN D	In
In	(short) STATISTIC SW	20A	20B	SERVICE SW (long)	In
In	PAY OUT SW*	21A	21B	KEY OUT SW	In
Out		22A	22B	HOPPER COIN SW	In
Out	COIN + BILL COUNTER	23A	23B	COIN LOCK	Out
Out	KEY IN COUNTER	24A	24B	BILL ACCEPTOR LOCK	Out
Out	TOTAL IN COUNTER	25A	25B	UPPER LAMP GREEN	Out
Out	TOTAL OUT COUNTER	26A	26B	UPPER LAMP RED	Out
Out	KEY OUT COUNTER	27A	27B	UPPER LAMP YELLOW	Out
Out		28A	28B	TOTAL BET COUNTER	Out
Out	HOLD 1 LAMP	29A	29B	BET / DOUBLE LAMP	Out
Out	HOLD 2 LAMP	30A	30B	MAXBET LAMP	Out
Out	HOLD 3 LAMP	31A	31B	PAYOUT LAMP	Out
Out	HOLD 4 LAMP	32A	32B		Out
Out	HOLD 5 LAMP	33A	33B	HOPPER MOTOR	Out
Out	START LAMP	34A	34B	HELP LAMP	Out
In	KEY IN SW	35A	35B		In
	GND	36A	36B	GND	

COMPONENT SIDE		SOLDER SIDE	
GND	1A	1B	GND
GND	2A	2B	GND
+5V	3A	3B	+5V
+5V	4A	4B	+5V
+12V	5A	5B	+12V
	6A	6B	
	7A	7B	
	8A	8B	
GND	9A	9B	GND
GND	10A	10B	GND